E v o l D i r

January 1, 2014

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.

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Conferences

reinhard.buerger@univie.ac.at

Gothenburg MathTheoreticalEvolution Jun15-19

Dear bio-math researcher,

We hope to see you here in Gothenburg for the ninth European Conference on Mathematical and Theoretical Biology.

The conference homepage is ecmtb2014.org where you can find more information and where the abstract submission is open.

Please also consider the possibility to arrange a minisymposium, see ecmtb2014.org/minisymposia.

The list of plenary speakers has also been finalized:

Matthias Birkner, Mainz Tom Britton, Stockholm Marie Doumic, INRIA, Paris Mikael Fortelius, Helsinki Trevor Graham, London Mathisca de Gunst, Amsterdam Johan Paulsson, Boston David Rand, Warwick Sebastian Schreiber, Davis

Welcome to Gothenburg, Andrea Pugliese, Peter Jagers and Torbjörn Lundh

Irvine California LightOfEvol VIII Jan10-11

*January 10-11, 2014 **/In the Light of Evolution VIII: Darwinian Thinking in the Social Sciences /Organizers: Brian Skyrms, John C. Avise and Francisco J. Ayala Beckman Center of the National Academies, Irvine, CA

*Darwinian thinking is now having a major impact in social science, both in the consideration of the consequences of biological and cultural evolution on traditional questions, and in the use of quasi-Darwinian adaptive dynamics in evolutionary game theory. This Darwinian point of view is having a major impact on economics, political science, sociology, anthropology, and demography.

Registration is now open, http://www.cvent.com/d/-44qkjy/1Q $150 Registration Fee includes breakfast and lunch on Friday and Saturday (also dinner on Friday); and transportation between the hotel and the

Beckman Center.

$100 Discount Registration Fee is available for graduate students and postdocs.

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

Francisco J. Ayala 2001 National Medal of Science Laureate 2010 Templeton Prize Laureate University Professor Donald Bren Professor of Biological Sciences University of California, Irvine Department of Ecology and Evolutionary Biology 321 Steinhaus Hall Irvine, CA 92697-2525, USA tel: +1-949-824-8293 fax: +1-949-824-2474 fjayala@uci.edu http://www.faculty.uci.edu/-profile.cfm?faculty_id=2134 "Francisco J. Ayala" <fjayala@uci.edu>

Krakow ComparativePhysiology Aug23-28

International Congress of Comparative Physiology and Biochemistry From Molecules to Macrophysiology 23-28 August 2015, Kraków, Poland http://-www.iccpb2015.confer.uj.edu.pl The 9th International Congress of Comparative Physiology and Biochemistry will be organized in 2015 in at the Jagiellonian University Krakow, Poland. The objective of this meeting will be to build a consolidated view of organisms 'From Molecules to Macrophysiology'. Submit symposia proposals by the 31st January 2014.

– Dr. Marcin Czarnoleski Jagiellonian University Institute of Environmental Sciences Gronostajowa 7, Krakow 30-387 Poland phone: (+48)126645203 email: marcin.czarnoleski@uj.edu.pl

marcin.czarnoleski@uj.edu.pl

Lancaster BSPB ProtistEvolution Apr23-25

The BSPB Spring Meeting 2014 will take place at Lancaster University, UK which is set in 360 acres of beautiful parkland and lies approximately three miles south of the City of Lancaster. The campus is easily accessible via road and rail, and is within 70 miles of Manchester's International Airport. The meeting opens on the Wednesday evening with a Plenary Lecture on the use of protists to investigate eukaryotic origins, given by Martin Embley. Two symposia then follow.

The first celebrates the distinguished career of Bland Finlay who, after 35 years of protistan research, has recently retired from his academic post at Queen Mary University of London. Speakers paying tribute to Bland's contribution to protistan biodiversity, biogeography and ecology include Genoveva Estaban, Tom Fenchel, Stephen Maberly, Bill Martin and David Wilkinson.

The second symposium examines the evolution and ecology of flagellate protists within the guts of insects, with invited contributions from Rod Dillon (Sand fly), Petros Ligoxygakis (Drosophila), Eamonn Mallon (Bumblebee) and Renate Radek (Termites). The meeting also welcomes contributed papers on any aspect of protistology and is particularly keen to encourage student contributions. To this end, Student travel/accommodation bursaries are available, together with the Humphrey Smith Student Prizes for best oral and poster presentations.

Further information about the meeting can be found using the links below but important dates for your diary are:

- Friday 7th February 2014: Deadline for abstract submission

- Friday 14th March 2014: Deadline for early bird registration rates

- Wednesday 26th March 2014: Deadline for securing campus accommodation

- Wednesday 9th April 2014: Registration for the meeting closes

martcarr74@gmail.com

Leicester UK EMBOHumanEvolution Apr1-4

Christmas is coming, so why not treat yourself to the perfect present? - register for the EMBO Conference on Human Evolution in the Genomic Era: Origins, populations and phenotypes, to be held in Leicester, 1-4 April, 2014! Registration and payment systems are both now active.

Invited speakers are:

Guido Barbujani Universita' di Ferrara, IT Ewan Birney European Bioinformatic Institute, UK Carlos Bustamante Stanford University School of Medicine, US Lounes Chikhi Instituto Gulbenkian de Ciência, PT Vincenza Colonna Institute of Genetics and Biophysics - ABT, IT Graham Coop UC Davis, US Anna Di Rienzo University of Chicago, US Richard Durbin Wellcome Trust Sanger Institute, UK Pascal Gagneux UC San Diego, US Garrett Hellenthal University College London, UK Brenna Henn Stony Brook University, US Turi King University of Leicester, UK Tomas Marques-Bonet Institut Biologia Evolutiva (Universitat Pompeu Fabra/CSIC), SP Joanna Mountain 23andMe, US Mark Pagel University of Reading, UK Sohini Ramachandran Brown University, US Aylwyn Scally University of Cambridge, UK Mark Shriver Pennsylvania State University, US

For further details and instructions on how to submit an abstract and register, please visit: http://-events.embo.org/14-human-evo/index.html Spaces are limited, so please register soon if you want to attend!

Chiara Batini & Mark Jobling - embo2014 <embo2014humanevolution@gmail.com>

Lillehammer Norway ClimateAdaptation Jan27-29 Deadline 3

Dear all,

Abstract submission deadline for the conference on *"Genetic Resources for Food and Agriculture in a Changing Climate" *in Lillehammer, Norway, 27th - 29th of January 2014 has been extended to the *8th of December*, 2013.

The main aims of the conference are to:

- contribute to an understanding of climate change and its predicted impact on agriculture and forestry - increase our understanding of adaptive genetic diversity and adaptation - assess how genetic resources for food and agriculture are affected by the changing climate - discuss the consequences that climate change challenges bring upon the sustainable utilization of plant, animal and forest genetic resources

The meeting is directed towards scientists, PhD students and young scientists, national genetic resource coordinators, breeding association representatives, government officials and other stakeholders with special interest in genetic resources for food and agriculture in a changing climate.

Please, follow the link below to the conference homepages for the scientific program, call for abstracts, and registration and practical information.

http://climate.nordgen.org NB! Reduced fees for registration and accomodation for students.

Feel free to distribute this invitation amongst your colleagues.

Best regards, Anne PrÃbel

– Dr. Anne Kettunen PrÃbel Senior Scientist NordGen - Nordic Genetic Resource Center P.O.Box 115, NO-1431 Ãs, Norway Street address: Raveien 9, 1430 Ãs Phone: +47 6494 9772, mobile: +47 9778 0903 anne.praebel@nordgen.org www.nordgen.org Anne Kettunen Praebel <anne.praebel@nordgen.org>

Lillehammer Norway GeneticResources Jan27-29

'Dear all,

This is a reminder for the conference on "Genetic Resources for Food and Agriculture in a Changing Climate" in Lillehammer, Norway, 27th - 29th of January 2014. The main aims of the conference are to:

* contribute to an understanding of climate change and its predicted impact on agriculture and forestry * increase our understanding of adaptive genetic diversity and adaptation * assess how genetic resources for food and agriculture are affected by the changing climate * discuss the consequences that climate change challenges bring upon the sustainable utilization of plant, animal and forest genetic resources The meeting is directed towards scientists, PhD students and young scientists, national genetic resource coordinators, breeding association representatives, government officials and other stakeholders with special interest in genetic resources for food and agriculture in a changing climate.

Please, follow the link below to the conference homepages for the scientific program, registration and practical information. Registration deadline is 6th of January, 2014. http://climate.nordgen.org NB! Reduced fees for registration and accommodation for students. Feel free to distribute this invitation amongst your col-

leagues. Best regards, Anne PrÃbel'

Torsten NygÃrd Kristensen <tnk@bio.aau.dk>

MNHN Paris YoungScientists Feb12-14 2

1st Young Natural History scientists' Meeting

Second Circular

12th - 14th February 2014

Muséum national d'Histoire naturelle (MNHN), Paris, France

http://bdem.mnhn.fr/sites/bdem.mnhn.fr/files/-upload/ynhm-2nd-circular.pdf Welcome to the Second circular for the *1st Young Natural History scientists' Meeting*, which is organized by The *Bureau des Doctorants et Étudiants du Muséum* (association for students and young researchers working at the Muséum national d'Histoire naturelle, Paris) and will be hosted at the MNHN (Paris, France) on February 12th and 13th, 2014. The meeting will be followed by excursions on the 14th.

We invite contributions (either oral or poster communications) on all aspects of natural history: - *Biodiversity Dynamics and Conservation*: any subjects linked to ecology and conservation of the Earth's biological diversity, including studies of Earth's ecosystems, conservation biology, molecular diversity, the distribution, abundance and dynamics of micro- to macroscopic organisms -, their interactions with both other life-forms and/or their physical environment. - *Earth and Planetary Sciences*: any topics related to atmospheric science, biogeochemistry, cosmochemistry and cosmology, climate science, geochemistry, geology, geomorphology, glaciology, hydrology and limnology, mineralogy, oceanography, paleoecology, biostratigraphy, paleobiogeography, palaeoenvironmental reconstructions, taphonomy, petrology, tectonics, volcanology. - *Mankind, Prehistory, Nature and Societies*: any work on biological anthropology, genetics, prehistory, social and cultural anthropology, ethnology, ethno-biology, ethno-musicology, geography, and the history and philosophy of sciences and techniques. - *Systematics, Evolution and Comparative Anatomy*: any aspects of comparative anatomy and morphology, evo-devo, evolutionary ecology and behavior, experimental evolution, palaeobiology, taxonomy, phylogenetics and phylogeography, theories and models.

A keynote speaker will open each of these multidisciplinary themes with a lecture on a relevant topic.

No registration

Submitting an abstract leads to an automatic free registration, including full package and tea/coffee breaks. There is no registration or fee for attendance only, which will be limited to the 120 seats of the auditorium.

On Thursday evening (13th) a closing party will be held in the MNHN cafeteria and will include a buffet and drinks reception. *A participation of less than 5 euros will be asked*.

*Abstract submission *

The deadline for abstract submission is January 19th 2014 (23:59 GMT+1).

All abstracts should include the name(s) of author(s) and their address(es), a succinct title (no more than 100 characters) and the main body of text, which should comprise no more than 300 words, and be send by email to assobdem@mnhn.fr. Please indicate in the subject of your email if you want to present a talk or a poster. If we receive too many abstracts for oral communications they will be reviewed by the organising committee, and only the successful abstracts will be given as talks, the other abstracts will be accepted for poster presentations (according to the number of slots available). Guidelines on presentation formats are given below.

Oral contributors

All speakers (apart from the keynote speakers) have been allocated 20 minutes. You should therefore prepare a 15 min talk to allow time for questions and switching between presenters. The system is a PC and PowerPoint is installed. The presentation should be submitted and checked on the computer before the beginning of the allocated session.

Poster contributors

Poster boards are circa 2 m tall and 1m wide; they will not be supplied with power sockets. Each will accommodate an A0-sized poster presented in PORTRAIT format. Poster boards will not accommodate landscape format. Should I bring materials to fix the poster to the board?

You can, but you don't have to. May I ship my poster to you in advance to avoid baggage charges?

Yes, of course! Email us using assobdem@mnhn.fr to know the shipping address. (You may wish to bring the poster on a USB stick in case it is lost or damaged in the post, but we do not have access to an A0-printer here, so you would have to go to a shop nearby to get

it printed in the worst case).

Venue and travel

The conference will take place at the Muséum national d'Histoire naturelle, in the auditorium of the Grande Galerie de l'Evolution (GGE) on 12th and 13 th February 2014.

GETTING THERE:

*Address: *Jardin des Plantes - 36, rue Geoffroy Saint Hilaire 75005 Paris *Bus:* Lines 24, 57, 61, 63, 67, 89 or 91

*Metro, RER: *M5: Austerlitz, M7: Censier Daubenton, M10: Jussieu or Austerlitz, RER C: Austerlitz.

*SNCF Railway Stations: *Austerlitz or Gare de Lyon (but all the railway stations are connected to metro and bus lines)

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Marseilles 18thEBM Sep16-19 EarlyRegistration

Dear all

The early registration dead line for for The 18th evolutionary biology meeting at Marseilles is January 31

http://sites.univ-provence.fr/evol-cgr/ best regards Pierre

Pierre PONTAROTTI <pierre.pontarotti@univ-amu.fr>

NewcastleU EvolutionaryGenetics Apr14-16

The 58th meeting of the Ecological Genetics Group will be organised by Newcastle University from 14 - 16 April 2014. The meeting is well known for its excellent and friendly atmosphere. The meeting brings together young and experienced researchers from the UK, Europe and further afield. Their work ranges from ecology, population genetics and conservation biology to evolutionary genetics, with species from the whole tree of life. The conference will be held at Longhirst Hall, set in wonderful surroundings in Northumberland. Prof. Pär Ingvarsson will deliver the keynote speech. Participants can contribute through an oral presentation, a poster presentation or a discussion topic.

Places are limited, so make sure you register as early as possible: http://conferences.ncl.ac.uk/-ecologicalgeneticsgroup2014 Any queries: just contact us. Hope to see you all in Northumberland in April!

Kirsten

Dr Kirsten Wolff Reader in Evolutionary Genetics Devonshire Building Newcastle University Newcastle upon Tyne NE1 7RU

Personal email: kirsten.wolff@ncl.ac.uk

Conference Email: egg@ncl.ac.uk

phone: 0191 208 5626 or 0191 208 4852

kirsten.wolff@newcastle.ac.uk

Oxford SeabirdEvolution Mar21-23

Dear all,

The 12th international conference of the Seabird Group will run from 21st to 23rd March 2014 at Merton College, in the historic town of Oxford, UK. The conference convenor will be Professor Tim Guilford. There is no set theme for the meeting, but plenary speakers will include:

- Pr. Christopher Perrins, Edward Grey Institute, Oxford University - Dr. Judy Shamoun-Baranes, University of Amsterdam - Dr. Francesco Bonadonna, CNRS Montpellier

The cost will be £100 (includes reception, coffee/tea and lunch) plus £25 for the 3 course banquet on Saturday night.

If you have questions, please send an inquiry to: seabirdconference@zoo.ox.ac.uk We look forward to seeing you at the meeting!

You can register for the conference by following this link: http://oxnav.zoo.ox.ac.uk/seabirdconference Please visit the website to find out more details.

Best regards, Akiko Shoji

Department of Zoology, University of Oxford, Oxford, OX1 3PS, UK

annette.fayet@sjc.ox.ac.uk

PuertoRico SMBE14 MutationSymposium Jun8-12

PuertoRico.SMBE14.MutationSymposium.June8-12

We are hosting a Symposium at SMBE 2014 (June 8th-12th, San Juan, Puerto Rico) entitled, "Mutation: The Ultimate Source of Molecular Variation," and invite you to submit abstracts for contributed talks here:

http://smbe.org/annual/2014/scientific-program/call-for-symposia/ As biologists, we are interested in explaining variation at multiple levels: what makes species different, what makes individuals different, what makes genes different, etc. One cannot study such variation without understanding mutation. Mutations can result from errors during replication, mistakes during recombination, or from environmental factors. Although there are mutation rates estimated for taxa, mutation rates vary across the genome, and may vary with age. While point-mutations have been well studied, more complex events like indels or segmental-duplications have not. Mutations are of great interest for studying population history and mechanisms of evolution. Mutations are also widely sought after as the causes of disease and phenotypic variation. However, mutations do not occur in a vacuum; genetic background influences mutations' impact on fitness. In this symposium, we bring together researchers who study the origin and impact of mutations, including the influence of mutation patterns on evolution and disease.

We are pleased to highlight our two invited speakers: Donald F. Conrad, Washington University in St. Louis: 'The developmental basis of mutation in mammals.'

Rebecca A. Zufall, University of Houston: 'Mutation accumulation in the absence of selection in the ciliate Tetrahymena thermophila.'

Symposium Organizers: Reed A. Cartwright (cartwright@asu.edu) Center for Evolutionary Medicine and Informatics, The Biodesign Institute, Arizona State University, Tempe, AZ USA

Melissa A. Wilson Sayers (mwilsonsayres@berkeley.edu) Integrative Biology Department, University of California - Berkeley, Berkeley, CA USA

"Melissa A. Wilson Sayres" <mwilsonsayres@gmail.com>

PuertoRico SMBE 2014 Jun8-12

Society For Molecular Biology & Evolution Annual Meeting 2014 SMBE 2014 San Juan, Puerto Rico Venue: Caribe Hilton Hotel Dates: 8th - 12th June 2014

Abstracts now open: https://mcidublin.conference-services.net/authorlogin.asp?conferenceID=-3958&language=en-uk Abstract Deadline: Jan 27th

Web: www.smbe.org/annual/2014 Email: smbe2014@mci-group.com #smbe14 Facebook: https://www.facebook.com/OfficialSMBE Twitter: https://twitter.com/intent/user?original_referer=-http%3A%2F%2Fwww.smbe.org%2F&profile_id=-1120098811&screen_name=OfficialSMBE&tw_i=-407851925787639808&tw_p=-embeddedtimeline&tw_w=311466697871720448 Joanne Stout SMBE 2014 Project Manager Web: www.smbe.org/annual/2014 Email: smbe2014@mci-group.com

SMBE2014 <SMBE2014@mci-group.com>

PuertoRico SMBE Coevolution Jun8-12

Dear Colleagues,

There will be a 1.5hr symposium entitled "Molecular Coevolution: new conceptual framework and new methodologies" in SMBE 2014 to be held in Puerto Rico. The symposium is organized by Rob Kulathinal, Jason de. Koning, and me. We intend to have 6 oral presentations 15 min each. The presentations will be selected from the submitted abstracts at SMBE web site (not yet open). Both oral and poster presentations in the field of coevolution will be considered in a special issue of the journal Coevolution http://-mc.manuscriptcentral.com/tcev . 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/bio/-professor_details.html?en/31 Xuhua Xia <Xuhua.Xia@uottawa.ca>

PuertoRico SMBE InvertGenomics Jun8-12 CallAbstracts

Dear colleagues and friends,

There will be a symposium entitled "Establishing a "Global Invertebrate Genome Alliance" (GIGA) for Comparative Genomics" at SMBE 2014 to be held in Puerto Rico from June 8-12, 2014.

We aim to bring together researchers that help comprise a "Global Invertebrate Genome Alliance" (GIGA - http://giga.nova.edu). This community of scientists (COS) was only recently forged in 2013 with the ultimate aim to cooperatively sequence or analyse whole genomes and transcriptomes of approximately 7,000 selected invertebrates, with a focus on non-insect, non-nematode marine taxa. A white paper is available at the Journal of Heredity, which outlines GIGA's goals, data and methodological standards (http://-jhered.oxfordjournals.org/content/105/1/1.full).

This symposium is organized by Jose V. Lopez, Todd Oakley, and Christian R Voolstra. It addresses modern genome technology with the history of life, and will be another step in helping the GIGA community to grow and exchange ideas in a molecular evolutionary context.

The presentations will be selected from the submitted abstracts at the SMBE web site (https://mcidublin.conference-services.net/-authorlogin.asp?conferenceID=3958&language=en-uk).

We are looking forward to your participation and abstract submission.

Best Regards, Chris, Joe & Todd

christian.voolstra@kaust.edu.sa

Roscoff Viral Emergence Evolution Apr2-6

From emerging to pandemic viruses: interplay between host ecology and viral evolution

April 2-6, 2014, Roscoff (Brittany, France)

http://www.mivegec.ird.fr/monod/-CJM_Regoes_en.htm Deadline for registration: Jan 10, 2014

Emerging viruses are recognized to be a threat not only to human health but also to activities, such as crop or cattle farming, and even to endangered species. This Jacques Monod conference will study virus evolution and emergence through an original perspective by focusing on where viruses thrive. A first series of lectures will present virus outbreaks in the wild, ranging from 'classical' topics (ebola in humans) to more unusual viruses (viruses infecting Archae or viruses infecting... viruses). A second series of lectures will present experimental results on outbreaks, with a particular focus on bacteriophages, which are particularly amenable to experimental evolution approaches. Finally, the third series of lectures will focus on deciphering the dynamical processes that can lead to outbreaks of new viruses. Overall, this conference stands out as one of the few that gathers researchers, who use different approaches (molecular biology, experimental evolution, mathematical modeling) and work on viruses infecting a wide variety of hosts (animals, plants, bacteria, Archae, viruses) but who are all interested in virus emergence.

Organisers

Chairperson: Roland R. Regoes ETH Zurich, Switzerland roland.regoes@env.ethz.ch

Vice-chairperson: Samuel Alizon Laboratoire MIVEGEC, Montpellier, France samuel.alizon@cnrs.fr

Invited speakers

ALIZON Samuel (Montpellier, France) - Vice-chairperson ARTS Eric (Cleveland, USA) ASQUITH Rebecca (London, UK) BENKIRANE Monsef (Montpellier, France) BLANC Stephane (Montpellier, France) BONHOEFFER Sebastian (Zurich, Switzerland) CHARBONNEL Nathalie (Montpellier, France) CLAVERIE Jean-Michel (Marseille, France) COBEY Sarah (Chicago, USA) CUNNINGHAM Andrew A. (London, UK) DE LAMBALLERIE Xavier (Mar-

seille, France) ELENA Santiago (Valencia, Spain) FRASER Christophe (London, UK) GANDON Sylvain (Montpellier, France) GAUDIN Yves (Gif-sur-Yvette, France) GESSAIN Antoine (Paris, France) HAMPSON Katie (Glasgow, UK) JIGGINS Franck (Cambridge, UK) KOSKELLA Britt (Exeter, UK) LEVIN Bruce (Atlanta, USA) LLOYD-SMITH James (Los Angeles, USA) MARTIN Darren (Cape Town, South Africa) PRANGISHVILI David (Paris, France) PYBUS Oliver (Oxford, UK) REGOES Roland (Zurich, Switzerland) - Chairperson TURNER Paul (New Haven, USA) VAN BOVEN Michiel (Bilthoven, Netherlands) VIGNUZZI Marco (Paris, France) WEAVER Scott (Galveston, USA) WIMMER Eckard (Stony Brook, USA)

Registration fee

420 Euro for PhD students 600 Euro for other participants

(the fee including board and lodging, i.e. 4 nights, breakfeast and 6 meals)

Application for registration

The total number of participants is limited to 115 and all participants are expected to attend for the whole duration of the conference. Selection is made on the basis of the affinity of potential participants with the topics of the conference.

Scientists and PhD Students interested in the meeting should send: 1. their curriculum vitae 2. the list of their main publications for the 3 last years 3. the abstract of their presentation to the Chairperson of the conference (roland.regoes@env.ethz.ch) before the deadline.

Subsequently, the organizers will select the participants. Except in some particular cases approved by the chairperson, it is recommended that all selected participants present their work during the conference, either in poster form or by a brief in-session talk. The organizers choose the form in which the presentations are made. No payment will be sent with application. Information on how and when to pay will be mailed in due time to those selected.

Sponsors: CNRS, INSERM, IRD, FEMS, REID, ESV

roland.regoes@env.ethz.ch samuel.alizon@cnrs.fr

samuel.alizon@cnrs.fr

Spain WoodpeckerConservation Feb23-26

Conference: Spain.WoodpeckerConservation.Feb23-26

Abstract submission deadline for the conference “Woodpeckers in a Changing World - 7th International Woodpecker Conference” (Vitoria-Gasteiz, Spain, 23-26 February 2014) has been extended to the 5th of January 2014.

On behalf of the Organizing Committee, we are pleased to announce the 7th International Woodpecker Conference. As usual, these international woodpecker conferences aim at bringing together researchers, conservationists and forest managers from across the globe. The title of the planned conference is “Woodpeckers in a Changing World”, which shows that we strive to discuss threats to and opportunities for woodpeckers in the face of global change and debates over forest management and energy policies currently taking place at EU and international institutions. In addition, this conference aims to promote an international forum for discussion on how woodpecker research may improve our understanding of behaviour, ecology and conservation sciences.

The conference is embedded within an EU-LIFE project (Pro-Izki) that focuses on the development of actions for the conservation of the Pyrenean oak forest of Izki (North Spain) and their associated species.

The conference is organized by The Provincial Council of Ãlava and Hazi Foundation, the two partners involved in the management of LIFE+ Pro-Izki. Moreover, the conference follows the path of previous conferences on woodpeckers organized by the Woodpecker Working Group of the German Ornithological Society, which launched the initiative and will hold its 25th meeting in Vitoria-Gasteiz. These three organizations work in partnership to generate a pleasant atmosphere that leads to fruitful exchange of information among researchers of this fascinating avian group.

IMPORTANT DATES

January 5, 2014: abstract submission closes January 15, 2014: poster and contributed oral communications agreed February 10, 2014: registration closes February 23, 2014: conference opens

PROGRAM

The conference will comprise three main topics: - Forest Management and Woodpecker Conservation - Behaviour and Ecology of Woodpeckers - Molecular Ecology of Woodpeckers

Talks may be submitted to these topics as well as to any other topic related to woodpeckers. Contributed talks and posters will be selected from among the submitted abstracts.

The following speakers have tentatively agreed to attend the conference: - Carlos Ciudad, University of Leon, Spain - Dylan C. Kesler, University of Missouri, US - Jean-Michel Roberge, Swedish University of Agricultural Sciences, Sweden - Karen Wiebe, University of Saskatchewan, Canada - Konrad Leniowski, University of Rzeszow, Poland - Martjan Lammertink, CONICET, Argentina - Paulo C. Pulgarin-R, University of Los Andes, Colombia - Utku Perktas, Hacettepe University, Turkey & American Museum of Natural History, US - Walter D. Koenig, Cornell Lab of Ornithology, US

Further details on the conference can be found at: http://www.izkilife.com/index.php/es/noticias/-307-woodpeckers-in-a-changing-word-international-conference Looking forward to seeing you in Vitoria!

Hugo Robles, University of Antwerp, Belgium Gilberto Pasinelli, Swiss Ornithological Institute, Switzerland

Pasinelli Gilberto <gilberto.pasinelli@vogelwarte.ch>

Sydney EvolutionSexualConflict Feb2-5

We are busy finalising the program for the "Cooperation & Conflict in the Family Conference" to be held at the UNSW, Sydney from 2-5 February 2014. ECR Attendance Grants

We are pleased to announce the the Human Behaviour and Evolution Society has sponsored 4-5 places (registration + 4 nights' accommodation) at the conference for early career researchers to participate in the conference, including giving talks. Delegates still need to meet their own travel costs, most meals (other than breakfasts - in college - and the Conference Dinner), but this package saves students $700 and non-students $1100.

Because the conference is so soon, we will begin reviewing applications at the end of this week, so try to get your application in by Thursday 12th to ensure full consideration. Fill in the form at http://-evolvingeconomics.com/registration/hbesgrants/ .

Regular Registrations

If you wish to attend the conference, there is still time to register at www.evolvingeconomics.com< http://-www.evolvingeconomics.com >.

Conference description

The Cooperation and Conflict in the Family conference will be held at UNSW in Sydney, Australia from February 2-5 2014. It brings together leading economic and evolutionary researchers to explore the nature of conflict and cooperation between the sexes in the areas of marriage, mating and fertility. The conference provides an opportunity for researchers to discuss the economic and evolutionary biology approaches to these issues, explore common ground and identify collaborative opportunities. Areas of interest include:

Conflict in mating: How does conflict between the reproductive interests of men and women affect mating markets and sexual strategies?

Fertility: How is the fertility decision made in marriage? What are the trade-offs between quality and quantity of children? What factors are behind the demographic transition and low fertility of the modern era?

Investment: How do the competing interests of men and women affect parenting behaviour, work and household decisions?

Economics and evolutionary biology have a rich history of analysis of cooperation and conflict in the family. Evolutionary biology sources the beginnings of this analysis to the work of Darwin in the mid to late 19th-century, while the economic study of the family has origins that are more recent, dating to the late 1950s. Since then, however, a strong tradition has emerged of the application of the economic approach to fertility, marriage, mating markets and investment in the quality and quantity of children.

While the ground being explored is common, the economic and evolutionary approaches are rarely reconciled. Particularly, the concepts of fitness and utility, which lie at the heart of evolutionary biology and economics, have not been unified across the disciplines. Fitness provides a basis for the emergence of traits and preferences, while in an economic utility framework they are assumed.

Cooperation and Conflict in the Family seeks to bridge these concepts. In recent decades, understanding of family dynamics has been revolutionised by parallel insights in evolution (sexual conflict theory) and eco-

nomics that the interests of men and women can diverge, altering the balance between cooperation and conflict within the family.

Public Lectures

Monique Borgerhoff Mulder, University of California Davis. "My Kin are Witches" - Life in an African Village in an Era of Globalization.

Paul Seabright, Toulouse School of Economics. What Role is there for Biology in Explaining Gender Outcomes in the 21st Century Workplace?

Plenary Speakers

David Barash, University of Washington. The Evolutionary Mysteries of Female Sexuality.

Alison Booth, Australian National University. Gender Differences in Risk Aversion: Do Single-Sex Environments Affect their Development?

Lena Eland, Columbia University. I do, I do, I do - Family Law and How the West was Won

Michael Jennions, Australian National University. A Biologist's Perspective on Sexual Conflict in Humans. Just Another Animal?

Hillard Kaplan, University of New Mexico. An Ecological Framework for Understanding the Role of Men in Families.

Hanna Kokko, Australian National University. How to Make Sense of Male Care Strategies.

Jason Potts, Royal Melbourne Institute of Technology. Cooperation and Conflict in Innovation Commons. Hope to see you in Sydney next February!

Rob Brooks & Jason Collins http://-www.facebook.com/EvolvingEconomicsConference rob.brooks@unsw.edu.au

TucsonArizona DeepGenomics Apr3-5

We are pleased to announce the National Science Foundation's Integrative Graduate Education and Research Traineeship (NSF-IGERT) Symposium on Deep Genomics on April 3-5, 2014 in Tucson, Arizona.

Symposium website: http://-www.genomics.arizona.edu/meeting.html The University of Arizona IGERT Program in Comparative Genomics is sponsoring an international meeting on Deep Genomics. The symposium's theme this year encompasses broad scale comparative inferences in the three areas of our training program, including comparative and evolutionary genomics of divergent species, genomics of development, traits, and related interaction networks originating early in evolutionary history, and computational challenges associated with genomics at a broad phylogenetic scale. The meeting will take place at the Marriott University Park Hotel adjacent to the University of Arizona campus in Tucson on Thursday-Saturday, April 3-5, 2014. The format of the meeting will allow considerable time for informal discussion and interaction among participants. Participation by graduate students and postdoctoral fellows is strongly encouraged, and discounted rates for registration will be available.

REGISTRATION Early registration deadline: March 15, 2014 Faculty: $150, Students and Postdocs: $75

Late registration deadline: March 30, 2014 Faculty: $175, Students and Postdocs: $90

KEYNOTE SPEAKER Kenneth Wolfe - University College Dublin, Ireland

CONFIRMED SPEAKERS Robert Beiko - Dalhousie University, Canada William Cresko - University of Oregon Miklos Csuros - Universite de Montreal, Canada Patrick Degnan - University of Illinois Dannie Durand - Carnegie Mellon University Veronica Hinman - Carnegie Mellon University Erin Kelleher - University of Houston Junhyong Kim - University of Pennsylvania Li-Jun Ma - University of Massachusetts Michael Nodine - Gregor Mendel Institute, Austria Robert Reed - Cornell University Shin-Han Shiu - Michigan State University Joseph Thornton - University of Chicago Travis Wheeler - HHMI Janelia Farm

POSTER SESSION The symposium will feature a poster session. Please refer to the website for more information: www.genomics.arizona.edu/meeting.html Please contact Dr. Michael Sanderson, sanderm@email.arizona.edu, with all scientific queries.

Please contact Mrs. Pennie Liebig, genomics@email.arizona.edu, with all registration or administrative queries.

We hope to see you in April!

genomics@email.arizona.edu

UAlabama Biodiversity Apr22-24

Announcing the E.O. WILSON BIODIVERSITY SYMPOSIUM The University of Alabama | April 22-24, 2014 biodiversity.ua.edu

Join Dr. Edward O. Wilson and a panel of biodiversity experts for three days of briefings and stimulating dialog on the state and future of biodiversity on our planet.

SPEAKERS Dr. E.O. Wilson, Harvard University Dr. P. Dee Boersma, University of Washington Dr. R. Scot Duncan, Birmingham-Southern College Dr. Ryan Earley, University of Alabama Dr. Scott V. Edwards, Harvard University Dr. Harry W. Greene, Cornell University Dr. Juan Lopez-Bautista, University of Alabama Dr. Jonathan B. Losos, Harvard University Dr. Meg Lowman, North Carolina State University Dr. D. Bruce Means, Coastal Plains Institute and Land Conservancy & Florida State University Dr. Michael B. A. Oldstone, The Scripps Research Institute Dr. Richard Richards, University of Alabama Dr. Leslie J. Rissler, University of Alabama Dr. Sahotra Sarkar, University of Texas at Austin Dr. Diana H. Wall, Natural Resource Ecology Laboratory & Colorado State University

REGISTRATION is required. Seating is limited.

MORE INFORMATION: biodiversity.ua.edu

Dr. Leslie J. Rissler Associate Professor Department of Biological Sciences MHB Hall Room 307 University of Alabama Tuscaloosa, AL 35487

205-348-4052 rissler@as.ua.edu www.ljrissler.org rissler@as.ua.edu

UIllinois ArthropodGenomics Jun12-14

Save the dates: Arthropod Genomics 2014

The 8th Annual Arthropod Genomics Symposium will be held from June 12 - June 14, 2014, at the University of Illinois at Urbana-Champaign. A pre-symposium Epigenomics Workshop will be held on-site on June 11. Registration will open in January.

For questions, or to receive future communications regarding Arthropod Genomics 2014 via your personal email address, please email ags@igb.illinois.edu.

Happy Holidays!

ags@igb.illinois.edu

UNAM Mexico DrugResistanceEvolution May19-21

A MMEMS workshop: Systems Biology of Drug Resistance Evolution

This message is to inform you of an inter-disciplinary meeting funded by EPSRC on the theme of drug resistance, to be held on Mon, Tue, Wed 19-21st May, 2014 in UNAM, Mexico (http://www.morelos.unam.mx).

The euphemistic term 'emergence' is often used in medicine to describe the evolutionary processes by which living systems acquire resistance to chemotherapy. The purpose of this meeting is to understand clinical resistance from the perspective that it is best understood, and therefore controlled, if we adopt an evolutionary perspective from the start.

Reflecting the importance of the different disciplines needed to tackle the problem of drug resistance evolution, our invited speakers represent a wide range of methodological approaches.

With an emphasis on the relevance to past but also potential future clinical studies, speakers will address different aspects of the resistance problem. Topics for discussion include antibiotic discovery (JL), antibiotic stewardship in the clinic (JI), rapid pathogen diagnosis (DP), bioinformatics approaches to clinical resistance adaptation (TaLi), reduced-dose trials using malaria in vivo models (AR), in vitro models of resistance adaptation (MB) studied using ideas from systems biology (IG, TLu), in addition to theoretical, epidemiological modelling (CCC).

Invited speakers:

Tim Lu, MIT Joseph Lehar, Novartis Institutes for BioMedical Research Andrew Read, Penn State Miriam Barlow, UC Merced Carlos Castillo Chavez, SU Arizona Ivana Gudelj, Exeter University Jon Iredell, Sydney Medical School David Perlin, Rutgers NJ Medical School Tami Lieberman, Harvard Medical School

If you would like to attend the meeting and contribute, a limited number of time slots have been allocated to 15 minute talks. A poster wall will also be available.

The meeting website will soon have full details: http://-/www.mmems.org To register your interest and so reserve a place, please email the organisers with the subject line 'SBDR:talk', 'SBDR:poster' or 'SBDR:neither'

There will be a registration charge of $50 to cover coffee breaks and several workshop-related expenses. (This may be reduced if attendance is sufficiently high.)

Robert Beardmore, Exeter University (r.e.beardmore@exeter.ac.uk) Rafael Pena-Miller, Oxford University/UNAM (rafael.pena-miller@zoo.ox.ac.uk)

"Beardmore, Robert" <R.E.Beardmore@exeter.ac.uk>

UWashington AmerGeneticAssoc Jun28-29

Mark your calendars: The 2014 annual meeting of the American Genetic Association will be held June 28/29, 2014 at the University of Washington in Seattle, WA. Robin Waples, President of the AGA, will convene the symposium, Evolution and Plasticity: Adaptive responses by species to human-mediated changes to their ecosystems. David Reznick will give the Key Lecture. Further details will be available soon on the AGA website http://www.theaga.org/- Anjanette Baker Managing Editor, Journal of Heredity http://jhered.oxfordjournals.org/ Association Administrator, American Genetic Association http://www.theaga.org/ https://www.facebook.com/-AmericanGeneticAssociation 2030 SE Marine Science Drive Newport, OR 97365 agajoh@oregonstate.edu

agajoh@oregonstate.edu

UYork AntEvolution

The evolution of the supercolony and the role of parasites

The project will investigate the evolution of a syndrome in ants, whereby low aggression between nests allows formation of huge 'supercolonies' that often become invasive. This project will use modelling and experimental techniques to how this phenomenon has evolved, with particular reference to the role of parasites.

This studentship is part of a new NERC Doctoral Training Partnership in "Adapting to the Challenges of a Changing Environment" (ACCE).

Supervisors: Dr Elva Robinson (University of York, Biology); Dr James Marshall (University of Sheffield, Computer Science) & Professor Ben Hatchwell (University of Sheffield, APS)

Application Deadline 20th January 2014.

For more information see: Project details: http:/-/www.york.ac.uk/biology/postgraduate/nercdtp/-projects/ ACCE: http://www.york.ac.uk/biology/-postgraduate/nercdtp/ EJH Robinson University of York Elva.Robinson@yccsa.org

EMAIL DISCLAIMER http://www.york.ac.uk/docs/-disclaimer/email.htm ejhr500@yccsa.org

UZurich EvolutionaryPlantRadiations Jun13-14

Evolutionary Plant Radiations Meeting Institute of Systematic Botany, University of Zurich, Switzerland 13-14 June 2014

Registration is now open: http://www.systbot.uzh.ch/-static/congresses/radiations/index.htm Recent developments are providing exciting new insights into the evolutionary dynamics of species diversification and the importance of evolutionary radiations, or rapid episodes of lineage diversification. The aim of this meeting is to explore questions about where, when and why plant evolutionary radiations happen, and how they proceed. The meeting will bring together contributions spanning: (i) new models of species diversification, including paleodiversity and trait evolution, and the increasingly sophisticated and powerful tools available for testing hypotheses about diversification trajectories and their causes; (ii) the proliferation of new molecular phylogenetic data, for more and larger plant clades spanning broader taxonomic, geographical and temporal levels, as well as opportunities for unprecedented phylogenetic resolution of rapidly evolving clades coming from genome-scale DNA sequence data; (iii) assembly of more comprehensive species geographic distribution, functional and life history trait data sets that are enabling more accurate and complete reconstruction of biogeographic and trait evolution histories and interactions; (iv) empirical studies of key plant radiationsÂ for understanding the contributions of biotic interactions (pollinators, herbivores, pathogens) as drivers of radiations, the interplay between ecological opportunity and

evolutionary innovation in driving radiations, and the mechanisms of radiations in terms of underlying population ecology and speciation.

Speakers Tim Barraclough, Imperial College, London, U.K. Mark Carine, Natural History Museum, London, U.K. Elena Conti, University of Zurich, Switzerland Michael Crisp, Australian National University, Canberra, Australia Michael Donoghue, Yale University, U.S.A. Erika Edwards, Brown University, U.S.A. Luke Harmon, University of Idaho, U.S.A. Colin Hughes, University of Zurich, Switzerland Steven Johnson, University of KwaZulu-Natal, South Africa Daniel Kissling, Aarhus Univ. Denmark / Univ. of Amsterdam, Netherlands Christian Lexer, University of Fribourg, Switzerland Peter Linder, University of Zurich, Switzerland Santiago Madrinan, Universidad de Los Andes, Colombia Toby Pennington, Royal Botanic Garden Edinburgh, U.K. Daniel Rabosky, Cornell University, U.S.A. Richard Ree, Field Museum, Chicago, U.S.A. Susanne Renner, University of Munich, Germany Robert Ricklefs, University of Missouri, U.S.A. Daniele Silvestro, University of Gothenburg, Sweden Tanja Stadler, ETH Zurich, Switzerland Tony Verboom, University of Cape Town, South Africa

There will be an opportunity to present contributed posters.

Programme: Thursday 12 June Evening welcoming icebreaker Friday 13 June & Saturday 14 June Presentations and posters; Saturday evening conference dinner Sunday 15 June Post-conference one-day excursion to Schynige Platte, an alpine botanical garden situated at 1970 m, which boasts an almost complete collection of Swiss alpine plant species, and offers a stunning alpine panorama of the Eiger Northface, Mönch and Jungfrau.

Pre-Conference Workshop Thursday 12th June - One-day Workshop on computational methods in macroevolutionary analysis led by Dan Rabosky, Univ. Michigan.

colin.hughes@systbot.uzh.ch

Venezuela ConservationGenetics May5-9 reminder

**** Spanish and Portuguese versions follow ****

REMINDER- Deadline for abstract submission is January 10, 2014.

First Latin American Conference on Conservation Genetics

In celebration of its tenth birthday, The Red de la Genética para la Conservación, or ReGeneC, announces the First Latin American Conference on Conservation Genetics, in Estado Vargas, Venezuela, May 5-9, 2014.

See http://www.regenec.org/taller/may2014/ for recent updates.

Confirmed plenary speakers include: Dr. Jonathan Ballou, Smithsonian Institution, USA Dr. Jesús Maldonado, Smithsonian Institution, USA Dr. Cristina Miyaki, Universidade de Sao Paolo, Brazil Dr. Andrea Premoli, Universidad del Comahue, Argentina Dr. Antonio Solé-Cava, Universidade Federal do Rio de Janeiro, Brazil

We welcome abstracts for talks or posters presenting original scientific work from across the region, focused on using genetic tools to solve conservation problems in Latin America: http://www.regenec.org/-taller/may2014/resumenes.php The official languages of the conference will be Spanish and Portuguese.

For full conference schedule, including pre- and post-conference courses, ReGeneC alumni round table, symposia/fora, and details about conference contributions to a special issue in the Journal of Heredity, see our website

We look forward to seeing you in May!

- The Conference Organizing Committee

ReGeneC is a network of researchers and conservation practitioners from across Latin America dedicated to supporting the growth and development of conservation genetics in the region http://www.regenec.org/

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RECORDATORIO: La fecha límite para la recepción de resúmenes es el 10 de enero de 2014.

Primer Congreso Latinoamericano de Genética para la Conservación En el marco de la celebración de su décimo aniversario, la Red de la Genética para la Conservación, o ReGeneC, anuncia el primer Congreso Latinoamericano de Genética para la Conservación, en el estado Vargas, Venezuela, el 5-9 de mayo de 2014.

Ver http://www.regenec.org/taller/may2014/ para recientes actualizaciones.

Como conferencistas confirmados tenemos a: Dr. Jonathan Ballou, Instituto Smithsoniano, EEUU Dr. Jesús Maldonado, Instituto Smithsoniano, EEUU Dra. Cristina Miyaki, Universidade de Sao Paolo, Brasil Dra. Andrea Premoli, Universidad del Comahue, Ar-

gentina Dr. Antonio Solé-Cava, Universidade Federal do Rio de Janeiro, Brasil

Se encuentra abierta la recepción de resúmenes para presentaciones orales o en forma de cartel de trabajos científicos desarrollados en América Latina, enfocados en el uso de herramientas genéticas para solventar problemas en conservación: http://www.regenec.org/-taller/may2014/resumenes.php Los idiomas oficiales del congreso serán castellano y portugués.

Para consultar el cronograma completo del congreso, los cursos pre- y post-congreso, las actividades de exestudiantes de los cursos ReGeneC, los simposios/foros y los detalles sobre cómo ser parte de un número especial del Journal of Heredity, les invitamos visitar nuestro sitio web: http://www.regenec.org/taller/-may2014/ Les esperamos en mayo! - El comité coordinador

ReGeneC es una red de investigadores y otras personas trabajando en la conservación de América Latina, dedicada al apoyo del crecimiento y desarrollo de la genética para la conservación en la región: http://-www.regenec.org/ ****

LEMBRETE: O prazo para submissão de resumos é 10 de janeiro de 2014

Primeiro Congresso Latinoamericano de Genética para a Conservação

Entre as comemorações de seu décimo aniversário, a Rede de Genética para a Conservação, ReGeneC, anuncia o primeiro Congresso Latinoamericano de Genética para a Conservação, no estado de Vargas, Venezuela, de 5 a 9 de maio de 2014.

Veja a http://www.regenec.org/taller/may2014/ de atualizações.

Os palestrantes confirmados são: Dr. Jonathan Ballou, Instituto Smithsoniano, EUA Dr. Jesús Maldonado, Instituto Snithsoniano, EUA Dra. Cristina Miyaki, Universidade de São Paulo, Brasil Dra. Andrea Premoli, Universidad del Comahue, Argentina Dr. Antonio Solé-Cava, Universidade Federal do Rio de Janeiro, Brasil

Está aberta a submissão de resumos para apresentações orais ou painéis de trabalhos

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

GradStudentPositions

BiK-F Frankfurt EvolutionaryProteomics

Job opening for the joint research project: (Reverse) Proteomics as novel tool for biodiversity research A joint project by: Leibniz-Institut für Analytische Wissenschaften - ISAS - e. V., Dortmund and Berlin, Leibniz-Zentrum für Marine Tropenökologie GmbH, Bremen, Senckenberg Gesellschaft für Naturforschung, Frankfurt, and Technische Universität Dortmund The project will be funded by the Leibniz Association. The proposed project offers the unique opportunity to combine research activities in different fields of expertise and to establish a long-term network to tackle the highly relevant research field of biodiversity with a novel approach for species classification and detection of physiological and developmental stages. Position offered by the Biodiversität und Klima Forschungszentrum (BiK-F), Frankfurt:

PhD position in biology /bioinformatics (m/f)

As a PhD student you will work on the sequencing and assembly and analysis of the Radix balthica genome in cooperation with external partners, the sample preparation for proteomic experiments and the combination of large scale genomics and proteomics data. Presenting project data is expected. Your profile: - Degree in biology or bioinformatics - Expertise in genome assembly of non-model organisms, evolutionary thinking - Basic knowledge in laboratory work - Scientific creativity, interest in interdisciplinary research and passion for discovery - Good working knowledge of English; German is an asset

Please send applications including CV and contact addresses of two references via email to Prof. Dr. Markus Pfenninger (Pfenninger@bio.uni-frankfurt.de), Biodiversity and Climate Research Centre, Senckenberganlage 25, 60325 Frankfurt/Main.

Prof. Dr. Markus Pfenninger Forschungszentrum Biodiversität & Klima Molekulare Ãkologie Gruppe Georg-Voigt Straße 14-16 D 60325 Frankfurt am Main Germany

pfenninger@bio.uni-frankfurt.de

BielefeldU MarineMammalEvolution

PhD studentship in marine mammal evolutionary genomics

Supervisors: Dr Joe Hoffman (Bielefeld University, Germany) and Dr Jaume Forcada (British Antarctic Survey, UK)

Many studies of wild populations reveal links between heterozygosity and fitness, with highly heterozygous individuals carrying fewer parasites, living longer and being more attractive to mates. However, because most studies use only around ten microsatellite markers, we do not yet know which of two possible mechanisms is most important nor which types of gene could be involved. This studentship will take full advantage of emerging next-generation technologies to elucidate the relationship between heterozygosity and fitness in a natural vertebrate system based on a large body of genetic and observational data from an intensively studied colony of Antarctic fur seals (Arctocephalus gazella).

The objective is to determine the main mechanism(s) responsible for heterozygosity-fitness correlations using a combination of high-density SNP genotyping, linkage mapping and comparative genomics.

We seek a bright and highly motivated student who ideally holds an M.Sc. or equivalent in a relevant topic (e.g. population, evolutionary or conservation genetics, bioinformatics). Experience of working with next generation sequence data (including writing custom scripts), SNP discovery and genotyping (including RAD sequencing and high-density SNP arrays) and quantitative genetics (including linkage mapping) would be advantageous, but full training will be provided. The ideal candidate will also be able to work both independently and as part of a team. A high standard of spoken and written English is required.

The student will be based at the Department of Animal Behaviour at Bielefeld University (www.uni-bielefeld.de/biologie/vhf/index.html). The department is the oldest of its kind in Germany and currently hosts six principal investigators, seven postdocs and twenty PhD students. It offers a stimulating international environment and an excellent research infrastructure including a brand new molecular laboratory. The working language of the Department is English. The student will also have the opportunity to interact with cooperation partners (Prof Jon Slate and Dr Jochen Wolf) through placements at Sheffield and Uppsala Universities respectively.

Bielefeld is a city of 325,000 inhabitants with an attractive historical centre and easy access to the Teutoberger Wald for hiking and other outdoor pursuits. It offers a very high standard of living and is well connected to most major European cities.

This generous studentship, which provides a net salary of at least euro 1500 per month and includes health insurance, is funded by the German Science Foundation (DFG) for a period of three years. Funding is also available for attending conferences. To apply for the position, please provide: (i) a letter of motivation including a maximum 2-page statement of your research interests, relevant skills and experience; (ii) a CV including publication list; and (iii) names and contact details of three referees willing to write confidential letters of recommendation. All materials should be emailed as a single PDF file to: joseph.hoffman@uni-bielefeld.de with 'PhD application' in the subject line.

The University of Bielefeld is an equal opportunity employer. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement, women will be given preference, unless particular circumstances pertaining to a male applicant apply.

The application deadline is January 10th 2014 and interviews will take place shortly afterwards. The preferred start date is flexible and will depend on the timeframe of the most qualified applicant. For further information, please see http://www.uni-bielefeld.de/-biologie/vhf/JH or contact Joe Hoffman via email (joseph.hoffman@uni-bielefeld.de) with any informal inquiries.

For representative publications, please see: Hoffman et al. (2003) Evolution, 57: 1917-1930; Hoffman et al. (2007) Nature, 445: 912-914; and Hoffman et al. (2013) BMC Genomics, 14: 52.

Joe Hoffman Department of Animal Behaviour University of Bielefeld

Postfach 100131

33501 Bielefeld

Germany

+49 (0)521 1062711 http://www.uni-bielefeld.de/-biologie/vhf/JH/index.html

j_i_hoffman@hotmail.com

DartmouthC PredatorPreyEvolution

Ph.D. opportunity in sensory ecology

Applications are invited for a PhD position in the lab of Hannah ter Hofstede, Department of Biological Sciences, Dartmouth College (http://-www.dartmouth.edu/ ~ terhofstede). My lab considers predator-prey interactions in the acoustic world of bats and their insect prey. Studies are interdisciplinary and combine acoustic, neurophysiological, behavioral and ecological data collected in the lab and field.

The Graduate Program in Ecology and Evolutionary Biology at Dartmouth College has a core group of enthusiastic faculty, graduate students and postdocs who provide an exciting environment in which to pursue a Ph.D. (http://dartmouth.edu/biology). Generous support is available in the form of fellowships, health care, and discretionary funds for research and travel. Detailed information about the program, and access to online applications, are available at http://dartmouth.edu/biology/graduate/-ecology-and-evolutionary-biology .DEADLINE EX-

TENDED TO JAN. 31, 2014.

Interested individuals should contact Hannah ter Hofstede directly by email before applying (Hannah.ter.hofstede@dartmouth.edu). Please send your CV, contact information for 2 references, and a description of your research interests, experience, and goals.

Hannah.ter.Hofstede@dartmouth.edu

DurhamU DelphinidPopGenetics

NERC-funded PhD Studentship in the United Kingdom open for competitive applications.

Eligibility: UK nationals and residents only for full scholarship (for details see: http://www.nerc.ac.uk/-funding/available/postgrad/eligibility.asp)

This PhD studentship supported by the Natural Environment Research Council, UK (NERC)-IAPETUS Doctoral Training Partnership is now open for applications from interested candidates. Candidates will be competitively assessed across all IAPETUS DTP projects (For a list of projects and further details see: http://www.iapetus.ac.uk). The start date for this project will be October 2014, and the student will be based at Durham University. The studentship includes tuition fees, monthly stipend, and research funds depending on eligibility.

Project: Population genetics at Y-linked and adaptive markers in delphinid Cetaceans

Supervisors: A. Rus Hoelzel (University of Durham) & Per Berggren (University of Newcastle)

Most dolphin species are highly social and important predator species in marine ecosystems. Understanding the evolution of diversity among dolphin populations is important towards their effective conservation and management, and requires information on factors that promote phylopatry, which may be different for males and females. It also requires an understanding of habitat dependencies and local adaptation. In spite of high dispersal potential, many dolphin species show population genetic structure over a small geographic scale for neutral genetic markers, indicating differentiation by drift. Patterns of connectivity depend in part on dispersal strategies that will depend on factors such as social structure, group size, reproductive strategy, habitat dependence and inbreeding avoidance. The primary objectives of the project will be to use genomic data to test hypotheses about differential dispersal in males and females, about how the relevant processes and emergent patterns depend on ecological specialisations (ecotypes), and hypotheses about differential selection for functional loci associated with physiological differences among ecotypes.

Applications now accepted through January 20th V contact Rus Hoelzel at a.r.hoelzel@dur.ac.uk for further details.

“HOELZEL A.R.” <a.r.hoelzel@durham.ac.uk>

ETHZurich PlantEvolutionaryGenomics

PhD Student Position in Plant Evolutionary Genomics (3 years) in the Plant Ecological Genetics group at ETH Zurich, Switzerland, funded by a grant from ETH Zurich to Dr. Thomas Städler (PI) and Prof. Alex Widmer.

We seek a highly motivated PhD student to join our research program on the population genomics and evolution of postzygotic reproductive isolation in wild tomato species (Solanum section Lycopersicon). The particular focus of this newly-funded project builds on pilot data that identify numerous candidate imprinted genes (expression data from isolated endosperm tissue) and genes differently expressed in within-species versus hybrid endosperm. We anticipate that the successful candidate will perform controlled crosses, harvest endosperm tissue via cryodissection, and then uses Illumina sequencing to characterize endosperm transcriptomes. Additionally, he/she will assess patterns of DNA polymorphism and divergence for candidate imprinted genes in outcrossing versus selfing tomato species.

We offer a stimulating scientific environment and first-rate computational and molecular facilities. Our group is international in composition, with all group meetings, seminars etc. being held in English. The main study organisms in other (non-tomato) research projects are species of Silene and Brassicaceae (see http://www.peg.ethz.ch). Zurich is a cosmopolitan small city offering outstanding quality of life as well as a vibrant academic community (both ETH and University of Zurich). Starting date should be as soon as possible and no later than 1 April 2014.

Applicants for this position should have a Master de-

gree (or equivalent) in molecular population genetics/genomics, plant biology, or computational biology. A background in molecular population genetics and/or plant developmental biology is highly desirable, and familiarity with next-generation sequencing data sets (Illumina platform) and their bioinformatic analyses are definite assets. Good quantitative, analytical, and English skills are essential, as is the ability to work independently.

Applicants should submit a single PDF file by e-mail with the following items:

* A cover letter with a brief summary of previous research experience and professional motivation * Curriculum Vitae * Copies of degree certificates and list of coursework, including grades * Names, addresses and e-mails of two professional references

Applications received by 24 January 2014 are assured of full consideration, but the position remains open until filled. Please send inquiries and applications to

Dr. Thomas Städler, Plant Ecological Genetics, Institute of Integrative Biology (IBZ), ETH Zurich, Universitätstrasse 16, CH-8092 Zurich, Switzerland. E-mail: thomas.staedler@env.ethz.ch

thomas.staedler@env.ethz.ch

GhentU ComputationalGenomics

Dear colleagues,

In collaboration with ILVO, we currently have an open position for a PhD student to work on 'Computational tools for the functional interpretation of NGS (meta)genomics data'.

The general goal of this PhD research is the development of new computational methods for the analysis of metagenomics data from microbial communities and genetic diversity data from plant and animal populations generated by next generation sequencing (NGS).

More info:https://dl.dropboxusercontent.com/u/-41564946/Oproep_NGS_Genomics_data_EN_D68.pdf kind regards, Klaas Vandepoele

Prof. Dr. Klaas Vandepoele Tel. 32 (0)9 33 13822 VIB Department of Plant Systems Biology, Ghent University Technologiepark 927, 9052 Gent, Belgium E-mail: Klaas.Vandepoele@psb.vib-ugent.be Website: http://bioinformatics.psb.ugent.be/-cig/ Twitter: http://twitter.com/plaza_genomics

klaas.vandepoele@psb.vib-ugent.be

ISTAustria EvolutionaryBiology

IST Austria invites applications for its graduate program; the deadline is ** January 15th **.

The first year of the PhD program consists of coursework and rotations between different groups. The student then chooses a research project for their thesis. The program is open to bachelor and masters students, and to all nationalities.

Students can work in any of the areas represented at IST, including evolutionary biology. Interdisciplinary projects are encouraged.

For full details, see: http://ist.ac.at/graduate-school/ Nick Barton

IST Austria Am Campus 1 Klosterneuburg 3400 'phone: (43)2243 9000 3001 www.ist-austria.ac.at Nick.Barton@ist.ac.at

LMUMunich Paleobiology

Applications invited for the Master's program "Geobiology and Paleobiology" (MGAP) at the Ludwig-Maximilians-Universität (LMU) Munich (Germany)

The Master's program "Geobiology and Paleobiology" (MGAP) is a consecutive, research-focussed, two-year Master of Science program at the Faculty of Geosciences of the Ludwig-Maximilians-Universität (LMU) Munich, in collaboration with researchers of the Bavarian Natural History Collections and the GeoBio-Center @ LMU.

MGAP aims to provide students with a comprehensive introduction into the interdisciplinary research fields of geobiology and paleobiology to prepare them forcareers in science and beyond.

The MGAP program is based oninterdisciplinary, research-oriented courses in geo- and biosciences that address patterns and processes of the evolution of life and its habitats on our planet. Principal topics are evolutionary and environmental geobiology and paleo-

biology, supported by courses in complementary areas e.g., bioinformatics, statistics, sedimentology.

The module-based curriculum provides an integrative approach facilitated by experts in different areas of expertise. Students will learn and acquire routines with a wide range of scientific methods such as modern techniques in molecular biology, fieldwork, collection management, comparative morphology & phylogeny, bioinformatics, statistics and (paleo-) biodiversity assessments. Students will learn independent scientific work in individual and intensively supervised research projects at early stages of the curriculum.

A mentoring program offers further guidance and support throughout the studies.

MGAP in brief

- International Master's program in Geobiology and Paleobiology (Master of Science, M.Sc.) at the LMU Munich

- 2 years, 4 semesters, start in October (winter semester)

- All courses taught in English

- Courses are combined in Modules

Course total: 120 credit points (ECTS)

More information is available on the program's website

< http://www.mgap.geo.uni-muenchen.de >

For admission to the winter semester 2014/2015 (courses start early-October 2014) please note the following application deadlines:

non-EU students: January 31, 2014

EU students: May 31, 2014

Please send requests regarding the MGAP program ONLY to the email listed on the webpage mentioned above.

The Department of Earth- and Environmental Sciences (Division of Palaeontology & Geobiology) of the Ludwig-Maximilians-Universität Munich offers an excellent multidisciplinary research and learning environment, one of its particular strength being the close interaction between Geosciences, the Biological Faculty, and the Bavarian Natural History collections (< http://www.snsb.de >) in the framework of the GeoBioCenter @ LMU (< http://www.geobio-center.uni-muenchen.de >).

The LMU Munich is the leading research university in Germany, with a more than 500-year-long tradition, and builds upon its success in the Excellence Initiative, a Germany-wide competition promoting top-level university research. LMU Munich also has been successful in the "Qualitätspakt Lehre" intitative by the German Federal Ministry of Education and Research (BMBF) to promote innovative teaching and learning. Munich has also been repeatedly voted Germany's most livable city.

Prof. Dr. Gert Wörheide Department of Earth and Environmental Sciences, Division of Paleontology & Geobiology & GeoBio-CenterLMU Ludwig-Maximilians-Universität München, and Bavarian State Collections of Palaeontology and Geology Richard-Wagner-Straße 10 80333 München Germany

Phone: +49 (89) 2180-6718 Fax: +49 (89) 2180-6601 E-Mail: woerheide@lmu.de www.palmuc.de | www.mol-palaeo.de Labnews: www.facebook.com/-molpalaeo Tweets: twitter.com/gwoerhe

Lab publications: www.molecularpalaeobiology.eu www.researcherid.com/rid/C-1080-2008 woerheide@lmu.de

LeibnizAssoc Germany 8 ParasiteEvolution

Eight PhD Student Positions

The International Multidisciplinary Parasitology and Vector Biology (IMPact-Vector) Graduate School

The Biodiversity and Climate Research Centre (BiK-F) was founded by the Senckenberg Gesellschaft für Naturforschung, the Goethe-University Frankfurt am Main, and additional partners. It is funded by the Federal State of Hessen through its Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level.

The IMPact-Vector Graduate School is funded by the Leibniz-Association and offers PhD student positions in the areas of parasitology, infection and vector biology, and medical entomology. IMPpact-Vector is a joint program of the Senckenberg Research Institute and Natural History Museum/ Biodiversity and Climate Research Center (SGN/ BiK-F, Frankfurt am Main), the Bernhard-Nocht-Institute for Tropical Medicine (BNITM, Hamburg), the Leibniz-Institute for Zoo and Wildlife Research (IZW, Berlin) and the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB, Berlin).

We offer outstanding training and support in an excellent scientific network. Faculty members are affiliated with many well-known institutes (for details see our websites). Our mission is to help students to become creative, responsible and self-confident young researchers. We are looking for highly motivated students who are strongly committed to research and share our vision to improve world health.

The following topics are offered by the partner institutions (two PhD positions each):

Diversity and evolutionary adaptations of arthropods and their function as disease vectors (SGN/ BiK-F; in cooperation with BNITM, IZW, IGB)

Arbovirology and vector competence of mosquitoes (BNITM; in cooperation with SGN/ BiK-F, IZW)

Micro- and macro-parasite transmission between mammals and birds and their immunological costs of infection (IZW; in cooperation with BNITM, IGB, SGN/ BiK-F)

Relevance of parasites in freshwater ecosystems (IGB; in cooperation with SGN/ BiK-F, IZW)

Your profile: Masters or diploma degree in biology, zoology, molecular biology, biochemistry, virology or parasitology or related fields

Laboratory experience

Interest in solving complex biological problems

Excellent communication skills - English is the working language of the research groups

Salary and benefits are in accordance with a public service position in Germany (TV-H E13, 50%). Positions would start June 2014 and are limited to 3 years. The Leibniz-Association supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference.

Please send your complete application before February 11th, 2014 preferably by e-mail to the speaker of IMPact-Vector, Prof. Dr. Sven Klimpel (impactvector@senckenberg.de). Please include the position reference (Ref. # B 59). In a single pdf document, include your CV, copy of the master or diploma certificate, abstract of the master/diploma thesis, letter of motivation, contact details of two references and the completed application sheet found on the Senckenberg website

http://bit.ly/1kCfba7 Herrn Prof. Dr. Sven Klimpel c/o Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main impactvector@senckenberg.de

For scientific enquiries please contact Prof. Dr. Sven Klimpel, impactvector@senckenberg.de

monaghan@igb-berlin.de

LeibnizInst Berlin ClimateAdaptation

The Department of Ecosystem Research of the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) in Berlin together with the Free University of Berlin, invite applications for the position of:

PhD student in Evolutionary Biology

Application deadline: 15.02.2014; Starting date: May 2014, or as soon as possible thereafter (interviews will be conducted in March); Duration of the position: 3 years

Project title: *“Evolutionary responses to a global change”*

The PhD student will join the research group of Justyna Wolinska. The group is currently located at the Ludwig Maximilian University of Munich (Germany) but will move to Berlin in March 2014. He / she will study the evolutionary responses of communities and populations which may result from manipulated experimental conditions (i.e. global stressors), using cladoceran *Daphnia*as a model system. The student will also study the impact of manipulated conditions on the spread of infectious diseases and host-parasite coevolution (using *Daphnia* and their microparasites as a model host-parasite system).

This project is part of a research initiative around a large experimental setup located at Lake Stechlin near Berlin. “Lake Lab” (http://www.lake-lab .de/) consists of 24 experimental lake-water basins each 9 metres in diameter and around 20 metres deep, all isolated from the rest of the lake. In these experimental cylinders, future climatic scenarios are simulated and their effects on the lake studied. The overarching goal of this large research initiative is to find out if and how biodiversity will be affected as a result of climate change.

The PhD student will be involved in screening temporal changes in *Daphnia*populations using microsatellites and SNP markers, and he / she will study changes in gene expression of *Daphnia* induced by environmental conditions. Moreover, the PhD student will track temporal variation in parasite populations using NGS.

Depending on the interest of the student, he / she can be further involved in field and / or experimental work.

The ideal candidate should be familiar with molecular methods and have a strong background in evolutionary biology. In addition, knowledge of bioinformatics and/or population genetics will be highly advantageous. Excellent communication and writing skills in English, good work ethic, and creative thinking are desired. A Master's degree (or equivalent) in biology is necessary for admission. The working language of the group is English.

The student will participate in the organized PhD program and will take courses at the Free University of Berlin. In addition, the student will have the chance to collaborate intensively with researchers from IGB as well as from other institutions. Generous funds are available to cover attendance at national and international conferences as well as research stays (lab rotations) in other universities.

Applications should include 1) a letter of interest with a description of relevant experience, 2) curriculum vitae, 3) abstract of the Master's thesis, 4) a list of publications (if any), 5) the names (with e-mail addresses) of two potential referees. Applications should be submitted as a SINGLE (!) PDF document to the following e-mail address: wolinska@bio.lmu.de , with the subject line: "PhD application <your family name>".

Justyna Wolinska Ludwig-Maximilians-Universität München Department Biologie II Evolutionsökologie Grosshaderner Str. 2 82152 Planegg-Martinsried, Germany

Phone: +49 (0)89 2180 74201 Fax: +49 (0)89 2180 74204 email: wolinska@bio.lmu.de

http://www.evolutionary-ecology.bio.lmu.de/people/-assistant_profs/wolinska/index.html http://www.igb-berlin.de/ Justyna Wolinska <wolinska@bio.lmu.de>

LondonRoyalHolloway BeeBehaviour

PhD project on social insect behaviour available at Royal Holloway Closing date: 24th January 2014 5pm Title: Urban bees: communication, foraging and survival in cities

Supervisor: Dr Elli Leadbeater (Royal Holloway University of London) Co-supervisor: Dr. Richard Gill (Imperial College)

Bee pollination is enormously important to worldwide food production, and widely-reported threats to bee welfare have attracted global concern. Yet, evidence suggests that bees may be faring surprisingly well in an environment that would seem barren: the urban sprawl. Urban beekeeping is on the rise, and there is growing evidence that floral oases in cities can support surprisingly high pollinator diversity. But although this might provide insight into conservation strategies, we do not fully understand how urban bees adapt to their modern habitat. This four-year project will take a colony-based approach to compare the behaviour of bees from colonies placed in rural and urban environments, focussing particularly on waggle dance recruitment to food.

The successful applicant will be based at Royal Holloway University of London in the research group of Dr. Elli Leadbeater, and will be co-supervised by Dr. Richard Gill at Imperial College. Royal Holloway has an active and exciting research environment, and the department is currently ranked 6th in the UK for research excellence. We have a thriving core of researchers interested in social insect behaviour and evolution. Experimental work will involve field-based behavioural experiments on bee colonies in the spring and summer, and laboratory-based studies during the winter. The project also includes a 3-month placement at a non-academic host institute, the nature of which will depend upon the student's interests but may involve the media or conservation charities. Pre-application informal enquiries are strongly encouraged. Please direct these to Dr. Elli Leadbeater (Elli.Leadbeater@rhul.ac.uk).

Eligibility and Application Procedure All candidates should hold, or be expecting to gain by July, a 1st class or 2.1 BSc degree, or an MSc, in a suitable biological subject. Evidence of enthusiasm for research and a strong interest in animal behaviour will be an advantage, as will experience of field or lab-based behavioural experiments. The UK Biotechnology and Biological Science Research Council rules require that successful applicants must have appropriate UK residence eligibility (permanent right of abode in the UK). More details and an application form are available at:

http://www.rhul.ac.uk/biologicalsciences/-prospectivestudents/postgraduateresearch/-phdstudentships2014.aspx The application form should be emailed to tracey.jeffries@rhul.ac.uk, together with a CV and followed by two references, before the closing date of 24th January 2014 (5pm). Please clearly state the name of the supervisor (Dr. Elli Leadbeater) and project (Urban bees) that you

are applying for.

Elli.Leadbeater@rhul.ac.uk

LouisianaStateU PhylogeneticsMolecularEvolution

Graduate Students - Lab of Jeremy M. Brown - Louisiana State University

Phylogenetics, Phylogeography, and Molecular Evolution

NSF-funded Research Assistantship

Applications for graduate students in the lab of Jeremy M. Brown at Louisiana State University (LSU) are now being accepted for Fall 2014 admission. Research in the Brown lab is broadly centered on the use of a phylogenetic perspective to understand organismal history and molecular evolution. We work on both empirical and methodological questions, often involving the development of novel statistical and computational approaches. Recent and ongoing empirical work includes large-scale studies of vertebrate phylogeny, the use of phylogenies as forensic tools in criminal cases of HIV transmission, and investigations into somatic diversification during tumor development. Recent and ongoing methodological work focuses on the development and testing of statistical approaches for phylogenomics and the interpretation/visualization of phylogenetic information in massive sets of trees. Extensive opportunities exist for collaboration and coadvising with other outstanding evolutiona ry genetics labs at LSU (including those of Robb Brumfield, Mike Hellberg, Chris Austin, Jake Esselstyn, Prosanta Chakrabarty, Maheshi Dassanayake, and Cameron Thrash among others). An interest in programming, computation, and/or statistics is encouraged, but no specific prior background is required. Incoming students will join a highly collaborative and interactive group of researchers: http://www.phyleaux1.lsu.edu/-?q=node/8 . A research assistantship is currently available through a recent grant from the National Science Foundation (http://www.nsf.gov/awardsearch/-showAward?AWD_ID62571). The funded project aims to interpret, extract, and visualize the phylogenetic signal contained in collections of phylogenetic trees using network analyses. The project is collaborative with Jim Wilgenbusch and Kyle Gallivan at Florida State. Student involvement in this project could involve empirical analyses and/or software development.

All accepted students are guaranteed funding through research and/or teaching assistantships. Some excellent fellowship opportunities are also available for highly qualified applicants through the Louisiana Board of Regents (http://web.laregents.org/programs/borsf-programs/graduate-fellows/).

LSU's Dept. of Biological Sciences has a particular strength in computational evolutionary genetics. LSU continues to invest heavily in the computational sciences, with a recent focus on computational biology. Outstanding resources are available through the Center for Computation and Technology (http://-www.cct.lsu.edu/home) and the Louisiana Optical Network Initiative (http://www.loni.org/).

Baton Rouge is located in South Louisiana, one of the most culturally unique locations in the United States (http://louisianatravel.com/). The surrounding area has excellent food, music, festivals, and outdoor recreation. LSU's campus is just over an hour's drive from New Orleans and allows easy access to much of the Gulf Coast.

Informal inquires are welcomed and can be sent to: jembrown [at] lsu.edu

For more information on applying, see: http://-www.biology.lsu.edu/cos/biosci/GraduateProgram/-ProspectiveStudents/item39623.html https://-app.applyyourself.com/?id=gradlsu For more information on the Brown lab, visit us on the web at: http://www.phyleauxgenetics.org/ For more information on LSU's Dept. of Biological Sciences, visit: http://www.biology.lsu.edu/ Jeremy M. Brown Assistant Professor Louisiana State University Dept. of Biological Sciences 202 Life Sciences Building Baton Rouge, LA 70803

(225) 578-1745

http://www.phyleauxgenetics.org/

McMasterU AncientMicrobialGenomics

Multiple graduate positions are available starting in the fall of 2014 to work on ancient microbial genomics at McMaster University under the direction of Prof.H.Poinar and Prof.B.Golding.

Job Description: Advances in genome sequencing abilities and advances in techniques for the recovery of an-

cient DNA will be combined in this study to elucidate the genomes of ancient bacteria.

We are looking for students with good quantitative skills and/or molecular biological skills, that are capable of the analysis and generation of data from several ancient microbial genome projects. The successful candidate will work to develop new approaches in the lab or in the analysis of large sequence datasets to investigate the evolution of bacterial genomes.

Requirements: An degree in bioinformatics, computer science, genetics, molecular biology or other relevant topic; a knowledge of statistics; (proficiency in R, python or perl, C or C++ is a plus but not a necessity); and or experience with the analysis of genomic data sets. Wet bench skills such as DNA extraction, library preparation for HTS is helpful.

The candidate should be able to work independently and to have demonstrated the ability to develop with a project by generating new ideas and collaborative skills.

Individuals interested in the position should send (1) a cover letter summarizing their research interests and expertise relevant to the project (2) a Curriculum Vitae, and (3) the names and contact information for at least two people who can provide recommendations. The application should be sent as a single pdf file to

Prof. Hendrik Poinar (poinarh@mcmaster.ca) and Prof. Brian Golding (Golding@mcmaster.ca)

Hendrik Poinar <poinarh@mcmaster.ca>

NewcastleU TreeGenomics

A NERC-CASE funded PhD Studentship is open for competitive applications, entitled: "Living on the edge: can adaptation at the edge of a species range accommodate rapid climatic change in a long-lived species?" Eligibility: UK and European Union applicants only (for details see: www.nerc.ac.uk/funding/application/-studentships/)

The PhD studentship is supported by the Natural Environment Research Council, UK (NERC)-IAPETUS Doctoral Training Partnership. The studentship is for 3 - 4 years and based at Newcastle University, School of Biology. This project (Ref. IAP/13/73) is in collaboration with Dr Stephen Cavers (NERC, CEH, Edinburgh). The project will give the student skills/knowledge in Next Generation Sequencing, Bioinformatics, forest tree genetics, molecular evolution, plant taxonomy, field work, ecology and plant physiology and will give the student opportunities for interaction with stakeholders at a European scale. Full details of the project: http://www.iapetus.ac.uk/wp-content/uploads/2013/12/IAP_13_73-NEW-Wolff.pdf Candidates will be competitively assessed across all IAPETUS DTP projects (http://www.iapetus.ac.uk) and will need to meet NERC minimum eligibility requirements (see http://www.nerc.ac.uk/funding/-available/postgrad/eligibility.asp). Successful projects are anticipated to start from Oct 2014. The studentship includes tuition fees, monthly stipend (including additional CASE contribution), and research funds, depending on eligibility. General information about the IAPETUS DTP competition: http:/-/www.iapetus.ac.uk/?page_idc Applications need to go through the Newcastle applicant portal http://-www.ncl.ac.uk/postgraduate/apply/form/ The deadline for applications is 31st January 2014, although applications up till the DTP IAPETUS deadline of 10th February will be accepted.

Please contact Kirsten Wolff at Newcastle University for informal information.

Dr Kirsten Wolff Reader in Evolutionary Genetics Newcastle University, School of Biology Devonshire Building 5th floor Newcastle NE1 7RU, UK Phone: 0191 208 5626/4852 Fax: 0191 208 5229 email: kirsten.wolff@ncl.ac.uk www.staff.ncl.ac.uk/-kirsten.wolff/ kirsten.wolff@newcastle.ac.uk

NorthWesternU PlantConservation

Subject: Graduate program in plant biology and conservation at Northwestern University

PLANT BIOLOGY AND CONSERVATION

The Graduate Program in Plant Biology and Conservation is a collaboration between Northwestern University (NU) and the Chicago Botanic Garden (CBG). Both MS and PhD degrees are offered. This year a new internship-based MS program in land management and conservation is being offered. The programs offer a unique opportunity to study ecology, evolution, and environmental issues at the interface of basic and applied plant science. Students apply to the program through Northwestern University and take their courses at both NU and CBG with faculty from both institutions. The Plant Conservation and Science Center at CBG is a

tremendous resource for students, and the Chicago region provides an excellent community at the forefront of research in conservation and sustainability. Faculty research areas include:

Climate Change Conservation Genetics Crop Evolution and Diversity Invasion Biology Paleobotany, Paleoecology, and Paleoclimate Phylogenomics Plant Animal Interactions Plant Demography Plant Reproductive Ecology Plant and Fungal Systematics and Evolution Restoration Ecology Soil Ecology and Fungal Diversity

To learn more, contact the program director, Nyree Zerega (nzerega@chicagobotanic.org) or visit our websites:

Graduate Program: http://-www.plantbiology.northwestern.edu/ Plant Science Center: http://www.chicagobotanic.org/research/-labs.php?expanddiv=plant_conservation Application deadlines: PhD: December 31, 2013 MS (thesis-based): February 15, 2014 MS (internship-based): Applications will be reviewed beginning February 15 and review will continue through April 30, 2014. Admissions are on a rolling basis.

n-zerega@northwestern.edu

PennState InsectSystematics

The Deans lab has multiple openings for highly motivated graduate students interested in insect biodiversity and evolution. The current taxonomic focus is Hymenoptera (especially Ceraphronoidea), though opportunities to research other taxa are available. Selected students will be part of a highly integrative and energetic lab group, led by Drs. Andrew R. Deans, Heather M. Hines, and István Mikó and based, in part, at the Frost Entomological Museum.

Our research team employs multiple approaches to understand the evolution of form, function, and diversity in Hymenoptera, and students will minimally receive training in: - comparative morphology, including dissection, microscopy, and 3D reconstruction - phylogenetics - revisionary taxonomy - biodiversity informatics

Research/travel stipends available.

Find out more: PSU Entomology grad program - http://ento.psu.edu/graduatestudents Frost Museum blog - http://sites.psu.edu/frost/ Deans lab - http://deanslab.org/ Hines lab - http://-www.personal.psu.edu/hmh19/ Penn State - http://-psu.edu/ Andrew R. Deans Department of Entomology Pennsylvania State University 501 ASI Building University Park, PA 16802 USA

Phone: +1 814 863 2863 FAX: +1 814 865 3048 skype: ardeans

adeans@gmail.com

QueenMaryU CulturalEvolution

Header: Graduate Position: evolution of culture, Queen Mary U, London

Applications are invited from all nationalities for a funded PhD Studentship starting September 2014 within the Centre for Digital Music (C4DM) in the field of cultural evolution.

Background. Cultural evolution is a relatively new field in which the tools and concepts of evolutionary biology are applied to the historical dynamics of human artifacts. The goal of this PhD is to study the emergence of musical styles, and their causes, in an evolutionary framework. See, for example, our "Evolution of Music by Public Choice" (MacCallum et al., PNAS, 2012, http://www.pnas.org/content/early/-2012/06/12/1203182109)

Specifics. Depending on skills and inclination, the successful candidate will (1) focus on studying the evolutionary dynamics in existing datasets, estimating, for example, patterns of selection on musical traits and their transmission dynamics; or (2) develop robust audio feature extractors and music data mining methods for their application to particular bodies of music.

Supervision. The candidate will be supervised by Dr Matthias Mauch (http://www.eecs.qmul.ac.uk/-people/view/2932/dr-matthias-mauch) and will join a group of around 60 full-time PhD students, postdoctoral researchers and academics in the C4DM (http://c4dm.eecs.qmul.ac.uk/). The candidate will receive further advice on the study of evolution from external advisor Prof. Armand Leroi at Imperial College.

Skills. Candidates should have a first class honours degree or equivalent and/or a strong MSc degree in computer science, mathematics, physics, bioinformatics, evolutionary biology or engineering. Good programming skills in either Matlab, R, Python or similar

are essential, as is a passion for music. Knowledge of machine learning/data mining methods is desirable, but not essential if the candidate otherwise demonstrates good technical/mathematical skills.

Two sources of funding are available: An EPSRC studentship is available to candidates with UK residency. This studentship is for 3.5 years and will cover student fees and a tax-free stipend starting at £15,720 per annum. Full details and eligibility conditions can be found at http://www.epsrc.ac.uk/skills/students/help/Pages/eligibility.aspx .Candidates should state if they are eligible for this studentship. An International studentship is available to candidates without UK residency and is for 3 years. This studentship covers student fees and a tax-free stipend of £15,720 per annum.

Please apply on-line at http://www.qmul.ac.uk/postgraduate/applyresearchdegrees/index.html by selecting "Computer Science" in the "A-Z list of research opportunities" and following the instructions on the right hand side of the web page.

Please note that instead of the 'Research Proposal' we request a 'Statement of Research Interests', which should answer two questions: (i) Why are you interested in the proposed area? (ii) What is your experience in the proposed area? Your statement should be brief: no more than 500 words or one side of A4 paper. In addition we would also like you to send a sample of your written work. This might be a chapter of your final year dissertation, or a published conference or journal paper. More details can be found at: www.eecs.qmul.ac.uk/phd/apply.php or by clicking on the Apply button below. The closing date for the applications is 31 January 2014. Interviews are expected to take place during February 2014.

Please contact Dr Matthias Mauch (matthias.mauch@eecs.qmul.ac.uk) with any querie

"Leroi, Armand M" <a.leroi@imperial.ac.uk>

UAberdeen ExperimentalNicheEvolution

Experimental Evolution in Seed Beetles: Alternative Pathways to Habitat and Resource Divergence in a Global Crop Pest Under Changing Climates

Supervisors: Dr Lesley Lancaster (University of Aberdeen, UK), Dr Michael Ritchie (University of St Andrews, UK) and Dr Jörgen Ripa (Lund University, Sweden)

** EXTENDED APPLICATION DEADLINE: Monday 6 January 2014 **

APPLY ONLINE HERE: http://www.abdn.ac.uk/clsm/graduate/research/Seed%20Beetles.php Funding restricted to UK residents, see below

Project description:

Many organisms are currently responding to climate changes with dramatic range shifts involving evolutionary responses. Among the organisms most strongly affected by changing climates are small, exothermic animals such as insects, which can evolve rapidly and quickly disperse into available niches, often posing new threats to food security (as crop or stored-food pests), human and animal welfare (as disease vectors), and affecting overall ecosystem function.

The mechanisms of niche evolution and range shift under rapidly changing climates remain poorly understood. In this PhD project, the student will investigate a number of hypothetical evolutionary trajectories that could underlie rapid shifts in resource use and climatic tolerances observed during range expansions. Using experimental evolution and crossing experiments in a captive-bred colony of seed beetles (Coleoptera: Bruchidae, a global stored-crop pest), combined with in silico modeling approaches, the student will investigate conditions producing alternative evolutionary scenarios, and the quantitative genetic/genomic basis of niche divergence under each scenario. Project outputs will inform management of evolving pest species, and will contribute to evolutionary theory.

We will provide training in experimental evolution, quantitative genetic and genomic methods, and individual-based modelling approaches. Applicants are encouraged to establish contact with Dr Lesley Lancaster (lesleylancaster@abdn.ac.uk) during the application procedure.

Funding and Eligibility:

EASTBIO BBSRC Studentship: this scholarship will cover four years fees and stipend for UK/EU* students only. *European applicants must have been resident in the United Kingdom for the three years leading up to the start of the degree programme. Candidates should have (or expect to achieve) a First Class Honours degree and/or an excellent postgraduate qualification in a relevant subject. Please note that this project is in competition with others for the award of this studentship.

Application Notes:

Please select 'Degree of Doctor of Philosophy in Biological Sciences' in the online application form to ensure

that your application is sent to the College of Life Sciences & Medicine for processing. Any inaccurate information may result in a delay.

Lesley Lancaster, PhD University of Aberdeen School of Biological Sciences Zoology Building, Tillydrone Ave. Aberdeen AB24 2TZ lesleylancaster@abdn.ac.uk +44 01224 274551

The University of Aberdeen is a charity registered in Scotland, No SC013683.

Lesley Lancaster <lesleylancaster@abdn.ac.uk>

UAberdeen ExptEvolSeedBeetles

Experimental Evolution in Seed Beetles: Alternative Pathways to Habitat and Resource Divergence in a Global Crop Pest Under Changing Climates

Supervisors: Dr Lesley Lancaster (University of Aberdeen, UK), Dr Michael Ritchie (University of St Andrews, UK) and Dr Jörgen Ripa (Lund University, Sweden)

Application Deadline: Monday 16 December 2013

APPLY ONLINE HERE: http://www.abdn.ac.uk/-clsm/graduate/research/Seed%20Beetles.php **Funding restricted to UK residents, see below**

Project description:

Many organisms are currently responding to climate changes with dramatic range shifts involving evolutionary responses. Among the organisms most strongly affected by changing climates are small, exothermic animals such as insects, which can evolve rapidly and quickly disperse into available niches, often posing new threats to food security (as crop or stored-food pests), human and animal welfare (as disease vectors), and affecting overall ecosystem function.

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Application Notes:

Please select 'Degree of Doctor of Philosophy in Biological Sciences' in the online application form to ensure that your application is sent to the College of Life Sciences & Medicine for processing. Any inaccurate information may result in a delay.

Lesley Lancaster, PhD University of Aberdeen School of Biological Sciences Zoology Building, Tillydrone Ave. Aberdeen AB24 2TZ lesleylancaster@abdn.ac.uk +44 01224 274551

Lesley Lancaster <lesleylancaster@abdn.ac.uk>

UAberdeen GenomeResequencingGeneticsOfGrowth

Graduate position available: Discovery and Exploitation of Genetic Variation Controlling Growth in Farmed Tilapia Using Genome Sequencing. PhD studentship supervised at the University of Aberdeen. Supervisors: Dr Dan Macqueen (University of Aberdeen), Prof Ian Johnston (Xelect Limited), Dr Sam Martin (University of Aberdeen). Application Deadline: Monday 6 January 2014. Advert (https://www.abdn.ac.uk/-clsm/graduate/research/discovery-and-exploitation-of-genetic-variation-controlling-growth-in-farmed-tilapia-using-genome-sequencing-441.php). The University

of Aberdeen and Xelect Ltd are pleased to announce the joint-supervision of a prestigious Industrial CASE PhD studentship. Xelect Ltd develops and licenses genetic markers for broodstock selection to the aquaculture industry. The project aims to develop novel genetic applications in tilapia aquaculture - an international industry worth > $3 billion, which has a key role in global food security. We are seeking an outstanding and highly motivated student with a strong background in genomics and bioinformatics and preferably an interest in fish biology and/or aquaculture.The student will identify and characterise massive-scale genetic variation in tilapia, focusing on its role in controlling growth traits. They will generate a large trait database spanning fish individuals from multiple unrelated families and perform extensive sequencing experiments, either at the whole genome level or targeting candidate genes with prior sequence capture enrichment. The approach will generate an unprecedented single nucleotide polymorphism (SNP) database, which will be used to identify genetic variation controlling the growth traits, exploiting established statistical methods and follow-up laboratory experiments. We expect the project will provide important data about the genetic control of growth. There will also be the opportunity to patent SNP markers and commercialize them. The student will be trained in fish biology and husbandry and in the generation and analysis of next-generation sequencing data. A minimum three-month research placement with Xelect Ltd will add a strong translational component to their training. The student will attend and present their results at international conferences and be expected to publish high impact papers. The successful candidate will graduate with a strong CV relevant to both academic and commercial post-doctoral research environments. Informal enquires are very welcome and should be directed to Dr Dan Macqueen. Funding and Eligibility: EASTBIO BBSRC Studentship: the scholarship will cover four years fees and stipend for UK/EU* students only. *European applicants must have been resident in the United Kingdom for the three years leading up to the start of the degree programme. Candidates should have (or expect to achieve) a First Class Honours degree and/or an excellent postgraduate qualification in a relevant subject. Interested candidates are invited to informally contact lead supervisor Dan Macqueen (http://www.abdn.ac.uk/-biologicalsci/staff/details/daniel.macqueen) by email (daniel.macqueen@abdn.ac.uk).

The University of Aberdeen is a charity registered in Scotland, No SC013683.

daniel.macqueen@abdn.ac.uk

UAntwerp UGhent Senescence

The Faculty of Sciences, Department Biology-Ethology of the University of Antwerp and the Terrestrial Ecology Unit of the University of Ghent are seeking to fill the following vacancy (m/f):

Ph.D. student in Behavioural and Evolutionary Ecology

Job description: Senescence, the progressive deterioration of performance with advancing age, is increasingly documented in natural animal populations. However, ageing is not only relevant for the ageing individual, there is increasing evidence that offspring quality changes as a function of parental age. But very little is known why offspring from older parents may have decreased survival prospects. In the proposed project we, therefore, shift the focus on the transgenerational aspects of ageing. We will apply sophisticated cross-fostering experiments in a wild population of individually marked Lesser black-backed gulls, combined with cross-sectional, longitudinal and state-of-the-art behavioural tracking approaches to ultimately improve our understanding of the evolutionary ecology of senescence.

Profile and requirements: * you have a Master degree in Biology or an equivalent degree in life sciences. * you are an enthusiastic and motivated student with a strong interest in Behavioral and Evolutionary Ecology, who likes working in the field under at times harsh conditions. Preferentially you have already experience in fieldwork, but this is not essential. * you have good organizational, writing and presentation skills and should be able to work well both independently and in a team environment.

We offer: * a Ph.D. scholarship for one year, and extension for another three years after positive evaluation. * the project will be carried out in close collaboration with Ghent University (joint FWO funded project). * during fieldwork, you will form part of a small research team (2-3 PhD students, 2 field assistants) studying different aspects of gull ecology. * based at the University of Antwerp, the successful applicant will join a young, dynamic and stimulating group of researchers working on all 4 major aspects of animal behaviour (causation, development, function, evolution), with particular emphasis on bird family life (maternal effects, phenotypic plastic-

ity, parent-offspring conflict & co- adaptation) (see https://www.uantwerpen.be/en/staff/wendt-mueller/- and http://www.ecology.ugent.be/terec/) * the preferred starting date is 1 March or 1 April 2014

Interested? * Please send all application material including 1) your curriculum vitae 2) a brief (250 words) summary of your reasons for applying and 3) contact information of max. 2 referees) as single PDF-file to: Wendt.Mueller@uantwerpen.be. Review of the applications will start on 3 February 2014 and continue until the position is filled, interviews of short-listed candidates will be held early February. * For more information, contact Prof. Wendt Müller (Wendt.Mueller@uantwerpen.be) or Prof. Luc Lens (Luc.Lens@ugent.be)

Müller Wendt <Wendt.Mueller@uantwerpen.be>

UBielefeld MarinePopulationGenetics

Population structure and local adaptation in commercially important European shellfish

Supervisors: Dr. Joe Hoffman (Bielefeld University, Germany), Dr Liz Harper (Cambridge University, UK) and Dr Melody Clark (British Antarctic Survey, UK)

There is mounting concern over the acidification of the World's oceans. In the 250 years since the onset of the industrial revolution, atmospheric CO2 levels have risen from 280 to 381 ppm and ocean pH has fallen from an average 8.16 to 8.05. Human-driven emissions of CO2 continue to rise and have begun to outstrip even the most pessimistic of IPCC model scenarios. How will life in the oceans adapt to this changing environment? Particular concern has been expressed over organisms with heavily calcified shells such as molluscs, as their ability to extract carbonate ions from seawater and incorporate these into their skeletons may be increasingly compromised.

This PhD position forms part of a Marie Curie Initial Training Network entitled CACHE: Calcium in a Changing Environment, funded by the EU (ref: 605051) and co-ordinated by the British Antarctic Survey. The aim of this network is to take a co-ordinated multidisciplinary approach to understanding calcium regulation and shell production in four commercially important shellfish species, the king scallop (Pecten maximus), the Pacific oyster, (Crassostrea gigas), the blue mussel (Mytilus edulis) and the soft shell clam (Mya arenaria). The network comprises 10 partners from 6 European countries, including research institutes, universities and SMEs. As a member of the network, the student will be expected to work co-operatively within the network, participate in European training events and spend up to 30% of their training with another network partner. Full details of the network can be found at www.cache-ITN.eu . The PhD project will use high-density SNP genotyping to examine the population genetic structure of the four shellfish species along a European latitudinal cline. The resulting data will be interpreted in the light of both life-history variation and oceanography, and will be analysed together with shell morphological data to explore the extent of phenotypic plasticity. Candidate genes involved in calcium regulation and deposition will also be assayed to test for fingerprints of natural selection.

We seek a bright and highly motivated student who ideally holds an M.Sc. or equivalent in a relevant topic (e.g. population, evolutionary or conservation genetics, bioinformatics). The student will be responsible for developing a bioinformatic pipeline to analyse Illumina Restriction Site Associated DNA (RAD) sequence data. Experience of installing and working with Linux systems, analysing high-throughput sequence data and writing custom scripts is therefore highly desirable, although full training can be provided. The ideal candidate will also be able to work both independently and as part of a multidisciplinary team. A high standard of spoken and written English is required.

The student will be based at the Department of Animal Behaviour at Bielefeld University (www.uni-bielefeld.de/biologie/vhf/index.html). The department is the oldest of its kind in Germany and currently hosts six principal investigators, seven postdocs and twenty PhD students. It offers a stimulating international environment and an excellent research infrastructure including a brand new molecular laboratory. The working language of the Department is English.

Bielefeld is a city of 325,000 inhabitants with an attractive historical centre and easy access to the Teutoberger Wald for hiking and other outdoor pursuits. It offers a very high standard of living and is well connected to most major European cities.

To apply for the position, please provide: (i) a letter of motivation including a maximum 2-page statement of your research interests, relevant skills and experience; (ii) a CV including publication list; (iii) names and contact details of three referees willing to write confidential letters of recommendation; (iv) for monitoring purposes only, please clearly state your nationality, sex and where

you saw the advert. All materials should be emailed as a single PDF file to: joseph.hoffman@uni-bielefeld.de with 'CACHE PhD application' in the subject line.

The application deadline is January 12th 2014 and interviews will take place shortly afterwards. The preferred start date is flexible and will depend on the timeframe of the most qualified applicant. For further information, please see http://www.uni-bielefeld.de/-biologie/vhf/JH or contact Joe Hoffman via email (joseph.hoffman@uni-bielefeld.de) with any informal inquiries.

If you are interested in a second CACHE project, please list that in your application. Any candidates shortlisted, but not offered a PhD

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UBirmingham EnvironmentalGenomics

Recruitment of a PhD student at the University of Birmingham, Edgbaston campus, Birmingham, UK

School of Biosciences, Environmental Genomics Group

*PI: Dr Luisa Orsini** (*http://-www.birmingham.ac.uk/schools/biosciences/staff/-profile.aspx?ReferenceId=63090&Name=dr-luisa-orsini)

**

PhD position in "Adaptive responses of natural populations to climate change": opening January 2014

Open position for a 3 - years PhD position, salary £26,459 per annum including graduate school fees.

/Rationale/: Both climate change and land use (agriculture) are recognized as a major problem in freshwater, estuarine and coastal environments, leading to eutrophication (organic pollution) and ecosystem damage. However, although the loss of water quality is recognized for its impact on ecosystem functioning and economy, one of the major issues for all types of agricultural practices and land use (classified as non-point source pollution by the EU and US Environmental Protection Agency) is that they are not easily measured or controlled directly and therefore are difficult to regulate. The PhD student will measure the temperature related changes that can lead to eutrophication as well as study the effect of pesticides on ecosystem functioning. The approach optimized for these two stressors can be extended to other environmental stressors, making the proposed research of high impact.

*/Job description: /*We are seeking*//*a motivated student who is looking forward to learning a multidisciplinary approach to science. He/she will work in a team of scientists with diverse and complementary expertise and learn from different fields of science. He/she will work in close collaboration with another PhD student focusing on paleogenomics and a postdoctoral researcher expert in bioinformatics. Theapplicant will establish a link between adaptive responses and specific environmental stressors (temperature and land use) through experimental evolution trials in mesocosm experiments. He/she will sequence population pools of evolved and control populations using high throughput sequencing technologies and identify signature of selection to temperature and land use changes using population genomics approaches. The results of this project will be a solid reference point for the analysis of adaptive responses in nature.

/Job requirements:/

1) Master in Biology/Environmental Science/Biochemistry

2) Fluency in spoken and written English is required

3) Previous experience in experimental evolution and/or statistical analysis is preferred

4) Previous experience in scientific writing will be considered as added value

5) Previous experience in international laboratories will be taken into account

For enquiries, please send a motivation letter, your CV and email contacts of three referees to l.orsini@bham.ac.uk.

Dr Luisa Orsini Lecturer in BioSystems and Environmental Change Environmental Genomics Group, School of Biosciences, University of Birmingham Birmingham, B15 2TT, United Kingdom T: +44 (0)121 4145894 F: +44 (0)121 414 5925 Email: l.orsini[at]bham.ac.uk

Free associate Laboratory of Aquatic Ecology, Evolution and Conservation University of Leuven Ch. Deberiotstraat 32, 3000 Leuven, Belgium Email luisa.orsini[at]bio.kuleuven.be

websites: http://www.birmingham.ac.uk/schools/-biosciences/staff/profile.aspx?ReferenceId=-63090&Name=dr-luisa-orsini https://-bio.kuleuven.be/eeb/laeec/whoiswho/00058905/ http://www.researchgate.net/profile/Luisa_Orsini/-?ev=hdr_xprf L Orsini <l.orsini@bham.ac.uk>

UBristol EvolutionPollinators

PhD Position: Traits and drivers of declines in UK pollinators

University of Bristol, UK & Centre for Ecology and Hydrology, Wallingford, UK. Application deadline: 9th January 2014, via the GW4+ DTP website. http:/-/www.bris.ac.uk/gw4plusdtp/apply/ Pollinating insects provide life-support services for biodiversity, ecosystems and food production by securing reproduction for c75% of food crops and 94% of flower plants. Widespread declines of many (but not all) species of insect pollinators have been reported recently, provoking serious concerns over future food security and ecosystem services. We understand little about macro-scale patterns (the traits and the drivers) of pollinator declines. Is who you are more important than where you are?

Recent research reveals how a range of anthropocentric pressures (e.g. pesticide use, climate change, intensive agriculture) may be driving declines in these species. But there is clearly variation in pollinator populations across and within species, with some species doing badly, but others doing well.

This studentship will determine which traits explain this variation. Species-specific traits such as tongue length, body size, life cycle, sociality & behavioural plasticity are all candidates for explaining the variation in pollinator declines. Much of the research to date has focused on social insect pollinators (particularly honeybees and bumblebees), yet these species represent a small fraction pollinator diversity in the UK: much of the pollination services are delivered by non-social Diptera, Lepidoptera and solitary bees. Further, are these biological traits better predictors of status than extrinsic factors, such as climate, land-use or the local intensity of pesticide use?

The student will exploit existing datasets of species occurrence (e.g. from data collected by volunteers (e.g. BWARS), professional surveys (Hymettus) and research council grants), assemble a comprehensive database of pollinator traits, and test hypotheses about the species' traits and environmental drivers of pollinator declines. This project, therefore, will reveal the importance of biological traits and extrinsic factors effecting population abundance across the range of insect pollinators, and make an important contribution to policy and predicting future delivery of pollination services under a range of environmental and land-use scenarios.

This is a collaborative, cross-disciplinary project, involving pollinator researchers at Bristol (Seirian Sumner & Jane Memmott), macroecologists at Centre for Ecology and Hydrology (Nick Isaac) and professional insect collections and survey organisations BWARS/Hymmettus (Mike Edwards).

Further project details can be found here: http://www.findaphd.com/search/-ProjectDetails.aspx?PJID=3D49688&LID=3D191 Applicants must have a 2.1 or 1st (or equivalent) from their first degree. Candidates must be from UK or EU. Informal enquiries should be addressed to: Seirian.Sumner@Bristol.ac.uk (http://-www.bristol.ac.uk/biology/people/seirian-r-sumner/-index.html) or Nick Isaac njbi@ceh.ac.uk (http://-www.ceh.ac.uk/staffwebpages/drnickisaac.html)

Dr Seirian Sumner Senior Lecturer in Behavioural Biology School of Biological Sciences University of Bristol Woodland Road Bristol BS8 1UG United Kingdom

Tel: 0117 33 17 898

Email: Seirian.Sumner@Bristol.ac.uk Website: http:/-/www.bristol.ac.uk/biology/people/seirian-r-sumner/-index.html Twitter: @WaspWoman

seirian.sumner@googlemail.com

UBristol EvolutionaryAdaptation

Applications invited for two studentships eligible for NERC funding at the University of Bristol, UK:

(1) When does adaptation prevent extinction due to climate change? Testing for evolution at contracting margins of European butterflies

http://www.findaphd.com/search/-ProjectDetails.aspx?PJID=49684 (2) Life history evolution in Australian fruit flies: are sexually successful males less stress resistant?

http://www.findaphd.com/search/-

ProjectDetails.aspx?PJID=49683 The deadline for applications is 10th Jan 2014, but please contact Jon Bridle (jon.bridle@bristol.ac.uk) directly before this date if you're interested.

Please see: http://www.bristol.ac.uk/gw4plusdtp/-projects/ for more details of these projects, and the application procedure.

These studentships will competitively awarded, and fully funded, and are open to all EU applicants. However, funding for living costs as well as tuition fees is only available for UK students.

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Dr Jon Bridle School of Biological Sciences University of Bristol, BS8 1UD Tel. 0117 928 7482

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

UBristol PollinatorSocieties

Pesticide "hang-overs" and social disruption in pollinator societies

University of Bristol, UK & University of Bath, UK Application deadline: 9th January 2014, via the SWDTP webpage http://www.bris.ac.uk/swdtp/apply/ Insect pollinators are essential for our food security. The recent global declines of key pollinators are therefore of great concern for global food production. The social bees are one of the most important crop pollinators, with their services valued at over $200billion per year. One major concern is whether pesticide use is responsible for the observed declines in pollinator populations. We lack essential mechanistic understanding of how pesticides disrupt insect behaviour, from genes to phenotype. This studentship will explore how pesticides disrupt social behaviours and colony-level interaction networks in pollinator societies, and whether such social disruption leads to suboptimal colony performance. Exposure to pesticides may impair the ability of individuals to interact, communicate and cooperate with their colony mates. There may be transient effects of individual-level exposure on colony function which 'end-point' studies miss. For example, what colony-level impact does a pesticide 'hang-over' have, where individuals may be affected for only a short time period after exposure? Finally, we know nothing about the genes associated with changes in behaviour after pesticide exposure.

The student will use a combination of behavioural experiments on bumble-bee colonies and social network analyses address these questions. The student will also have the opportunity to identify the changes in brain gene expression that occur during disruption of social behaviour. This project will reveal the functional effects of pesticides on these important pollinators, from gene to individual to colony level. It will thus deliver substantial impact in providing the science base for the future of sustainable agriculture in a world with growing food demands.

This is a collaborative, inter-disciplinary project, with high-level training in four fields: behavioural biology, pollinator research and genomics (Bristol - Seirian Sumner & Heather Whitney, School of Biological Sciences), and computational biology and mathematics (Bath - Dick James, Dept of Physics).

Further project details can be found here: http://www.findaphd.com/search/-ProjectDetails.aspx?PJID=3D49689&LID=3D191 Applicants must have a 2.1 or 1st (or equivalent) from their first degree. Candidates must be from UK or EU. Informal enquiries should be addressed to: Seirian.Sumner@Bristol.ac.uk (http://-www.bristol.ac.uk/biology/people/seirian-r-sumner/-index.html) or Dick James - pysrj@bath.ac.uk (http:/-/www.bath.ac.uk/physics/contacts/academics/-dick_james/).

Dr Seirian Sumner Senior Lecturer in Behavioural Biology School of Biological Sciences University of Bristol Woodland Road Bristol BS8 1UG United Kingdom

Tel: 0117 33 17 898

Email: Seirian.Sumner@Bristol.ac.uk Website: http:/-/www.bristol.ac.uk/biology/people/seirian-r-sumner/-index.html Twitter: @WaspWoman

seirian.sumner@googlemail.com

UCapeTown BirdPathogenEvolution

PhD opportunity at the University of Cape Town, Department of Biological Sciences.

Project: Pathogen landscapes in endemic bird pollinators of the Cape Floral Kingdom

This project aims to understand (i) the pathogen pressures experienced by habitat-generalist and habitat-specialist bird pollinators across a natural / urban / agricultural landscape matrix, and (ii) test the roles

that pathogens are likely to play in a future of contracting habitat availability and decreasing connectivity.

Research into the role of pathogens in host ecology and evolution has grown in recent decades and the advent of PCR-based methods now allows us greater insight into spatial patterns of pathogen pressure and diversity. Avian haemosporidians are blood parasites responsible for many diseases in domestic birds and their negative effects on fitness in wild bird populations are well established. Parasitism can affect host survival and fitness, and much like predators and food availability, may act to regulate host populations. In an age of global change and human-transformed landscapes the role of pathogens however remains poorly understood.

This project will involve collection of blood smears from target species together with the use of PCR-based methods to characterise infection intensity and prevalence of haemosporidian blood parasites. If your interests include the role of the Major Histocompatibility Complex in pathogen landscapes there is flexibility in developing the methods used in the project to include testing the role of selection at MHC class I loci in target species.

The project is fully funded with an annual tax-exempt R90 000 bursary for three years and associated running costs. The successful applicant will have a strong undergraduate academic record, an MSc degree in the Biological Sciences with relevant ornithological field experience and be available to start early to mid 2014. This project is part of a broader collaboration on Fynbos endemic birds and climate change between the Fitzpatrick Institute for African Ornithology at UCT, the South African National Biodiversity Institute and Birdlife SA.

For more details please contact me directly.

To apply, please send a CV (including your academic record & names and contact details of two referees) together with a short motivation for why you wish to undertake this research to Dr Jacqueline Bishop (jacqueline.bishop@uct.ac.za).

Closing date: 20th December 2013

Dr Jacqueline Bishop

Department of Biological Sciences University of Cape Town Private Bag Rondebosch 7700 South Africa

Tel. +27 21 6503631 email: jacqueline.bishop@uct.ac.za OR jbishop.uct@gmail.com website: http://www.biologicalsciences.uct.ac.za/ Jacqueline Bishop <jbishop.uct@gmail.com>

UExeter HumanEvolution

NERC funded PhD opportunities in human behavioural ecology/cultural evolution at the University of Exeter

Shakti Lamba and Tom Currie are currently advertising three projects for NERC-funded PhD studentships at Exeter to study processes that drive cultural change, the evolution of sociopolitical complexity, and evolutionary explanations of obesity respectively.

More information about these projects can be found through these links:

cultural change: http://www.exeter.ac.uk/studying/-funding/award/?id50 evolution of sociopolitical complexity: http://www.exeter.ac.uk/studying/funding/-award/index.php?id35 evolutionary explanations of obesity: http://www.exeter.ac.uk/studying/funding/-award/index.php?id36 Those interested can email us at S.Lamba@exeter.ac.uk or T.Currie@exeter.ac.uk to discuss these opportunities further.

“Currie, Thomas” <T.Currie@exeter.ac.uk>

UGeorgia BehavioralGeneticsFireAnts

PhD assistantship to support behavioral genetics of fire ants

Brendan Hunt and Ken Ross, Department of Entomology, University of Georgia

Funding is available to support one PhD student, to be co-advised by Brendan Hunt (http:/-/www.ent.uga.edu/personnel/faculty/brendan-hunt.html) and Ken Ross (http://www.ent.uga.edu/-personnel/faculty/ross.htm) in the Department of Entomology at the University of Georgia. The student will begin Fall Semester 2014.

Summary The broad goal of this research program is to provide insight into the regulatory and genetic basis of phenotypic variation. This will be achieved by using a combination of functional genomic tools and experimentation on lab-reared Solenopsis fire ant colonies. The student will take coursework in traditional ento-

mology as well as genomics/bioinformatics and will receive training in both areas. Hunt, a recently hired faculty member in the Department, has published research in social insect comparative genomics and epigenetics. Ross, a long time faculty member in the Department, has published research in fire ant taxonomy, social structure, population biology, and molecular evolution.

Requirements Biology background with interest in behavioral genetics. Applicants must meet requirements of admission to the Graduate School at the University of Georgia (see http://www.ent.uga.edu/graduate.html).

Applicants should direct inquiries to Brendan Hunt at huntbg@uga.edu.

Brendan Hunt Assistant Professor Department of Entomology University of Georgia - Griffin Campus 1109 Experiment Street Griffin, GA 30223-1797 USA office: 125 Redding Building phone: (770) 412-4093 skype: huntbg web: www.ent.uga.edu/personnel/-faculty/brendan-hunt.html huntbg@uga.edu

UGeorgia EvolutionaryGenomicsEpigenetics

Graduate position: PhD student in evolutionary genomics and epigenetics. Brendan Hunt and Ken Ross, Department of Entomology, University of Georgia.

This research program aims to investigate the epigenetic and genetic basis of behavioral and evolutionary variation in social insects through the sequencing of new genomes and the generation of functional genomic data. These data will be complemented with field collection and experimentation, benefitting from several multi-institution collaborations (see http://-huntlab.uga.edu/research.htm). The student will take coursework in traditional entomology as well as genomics/bioinformatics and will receive training in both areas. Hunt, a recently hired faculty member in the Department, has published research in social insect comparative genomics and epigenetics. Ross, a long time faculty member in the Department, has published research in fire ant taxonomy, social structure, population biology, and molecular evolution.

Requirements: Self-motivation, an interest in broad evolutionary questions, and a strong desire to develop bioinformatic expertise. Applicants must meet requirements of admission to the Graduate School at the University of Georgia (see http://www.ent.uga.edu/-graduate.html). The student will begin Fall Semester 2014.

More information about the Hunt Lab can be found online at http://huntlab.uga.edu. Prospective applicants should email Brendan Hunt at huntbg@uga.edu with a statement of interest.

huntbg@uga.edu

UHelsinki EvolutionDiseaseResistance

Applications are invited for a

FOUR-YEAR PHD STUDENT POSITION

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 focused on the interplay between ecology, genetics and evolution in shaping resistance of host plant /Plantago lanceolata/ against its pathogens. Host plant /P. lanceolata/ and its fungal pathogen /Podosphaera plantaginis/ have been intensively studied in the Åland Islands. With 12 years of epidemiological data from over 4000 host populations and solid experimental protocols, this system offers unique opportunities for testing classic hypotheses regarding host–pathogen co-evolution with direct links to epidemiological dynamics.

In practice, you will carry out field work in the Åland Islands archipelago (SW Finland) and conduct experimental work in the laboratory and under semi natural field conditions. The work involves the development and use of genomic tools to identify genes involved in disease resistance.The work may involve extended periods in the field sites in Åland and working with international collaborators in Europe and Australia. You are expected to present your findings in scientific meetings and workshops, as well as prepare publications for international scientific journals.

Motivated students with a MSc degree in ecology, evolutionary biology or molecular biology (or other related fields) are encouraged to apply. Prior expertise in experimental design, statistical analysis, bioinformatics or molecular laboratory work are a bonus but your most important assets are enthusiasm for research, motivation to learn new things, and ability to work indepen-

dently while being an active member of a research team.

Please send your application to biotiede-mrg@helsinki.fi by 8 January 2014 with title PhD RESISTANCE. Attach a CV (with possible publications included), a copy of your transcript records (= printout of the courses you've completed during your MSc), contact details of two references (e.g. MSc thesis supervisor), and a letter (MAX 1 page) with a description of your researcher interests and why you would be a suitable candidate for the project.

The salary will be based on level 2 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointee will be paid a salary component based on personal performance. Approximately the overall salary will be(2141 – 2609 EUR/month). All standard pension benefits and occupational health care are provided for university employees.

The work is scheduled to start in Winter/Spring 2014. For more information, please contact Dr Anna-Liisa Laine (anna-liisa.laine@helsinki.fi) and visit the website at allaine.it.helsinki.fi.

For information on the University of Helsinki, please visit: http://www.helsinki.fi/university/index.html
Anna-Liisa Laine <anna-liisa.laine@helsinki.fi>

UHull InvasiveSpecies

PhD studentship available from September 2014 at the University of Hull, UK and Centre for Ecology and Hydrology.

Title: Environmental DNA: From early detection to impact assessment of Invasive Alien Species in Freshwater ecosystems

Background and aims:

Invasive species rank alongside climate change as one of the major drivers of biodiversity loss, and cost the European economy up to â¬20*billionannually.Freshwaterecosystemsareoneofthemostvulnerablehabitatson Earthandareparticularlysusceptibletobiol*

Why choose this PhD? The studentship will:

Provide fantastic training in cutting edge molecular techniques, bioinformatics, and statistical modelling. Produce and disseminate critical results that will contribute to invasive species management in the EU. Be supported by considerable expertise in dynamic research environments at UoH and CEH. Benefit from recently refurbished labs with excellent molecular and bioinformatics facilities. Provide the opportunity to live in the UK City of Culture 2017!

How to apply:

Contact Dr Lori Lawson Handley l.lawson-handley@hull.ac.uk, 0044 (0) 1482 462061, to express interest PRIOR to formally applying, preferably before 10th January 2014. Apply formally, including a brief outline of research via http://www2.hull.ac.uk/student/graduateschool/-phdscholarships.aspx#EnergyERT Closing date 3rd February 2014

Supervisors: Lori Lawson Handley (UoH), Bernd Hänfling (UoH), Dave Lunt (UoH); Helen E Roy (CEH) and Graham Ferrier (UoH)

Eligibility: Applicants are expected to hold a minimum of a UK upper second class Honours degree, or equivalent, in an appropriate discipline

Full-time UK/EU PhD Scholarship will include fees at the âhome/EU' student rate and maintenance (Â£13,726 in 2014/15), subject to final confirmation) for three years, depending on satisfactory progress.

Full-time International (non EU) Fee PhD Studentships will include full fees at the International student rate for three years, dependent on satisfactory progress but no maintenance.

Dr Lori Lawson Handley School of Biological, Biomedical and Environmental Sciences University of Hull Cottingham Rd, Hull, HU6 7RX U.K.

Email l.lawson-handley@hull.ac.uk http:/-/www2.hull.ac.uk/science/biology/-research/evolutionary%20biology/-lori%20handleys%20research.aspx Twitter: @Calvia14

L.Lawson-Handley@hull.ac.uk

UIllinois FishEvolution

Two graduate research positions are available in the laboratory of Dr. Becky Fuller (http://-www.life.illinois.edu/fuller/) at the University of Illinois. Students interested in evolution and ecology of fishes are encouraged to apply.

Our lab has two main research themes. The first research theme focuses on the evolution of color pattern and color vision and how this varies with environmen-

tal conditions. This line of research includes questions about (a) the origins of female mating preferences, (b) the maintenance of genetic variation in male color patterns within populations, (c) the significance of population differentiation in phenotypic plasticity in color pattern, visual traits, and mating traits, and (d) the scale of temporal and spatial variation in lighting conditions and its effects on color pattern and color vision. Our most recent work involves developing models of visual detectability to determine how different species perceive color patterns in different environments. Our second research theme focuses on speciation and the extent to which it is driven by natural selection to different environmental conditions. This includes questions about (a) whether reinforcement or adaptation to different abiotic conditions (namely salinity) is important for the evolution of behavioral isolation, (b) whether postzygotic isolation evolves more rapidly for taxa that inhabit radically different environments, and (c) whether genomic rearrangements contribute to the evolution of reproductive isolation. Our most recent work here involves measuring QTL for reproductive isolation and examining genomic divergence between freshwater and saltwater populations/species of killifish. Students with interest/experience in genomics are welcome to apply.

Students in the Fuller lab have worked on a variety of fishes including killifishes in the genus Lucania, topminnows, and darters. Students are welcome to develop their own research projects independent of the main lab projects, but students may also collaborate on aspects of the main lab projects that are of interest to them. Students may apply either through the Program in Ecology, Evolution, and Conservation Biology (http://sib.illinois.edu/peec/index.html) or through the Department of Animal Biology (http://www.life.illinois.edu/animalbiology/). Students with interests in genomics may be eligible for funding via a recently awarded IGERT that emphasizes the vertical integration from genomes to individuals to species and ecosystems (http://sib.illinois.edu/igert/apply.html).

PhD candidates are preferred but students interested in pursuing an MS degree are welcome to apply. If you are interested in applying for a graduate position in my lab, please send a letter of interest to fuller@life.uiuc.edu describing your research interests, career goals and rationale for pursuing a graduate degree along with a CV.

Contact Information

Becky Fuller Associate Professor University of Illinois 606 E. Healey Avenue Champaign, IL 61820 phone: 217 333 9065 e-mail: fuller@life.uiuc.edu

fuller@life.illinois.edu

UKentucky LampreyGenomeEvolution

Two Graduate Research Assistantships are available in the Smith lab at the University of Kentucky as part of a 5 year NIH-funded project studying the mechanisms, evolution and developmental function of programmed genome rearrangements in the lamprey (Petromyzon marinus). The projects will involve comparative genomics and functional analysis of genes involved in programmed genome rearrangement. Students funded under this position will be encouraged to explore new avenues of research that stem from research performed under this grant.

The Department of Biology houses several active labs that focus on diverse aspects of evolution, with a strong emphasis on vertebrate genome evolution. The University of Kentucky provides several common use facilities (imaging, sequencing, proteomic, gene expression analysis, high performance computing) that directly facilitate the achievement of the projects research objectives.

To apply for this position, please send a CV, statement of research interests, and three letters of reference to Jeramiah Smith (jjsmit3@uky.edu).

The University of Kentucky is an Affirmative Action/Equal Opportunity University that values diversity and is located in an increasingly diverse geographical region. It is committed to becoming one of the top public institutions in the country. Women, persons with disabilities, and members of other underrepresented groups are encouraged to apply. The University also supports family-friendly policies.

Jeramiah Smith

Assistant Professor Department of Biology University of Kentucky Lexington, KY 40506

Jeramiah Smith <jeramiahsmith@gmail.com>

UKonstanz 11 EvolutionaryBiology

11 PhD positions - details below

PhD position on Evolutionary endocrinology of birds

The < http://www.orn.mpg.de/IMPRS > International Max Planck Research School (IMPRS) for Organismal Biology is jointly organized by the Max Planck Institute for Ornithology in Seewiesen and Radolfzell and the University of Konstanz. More than 25 internationally recognized research groups actively participate in the PhD program and offer challenging, cutting-edge PhD projects in the fields of Behavioral Biology, Ecology, Evolutionary Biology, Physiology, and Neurobiology.

Project description

Our main research interest is to understand the ways in which animals evolve physiological adaptations to the environment in which they live. At present we focus on the evolution of the endocrine control of behavior. We investigate, for example, how individual variation in corticosterone and testosterone profiles translate into fitness, whether hormone profiles are heritable and how plasticity in hormonal responses comes about. Our main study species is the great tit, Parus major, a well-studied and abundant species across Europe. We approach microevolutionary questions using natural variation in the wild, phenotypic engineering (hormone manipulations), telemetry, and behavioral observations, eventually extending into quantitative genetics approaches.

Main Advisor < http://www.orn.mpg.de/2606/-Research_Group_Hau > Michaela Hau, MIPO Seewiesen

Our offer

All students accepted to the program will be supported by stipends or contracts. Besides their own research, the IMPRS fellows attend laboratory courses and workshops in relevant transferable skills like scientific writing and project management. Talks by invited speakers during our annual IMPRS symposium, student retreats, and conference participation complete the individually tailored curriculum. The working language is English. Each PhD student receives individual supervision and mentoring and is guided in her/his research work by a PhD advisory committee.

Your application

Outstanding students of all nationalities with a deep commitment to basic research in Organismal Biology are invited to apply. Deadline for the application is January 15, 2014. Interviews with the applicants are scheduled for Mid-March. Candidates accepted into the program may start latest September 2014. The Max Planck Society and the University of Konstanz are equal opportunity employers.

Qualification: Applicants should hold a MSc or equivalent degree in biology or a related discipline at the point of enrollment.

Queries should be mailed to the program office: IMPRS@uni-konstanz.de

Application: For the online application process visit www.orn.mpg.de/2383/Application.

More information on the current PhD projects at http://www.orn.mpg.de/projects and www.facebook.com/OrganismalBiology . —

PhD position - Can female promiscuity evolve via indirect selection on male sex-drive?

The < http://www.orn.mpg.de/IMPRS > International Max Planck Research School (IMPRS) for Organismal Biology is jointly organized by the Max Planck Institute for Ornithology in Seewiesen and Radolfzell and the University of Konstanz. More than 25 internationally recognized research groups actively participate in the PhD program and offer challenging, cutting-edge PhD projects in the fields of Behavioral Biology, Ecology, Evolutionary Biology, Physiology, and Neurobiology.

Project description

Quantitative genetic analyses of male and female extra-pair mating behaviour in captive zebra finches have shown that female infidelity is positively genetically correlated with male sex drive (Forstmeier et al. 2011, PNAS 108:10608). This means that males with high sex drive will tend to sire daughters that are inclined to engage in extra-pair mating. To verify and further explore this finding we have established selection lines that have been selected over three consecutive generations for high versus low breeding values for male sex drive. The aim of the PhD project is to assess whether rates of female extra-pair mating (and hence extra-pair paternity) have indeed been altered by the indirect selection pressure exerted on males. If females from lines for high male sex-drive indeed show increased levels of extra-pair paternity (compared to control and low lines), the aim will be to characterize the behavioural differences among the selection lines (e.g. pair bond strength, sexual arousal).

Main Advisor < http://www.orn.mpg.de/409052/-employee_page?cf0919&employee_id&271 > Wolfgang Forstmeier, MPIO Seewiesen

Our offer

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ULausanne NeotropicalPlantEvol

Ph.D. position on Neotropical plant macroevolution and phylogenetics at the University of Lausanne

Project description The groups of Christian Lexer (University of Fribourg), Michael Kessler (University of Zurich) and Nicolas Salamin (University of Lausanne) are opening several positions in their respective labs, funded by the Swiss National Science Foundation (SNF), to work on the evolutionary and ecological aspects of speciation. The positions will be part of a large collaborative project that aims at bringing together ecology (Kessler), population genomics (Lexer) and phylogenomics (Salamin) to investigate the drivers of species radiations in several Neotropical plant groups.

In this context, we are looking for candidates that have a strong background in phylogenetics and evolutionary modeling to test hypotheses about species diversification and adaptation in tropical plant lineages. Beside the modeling and bioinformatic component of the project, several months of field work in the South American tropics will be expected.

Position characteristics The University of Lausanne is a place of teaching and research with around 12'000 students and almost 3'700 collaborators, professors and researchers. Ideally located on the shore of Lake Geneva and near Lausanne city center, its campus harbors 120 different nationalities. The position will be in the Department of Ecology and Evolution, which includes more than 20 research groups (www.unil.ch/dee) covering a wide range of topics from spatial ecology, evolution of mating systems and sociality to population genetics and phylogenetics. The candidate will also be affiliated with the Swiss Institute of Bioinformatics, which provides all the computational facilities for the project. Salary is according to the SNF guidelines.

Requirements Applicants should hold a Masters degree or equivalent in biology. Experience in organismic botany, analytical statistics and evolutionary modeling, phylogenetics, molecular techniques, scientific writing, and fieldwork are highly desirable. Excellent knowledge of English, written and oral, is essential. Knowledge of Spanish or Portuguese will help during field work, but is not essential.

How to apply Send the following documents as a single pdf file by email to Nicolas Salamin (nicolas.salamin [at] unil.ch): i) a two-page application letter describing your research interests, clearly stating why are you interested in the Ph.D. position, and your career goals; ii) your CV, including a list of publications (if applicable); iii) names and contact details of at least two referees from among your academic advisors (who have agreed to be contacted).

Deadline for applications Applications will be screened from December 15th 2013 onwards until the positions are filled.

Starting date May 1st 2014. Funding, including field and laboratory costs, is available for 3 years.

– 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/Computational_Phylogenetics.htm nicolas.salamin@unil.ch

ULeicester 2 Genomics

Two graduate student positions. Details below.

Genomic imprinting (GI) is the inactivation of one allele in diploid individuals, with inactivation being dependent upon the sex of the parent from which it was derived. Natural selection is expected to favor expression of both alleles in order to protect against recessive mutations that render a gene ineffective. What, then, is the benefit of silencing one copy of a gene, making the organism functionally haploid at that locus? Haigs kinship theory is the current leading evolutionary explanation.

Although current observations support the kinship theory, there have been no independent tests. Eusocial Hymenoptera (ants, bees and wasps) are an ideal model systems for making truly independent a priori tests of the theory. Hymenoptera are haplodiploid, with diploid females (queens and workers) arising from fertilized eggs and haploid males arising from unfertilized eggs.

This different genetic system combined with the shared brood rearing and reproductive division of labour characteristic of eusociality results in range of novel predictions for the kinship theory.

One previous problem in using Hymenoptera to test the conflict theory was that they were not known to have the mechanisms required for genomic imprinting. In 2006, it was shown that Apis mellifera has a fully functioning cytosine-phosphate-guanine (CpG) methylation system. DNA methylation is one of the major mechanisms of genomic imprinting in mammals and angiosperms. The honeybee methylation system has been shown to transmit epigenetic information. CpG methylation has since been shown to be common in hymenoptera and the Mallon lab have found it in bumblebees and shown it is invovled in traits predicted by the kinship theory.

Aims and objectives: The major aim of this PhD is to establish that genomic imprinting occurs in a more tractable bee species, the bumblebee. Genomic imprinting has not yet been discovered in insects and this will be a major discovery.

Funding Notes:

This studentship is one of a number of fully funded studentships available to the best UK and EU candidates available as part of the NERC DTP CENTA consortium.

For more details of the CENTA consortium please see the CENTA website: www.centa.org.uk Applicants must meet requirements for both academic qualifications and residential eligibility: http://-www.nerc.ac.uk/funding/application/studentships
Please direct informal enquiries to the project supervisor (ebm3@le.ac.uk).

If you wish to apply formally, please do so via: http://www2.le.ac.uk/study/research/funding/-centa/how-to-apply-for-a-centa-project Deadline for official application 31st January 2014

References:

Wang et al. (2006). Functional CpG methylation system in a social insect. Science, 314(5799), 645-647.

Kucharski et al . (2008). Nutritional control of reproductive status in honeybees via DNA methylation. Science 319, 1827V1830

Foret et al . (2012). DNA methylation dynamics, metabolic fluxes, gene splicing, and alternative phenotypes in honey bees. Proc.Natl. Acad. Sci. USA 109, 4968V4973.

Herb et al .(2012) Reversible switching between epigenetic states in honeybee behavioral subcastes Nature Neuroscience 15(10) 1371-1373

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PhD position

The role of host immune gene expression and gut microbiome in the anti-trypanosome response of an important insect pollinator

Supervisors: Dr Eamonn Mallon and Prof. Mike Barer

The insect immune system is hugely important to human health and wellbeing. Whether we consider the immune response of a human disease vector, or the immune system of an important crop pollinator defending itself from parasites, an understanding of these systems is vital. A recent development in this field is the discovery of the role of the commensual gut bacteria (gut microbiota) in modulating the immune response of insects to invading parasites.

How the insect gut microbiota help defend against parasites is largely unknown. The bumblebee Bombus terrestris and its invading gut trypanosome Crithidia bombi make an excellent model to tease out this process. Using RNA-Seq the Mallon lab have found 471 bumblebee genes that are differentially regulated upon infection with Crithidia. The lab has begun the functional analysis of these genes by knocking them down using RNAi and seeing the effect on Crithidia levels. It has also been found that gut microbiota are also important in this defence. When bacteria are removed through antibiotics, bumblebees are much more highly infected by Crithidia. If the gut microbiota is restored, bumblebees show a normal level of Crithidia infection.

This PhD will begin by using RNA-Seq to understand bumblebee gene expression changes in Crithidia infected bees with and without their gut

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ULeicester AntSocieties

Project title: Sociogenomics of ant social organisation

Department/School: Dept Biology, University of Leicester

Supervisors: Dr Rob Hammond, Dept Biology, U of Leicester Dr Sandra Beleza, Dept Genetics, U of Leicester

Collaborator: Dr Richard Gill, Dept Life Sciences, Imperial College London

Project Overview:

The evolution of highly integrated social groups with a reproductive division of labour, exemplified by the 'superorganismal' eusocial Hymenoptera (ants, bees and wasps), is a major transition in evolution offering unparalleled opportunities to understand how organization at a higher level evolves and diversifies. Until recently little was known about genetic influences on the diversity of social organizations found in social insects (the study of 'sociogenomics'). This is changing; next generation sequencing (NGS) makes it possible to understand the genomic architecture underpinning variation in social organisation, and, in turn, the effects social living has on the genome.

We propose an ambitious PhD investigating the population genetics, phylogeography and genomic architecture underlying a characterised polymorphism in social organization in the slender ant, Leptothorax acervorum. This common species has multiple mated queens per colony but populations vary in how reproduction is 'skewed' between nest queens. Aims and objectives:

To characterize: (1) the phylogeography and population genetic structure of L. acervorum from southern European populations using Restriction site Associated DNA sequencing (RADseq)5, and (2) the social organisation (reproductive skew) in these populations using microsatellite genotyping and queen dissections (to measure ovary development). To use these data: (1) to test whether changes in social organization are explained by range expansion, and (2) to identify genomic regions potentially under selection using population genetic techniques.

The studentship is entered into two competition rounds funded by the BBSRC and NERC and interested students should apply under both schemes.

NERC scheme http://www2.le.ac.uk/departments/-biology/postgraduate-study/phd/nerc-centa-phd-studentships/sociogenomics-of-ant-social-organisation To apply to NERC scheme: http://www2.le.ac.uk/-study/research/funding/centa/how-to-apply-for-a-centa-project BBSRC scheme (project under Leicester) http://www2.warwick.ac.uk/fac/cross_fac/mibtp/-pgstudy/phd_opportunities/gene_expression To apply to BBSRC scheme: http://www2.warwick.ac.uk/-fac/cross_fac/mibtp/pgstudy/phd_opportunities/-application/ Eligibility: *We are seeking a highly motivated student with a background and interest in Evolutionary Biology, Population Genetics & Bioinformatics

*Honours degree of class 2.1 or greater is essential

*Due to restrictions on the funding this studentship is only open to candidates from the UK/EU - see links above for details

Funding Details: Eligible students receive a stipend, university fees and some research costs.

Further Enquiries: Please contact Dr Rob Hammond: rh225@le.ac.uk

Dr Rob Hammond Dept. Biology University of Leicester University Road Leicester, LE1 7RH

Phone: ++ (0)116 252 5302 Fax: +44 (0)116 252 3330 E-mail: rh225@le.ac.uk http://www2.le.ac.uk/-departments/biology/people/hammond/dr-rob-hammond rh225@leicester.ac.uk

ULondon BatEvolutionaryGenomics

ERC-funded PhD project in the United Kingdom open for competitive applications

Eligibility: UK and EU nationals Deadline for formal applications: 01 February 2014 Start date: October 2014 (earlier start date is possible)

Project: Genetic basis of divergent and convergent evolution in Neotropical bats Supervisor: Stephen Rossiter (Queen Mary University of London)

Our recent work has focused on identifying molecular adaptations associated with the evolution of echolocation in bats and dolphins. In particular, we have shown that these two groups of divergent taxa have undergone numerous identical amino acid substitutions in multiple genes implicated in hearing and vision [1].

I am now seeking a motivated and highly able PhD student to build on this work. In particular, this PhD project will seek to elucidate the genetic basis of divergent and convergent evolution in a major group of Neotropical bats. These bats have undergone an extraordinary adaptive radiation linked to dietary diversification [e.g. ref. 2], from blood eating vampires to nectar feeders and frugivores.

The project will combine bioinformatics and evolutionary analyses, and so experience in both of these is essential. Fieldwork in the tropics is optional but not compulsory.

Potential applicants are encouraged to submit an informal application (CV and covering letter outlining your suitability for the position) to Stephen Rossiter (s.j.rossiter@qmul.ac.uk) before the formal deadline.

For further details with instructions on how to make a formal application see: http://evolve.sbcs.qmul.ac.uk/-rossiter/ *References*

[1] Parker et al (2013) Genome-wide signatures of convergent evolution in echolocating mammals. Nature 502, 228–231. [2] Liu et al (2012) Multiple adaptive losses of alanine-glyoxylate aminotransferase mitochondrial targeting in fruit eating bats. Molecular Biology and Evolution 29, 1507-1511.

Other keywords: mammals, genomics, selection, adaptation, speciation

* Essential skills, qualities and knowledge:*

A First Class or Upper Second Class degree (or equivalent) in a relevant biological discipline (biology, zoology, genetics, bioinformatics), and preferably also a Master's degree

Strong background in evolutionary biology

Experience of performing phylogenetic and evolutionary analyses

Experience of handling large DNA sequence datasets

Knowledge of coding (e.g. perl, python, ruby, R) is extremely desirable

Strong work ethic and a positive attitude

Self-motivated, well-organized and willingness to respond to constructive criticism

Ability to work closely with others, and participate in the life and research activities of the School of Biological and Chemical Sciences at QMUL

Stephen Rossiter <s.j.rossiter@qmul.ac.uk>

ULondon GenomicArchitectureIntragenomicConflict

The following 2 PhD Projects are on offer at Royal Holloway University of London

Life history and genome architecture

The organization and architecture of the genome has been shaped by natural selection. There is abundant evidence that many genomes contain parts which were acquired from other organisms. Examples are viruses, which have integrated in the genetic material in a cell, and plasmids found in bacteria. The most striking examples are the acquisition of the genomes of organelles such as chromoplasts and mitochondria, which have originated from a fusion of cells.

One fundamental question regarding genome architecture is why, and how, natural selection favours individual genes to cluster into nuclear genomes, and what type of genes were selected to cluster. In this theoretical project we will use mathematical and computer models to investigate this question.

When two genomes are brought together conflicts may arise. For the host cells, the new genome could contain beneficial traits, as well as detrimental traits, for instance bacterial viruses often carry genes which allow bacteria to survive and multiply, but these same viruses can lyse the bacterial cell. For the invading genome there is a tension between fully integrating in their hosts' genome and optimizing the transmission together with the host but in doing so giving up the possibility of independent transmission.

What we aim to investigate in this project is how selection has acted on these genes, and whether selection would favour genes to cluster into a nuclear genome, or not.

Intra-genomic Conflict and Medical Disorders Intragenomic conflict defies the logic of natural selection: why would natural selection favor any gene whose expression reduces the fitness of its host? However intragenomic conflict has left its signature in many molecular mechanisms. A paradigmatic example of evolution driven by intra-genomic conflict is the case of genomic imprinting where conflict between paternally inherited and maternally inherited genes in the same individual results in silencing of one gene but not the other.

Recently, genomic imprinting (and intra-genomic conflict in general) has been linked to several diseases. For example, deletion of the PWS/AS cluster of imprinted genes causes Prader-Willi syndrome (PWS) when the deletion is paternally inherited but Angelman syndrome (AS) when it is maternally inherited. The clinical phenotype, regarding appetite and activity levels, of children suffering from these syndromes is the reverse: poor sucking and low weight in children with PWS but insatiable appetite and obesity in children with AS.

This intriguing reversal of the clinical phenotype of a deletion is best explained in the light of conflict between genes with different parental origin. In particular, it can be explained when paternally inherited copies favor a greater allocation of maternal resources to off-

spring than the maternally inherited copy does. We are interested in further exploring the role of intra-genomic conflict in disease. Can we predict the risk of developing diseases caused by genes in conflict? Can we suggest epigenetic modifications that may palliate some symptoms?

Supervisors Prof. Vincent A.A. Jansen and Dr. Francisco Ubeda

Further details These projects are suitable for candidates with some background or experience in mathematical modeling or simulation at undergraduate level. We are looking for candidates, either with a background in the life sciences, and experience in mathematical or simulation modeling, or for candidates with a background in a quantitative subject (e.g. mathematics, computer science, physics) and an affinity for research in ecology and evolution.

The studentship has a maintenance allowance of £15726 per annum for 3 years and a UK/EU tuition fee waiver. We expect candidates to have a 2.1 or first class degree (or equivalent if not a UK degree). Both studentships will be held in the School of Biological Sciences of Royal Holloway, University of London. The research in the School covers the breadth of biology and hosts a number of theoretical researchers. The School was ranked among the best UK Bioscience Departments in the last research assessment (RAE 2008). The scenic Royal Holloway campus < http://www.telegraph.co.uk/education/-expateducation/9480575/Beautiful-universities-around-the-world.html?frame=2312131 > is on the outskirts of London.

If you are interested in applying please contact us informally before the deadline at F.Ubeda@rhul.ac.uk or Vincent.jansen@rhul.ac.uk. Apply before the 4th of March following the link “How to apply” on

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ULondon TurtleConservation

NERC-funded PhD Studentship in conservation biology open for competitive applications.

Project: Movement ecology and adaptive potential of loggerhead sea turtle

Supervisors: Dr. Christophe Eizaguirre (Queen Mary, University of London) & Dr. Chris Harrod (Queen Mary, University of London)

Under the scenario of changing oceans, identifying the effects of physical and chemical variation on biodiversity has become a central question in Conservation Biology. One of the direct and pervasive threats facing marine ecosystems is the global decline of large marine vertebrates such as Sea Turtles. This is because of the important roles these large consumers play in maintaining the structure and functioning of their habitats. Conserving turtles is therefore more than a single species protection. Here, we offer to characterize the habitat used by the loggerhead turtles nesting in Cape Verde. Using state of the art isotope analyses, molecular techniques and satellite transmitters, we aim to determine the characteristics of the habitats used by the turtles and hence define how on-going climate change may affect their distribution and adaptive potential. Results will have direct impacts on conservation measures taken to protect this species.

Eligibility: UK nationals and residents for full scholarship (for details see: http://www.nerc.ac.uk/funding/-available/postgrad/eligibility.asp)

This PhD studentship, supported by the Natural Environment Research Council, UK (NERC)- Doctoral Training Partnership, is now open for applications from interested candidates. Candidates will be competitively assessed across all Queen Mary-DTP projects (For a list of projects and further details see: http://london-nerc-dtp.org/2013/12/05/phd-projects-queen-mary-university-of-london/). The start date for this project is anticipated to be September 2014, and the student will be based at Queen Mary, University of London. The studentship includes tuition fees, monthly stipend, and research funds depending on eligibility. In short, full funding is available for students that are either UK nationals or EU nationals that have resided in the UK for the past 3 years.

Essential skills, qualities and knowledge: A First Class or Upper Second Class degree (or equivalent) in a relevant biological discipline (biology, zoology, genetics, evolutionary biology, ecology), and preferably also a Masters degree. Strong work ethic and a positive attitude. Self-motivated and well-organized.

Potential applicants are encouraged to submit an informal application (CV and covering letter outlining your suitability for the position) to Dr. Christophe Eizaguirre c.eizaguirre@qmul.ac.uk before the formal deadline in January 20th.

c.eizaguirre@qmul.ac.uk

UNaples EvolutionaryBiol

One PhD position (3 years) is available for foreign students at the Department of Biology. The Department of Biology in Naples is searching for highly motivated graduate students interested in different topics of biology, including biodiversity and evolution, human health and ecology. For more information about the Department of Biology please visit our homepage: http://-biologia.dip.unina.it/ and the related PhD program in Biology at: http://biologia.dip.unina.it/it/didattica/-dottorato/ Official applications should be submitted in the online application portal through the link below:

(http://www.unina.it/studentididattica/postlaurea/-dottorato/en/index.jsp).

Closing date for applications: 10th January 2014

Dott. Domenico Fulgione Dipartimento di Biologia Università di Napoli Federico II Complesso Universitario di Monte S. Angelo via Cinthia - Edificio 7 80126 Napoli Tel. +39-081-679130 Fax: 081-679233 fulgione@unina.it www.fulgionegroup.com Domenico Fulgione <fulgione@unina.it>

UNebraska SpeciationGenomics

Ph.D. Positions in Speciation Genetics/Genomics

The Meiklejohn research group at the University of Nebraska - Lincoln invites applicants to the Ph.D. program to start in the fall of 2014.

Our lab studies evolutionary genetics using the model genetic organism Drosophila. We use classical, molecular and population genetics methods as well as functional and comparative genomics to study divergence between species and disrupted gene interactions in species hybrids. A current focus in the lab is the identification of the genes responsible for sterility in F1 hybrid males between Drosophila simulans and its closest relatives.

The lab offers training in evolutionary theory, population genetics, generation and analysis of functional genomic data (such as transcriptomics), Drosophila genetics, and molecular and cytological dissection of spermatogenesis. More details regarding the lab's research can be found here: http://biosci.unl.edu/colin-meiklejohn Interested students are encouraged to contact me directly with a letter of interest and CV: cmeiklejohn2@unl.edu. The deadline for applications is December 15. For more information on the UNL biology graduate program, see: http://biosci.unl.edu/graduate The School of Biological Sciences has a strong group of evolution faculty, with particular focus on functional evolutionary genetics: http://biosci.unl.edu/current-faculty The School provides generous graduate student support, excellent biotech and computational facilities, and access to the Cedar Point Biological Station. Lincoln, Nebraska is a great college town with a high quality of life, low cost of living, a vibrant arts and music scene, and over 130 miles of bike trails (http://-lincoln.ne.gov/city/parks/parksfacilities/trails/).

Colin Meiklejohn Assistant Professor School of Biological Sciences University of Nebraska-Lincoln cmeiklejohn2@unl.edu

cmeiklejohn@gmail.com

UNevada LasVegas Genomics

MS/PhD in Life Science (bioinformatics) UNLV Fall 2014

We are seeking motivated students who are excited to begin their study in the newly developing field of bioinformatics. We study the genomes of fruit flies, mosquitoes, mammals and humans to understand the biological signals embedded in the DNA. Potential projects include studying gene rearrangements using comparative genomics of closely related species, or inferring genomic regions that are sensitive to insertion/deletions in the human genome. The interest is diverse but all projects in the lab are motivated by evolutionary questions. How does the genome evolve? Is there any order in how genes are arranged in the genome? Can we harness the evolutionary signal to understand the effect of certain mutations? All research projects will involve some algorithm development or statistical modeling.

More information can be found at http://-faculty.unlv.edu/mirahan/ You will apply through the School of Life Science at UNLV. http://www.unlv.edu/-

lifesciences/admissions To ensure full consideration, applications should be completed by January 15.

Ideal candidates would be students in the field of computer science who are motivated by questions in life science or students with a life science background with some experience in programming. Students (either MS or PhD) will be supported through a TA/RA position.

Please contact prof. Mira Han (mira.han at unlv.edu) with a CV if you are interested in this program.

Mira Han Assistant Professor School of Life Sciences UNLV 4505 S Maryland Parkway Box 454004 Las Vegas NV 89154-4004 (702)774-1503

mira.han@unlv.edu

UNottingham SnailSpeciation

Funding is available for a four year BBSRC DTP PhD studentship (deadline 5th January), to be awarded on a competitive basis within the University of Nottingham, to investigate the speciation of snails using next generation DNA sequencing methods

Speciation on a snail's scale

Snails and slugs are a major crop pest, with a few introduced species causing massive worldwide problems. They are difficult to identify, and part of the second most species-rich animal group - yet we have no good idea of how this biodiversity has come about. This project will use next generation sequencing methods to investigate the speciation of snails, especially with respect to characters under natural and artificial selection (e.g. shell colour and banding or molluscide resistance), and including methods that may help identify cryptic species. Although the precise nature of the project will be determined by the state of play when the project begins and the interests of the student, I envisage that he/she will use mapping and expression methods to home in on the genes in question. He/she may also develop new species/models to study (possibly involving fieldwork in Europe or Asia), enabling deeper comparative analyses. The student will receive training in standard molecular lab methods, next generation sequencing and bioinformatic methods.

Representative publications from existing students

Richards, PM, Liu, MM, Lowe, N, Davey, JW, Blaxter, ML and Davison, A (2013) RAD-Seq derived markers flank the shell colour and banding loci of the Cepaea nemoralis supergene. Molecular Ecology 22: 3077-3089. http://onlinelibrary.wiley.com/-doi/10.1111/mec.12262/full Grindon, AJ and Davison, A (2013). Irish Cepaea nemoralis land snails have a cryptic Franco-Iberian origin that is most easily explained by the movements of Mesolithic humans. PLoS One 8, e65792. http://www.plosone.org/article/-info%3Adoi%2F10.1371%2Fjournal.pone.0065792 Applicants should have, or expect to receive, a good degree in a relevant subject, and an interest and enthusiasm for evolution. In the first instance, prospective students should send a CV and an indication of general area of interest to angus.davison@nottingham.ac.uk; see also angusdavison.org

Funding details:

Funding is available for four years from Autumn 2014. A full award would be fees plus an annual stipend.

Eligibility:

Eligibility for full funding is restricted to UK residents (fees and stipend). EU students are eligible for fees only awards, unless the applicants fulfil the residency criteria for a full award. To be eligible applicants must have (or be expected to achieve) a first or upper second class UK honours degree, or the equivalent qualifications gained outside the UK and/or a postgraduate Masters degree in a relevant subject. For full eligibility criteria visit: http://www.bbsrc.ac.uk/web/-FILES/Guidelines/studentship_eligibility.pdf How to apply:

Applicants should go to www.nottingham.ac.uk/-bbdtp to download the application and reference forms. Note that an important part of this BBSRC DTP scheme is a lab rotation during the first year. A full list of the possible projects is here, http://www.nottingham.ac.uk/graduateschool/-doctoral-training-centres/bbsrc-doctoral-training-programme-in-biosciences/prospective-students/-available-projects/available-projects-new.aspx Dr. Angus Davison Reader in Evolutionary Genetics School of Life Sciences Life Sciences Building University Park University of Nottingham NG7 2RD

0115 8230322 angus.davison@nottingham.ac.uk www.angusdavison.org Angus.Davison@nottingham.ac.uk

UNottingham SticklebackSpeciation

Dear Colleagues

A competitively funded NERC PhD is available on "Speciation and environmental change in sticklebacks" at the University of Nottingham, cosupervised by myself, Dr Suzanne McGowan (Geography) and Dr Xu Chen (China University of Geosciences). UK students will be fully funded, EU applicants would qualify for fees only. Other international applications cannot be considered (sorry!).

It is widely accepted that environmental changes, like relative sea level (RSL) fluctuations, have effects on the evolution of biodiversity. RSL fluctuation could drive speciation in aquatic systems by affecting their connectedness and salinity, but the details are poorly understood because of the large time scales that are involved. A multidisciplinary approach is needed to ascertain the links between speciation and patterns of environmental change.

Three-spined sticklebacks (Gasterosteus aculeatus) are originally marine fish commonly used to study evolution because of their rapid adaptation to freshwater. North Uist in the Scottish Western Isles comprises a mosaic of interlinked freshwater and brackish lochs and lagoons whose low-lying elevation makes their aquatic environments unusually susceptible to RSL change. The contemporary distribution and phenotypic variation of sticklebacks here suggest a link between speciation and RSL change. Three main stickleback ecotypes are currently found on North Uist: 'freshwater' with reduced bony armour, 'residents' with similar phenotypes, but living year-round in brackish lagoons and 'anadromous' heavily armoured marine fish that breed in lagoons (and some low-lying freshwater lochs). The coexistence of resident and anadromous ecotypes breeding in North Uist lagoons (but not hybridising) is unique in Europe and suggests that they have speciated, but it is unclear how.

In this project, the student will make use of the fact that in aquatic systems palaeolimnological information about environmental change is stored in benthic sediments, while information about speciation can be inferred from DNA. 'Training sets' that describe the relationship between contemporary water chemistry and diatoms will allow the student to reconstruct palaeolimnological environments and test hypotheses about how their change drove speciation.

Aim: To determine the effect of past changes in RSL on the speciation of sticklebacks using a combination of palaeolimnological, genetic and contemporary ecological data.

North Uist was covered in ice at the last glacial maximum, and freshwater environments are less than 16,000 years old. Published reconstructions of RSL suggest that the Western Isles have since experienced two peaks of RSL, thousands of years apart, with an intervening drop in sea level of several metres.

The student will test three hypotheses on the speciation of North Uist sticklebacks: (1) Anadromous and resident fish are ancient lineages that evolved before the present interglacial and independently colonised the North Uist lagoons. Predicts that the split between them will be >16,000 years. (2) Speciation was sympatric. Predicts that anadromous and resident fish in each lagoon will be each other's closest relatives, and that lagoons have remained accessible from the sea. (3) The two peaks in RSL facilitated a 'double-invasion' by anadromous sticklebacks of lagoons that are close to sea-level. Reversion of some lagoons to freshwater between the peaks drove the first wave of invaders to evolve into residents, such that by the second RSL peak and invasion the two waves did not recognise each other as mates. Predicts particular patterns of RSL and salinity change in lagoons.

Studentships will be awarded following a competitive process within the 'ENVISION' NERC DTP consortium. Applicants should hold a minimum of a UK Honours Degree at 2:1 level or equivalent in a subject such as Environmental Science, Geography or Zoology. Flexibility to take on an interdisciplinary project, including fieldwork, molecular genetics, microscopy and diatom taxonomy would be advantageous.

Lab web pages: http://ecology.nottingham.ac.uk/~AndrewMacColl/index.php School web pages: http://www.nottingham.ac.uk/life-sciences/index.aspx Envision web pages: http://www.envision-dtp.org/ Best wishes

Andrew MacColl

Associate Professor of Evolutionary Ecology School of Life Sciences University of Nottingham University Park Nottingham NG7 2RD

Tel: +44 115 951 3410 Fax: +44 115 951 3251

Email: andrew.maccoll@nottingham.ac.uk

http://nottingham.ac.uk/life-sciences/people/andrew.maccoll http://ecology.nottingham.ac.uk/~maccoll.html

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UReading FungalClockGenes

Project title: Investigating the molecular clock of Verticillium dahlia, its evolution, and its influence on pathogenicity

Department/School: Biological Sciences

Supervisors: Dr Louise Johnson, University of Reading / Dr Richard Harrison, EMR.

Project Overview: The classical fungal model of clock genetics Neurospora crassa is in the same phylogentic class as many economically important plant pathogens, such as rice blast (Magnaporthe grisea), strawberry wilt (Verticillium dahliae) and various Fusarium species. Functional clock genes can be identified in these pathogens, however their role in pathogenicity is currently unclear. Plants exhibit differential immunity to disease dependent on the time of day that they are challenged. At the molecular level some pathogen-induced genes are known to have diurnal expression patterns, and recently defence genes have been shown to be under the direct regulation of a central clock gene in Arabidopsis1. This indicates that plants have variable resistance levels to pathogens throughout the day. The evolution of a clock-linked immune system suggests that pathogens may also time aspects of host challenge, such as spore release and ascospore germination. This is likely to require a functional circadian clock, linked to that of the host, integrating the same environmental signals in order to optimise infection.

This project aims to identify components of a molecular clock within the fungal root pathogen of strawberry, Verticillium dahliae, firstly by searching for homologs to the known clock components of, Neurospora crassa and secondly by gene expression studies to identify and characterise diurnally expressed genes. The next step will be to carry out phylogenetic analyses to elucidate the processes of adaptation in clock genes.

The studentship is jointly funded by East Malling Research and the University of Reading. The student will be primarily based at EMR, Kent, but will have the opportunity to spend time at Reading and benefit from training in a laboratory with different expertise.

Eligibility: * We are seeking a highly motivated student with a background in Biology, or a suitably numerate discipline (e.g. computer science, applied maths or physics). Programming experience is desirable but not essential. A honours degree of class 2.1 or greater is essential * Due to restrictions on the funding this studentship is only open to candidates from the UK/EU.

Funding Details: Three year programme from October 2014 covering fees and stipend.

How to apply: To apply for this studentship please submit an application for a PhD in Biological Sciences at http://www.reading.ac.uk/graduateschool/-prospectivestudents/gs-how-to-apply.aspx . *Important note* Please quote the referenceGS14-19 in the 'Scholarships applied for' box which appears within the Funding Section of your on-line application. Application Deadline: 14th March 2014

Further Enquiries: Please note that, where a candidate is successful in being awarded funding, this will be confirmed via a formal studentship award letter; this will be provided separately from any Offer of Admission and will be subject to standard checks for eligibility and other criteria. For further details please contact Dr Louise Johnson, l.j.johnson@reading.ac.uk

Dr Louise Johnson Lecturer in Population Genetics and Admissions Tutor (Zoology) School of Biological Sciences, University of Reading Lyle Building, Whiteknights Campus Reading, Berkshire RG6 6BX, UK Phone: 0118 378 4432 Email: L.J.Johnson@Reading.ac.uk

Louise Janna Johnson <l.j.johnson@reading.ac.uk>

USheffield PlantEvolutionaryGenetics

Convergent evolution in aquatic lycopods and angiosperms: did the same genetic toolkits solve similar environmental challenges?

A PhD position in plant evolutionary genetics is available in the Department of Animal and Plant Sciences at the University of Sheffield. The project will be conducted under the supervision of Pascal-Antoine Christin, Colin Osborne and David Beerling from the University of Sheffield, and James Hartwell from the University of Liverpool:

http://www.shef.ac.uk/aps/staff-and-students/-acadstaff/christin http://www.shef.ac.uk/aps/-staff-and-students/acadstaff/osborne http://-www.shef.ac.uk/aps/staff-and-students/acadstaff/-beerling http://www.liv.ac.uk/integrative-biology/-

staff/james-hartwell/ Distantly related groups of organisms often converge on the same adaptive solution to an environmental challenge, thereby creating ideal study systems to address fundamental questions concerning the opportunities and constraints that govern evolution. Lycopods and angiosperms that co-occur in British lakes acquired similar growth habits despite evolving independently for more than 400 million years. Moreover, both groups evolved the same specialized mode of photosynthesis (CAM photosynthesis) and the same developmental programme to build leaves equipped with stomatal pores to succeed in terrestrial environments. This PhD project will address the following key question: Did both plant lineages use the same genetic toolkits to evolve these critical ecological adaptations to sub-mergent and emergent lifestyles? The student will address this question using massively parallel direct sequencing techniques and bioinformatic tools. This comparative work will shed new light on the importance of the genomic background for the evolution of adaptive novelties across land plants. The student will integrate into thriving research groups, and the supervisors will provide training in their fields of expertise, including plant evolution, comparative genetics, eco-physiology, and bioinformatics. Applications are invited from candidates with interests in plant evolutionary biology, comparative genetics and/or ecology.

Informal inquiries can be made by email to Pascal-Antoine Christin (p.christin@sheffield.ac.uk).

This PhD is part of the NERC funded Doctoral Training Partnership ACCE (Adapting to the Challenges of a Changing Environment). This is a partnership between the Universities of Sheffield, Liverpool, York, and the Centre for Ecology and Hydrology. Full funding is only available to UK candidates. The closing date for applications is the 20th of January 2014. For details, please visit the University of Sheffield ACCE DTP website:

http://www.sheffield.ac.uk/aps/prospectivepg/-graduate-opportunities/accestudentships
p.christin@sheffield.ac.uk

USheffield ProteinEvolution

Evolution of new enzymatic functions: How did nature build efficient enzymes for C4 photosynthesis?

A four-years PhD position is available to start at the University of Sheffield in October 2014. It is a joint project between the Department of Animal and Plant Sciences (supervised by Dr Pascal-Antoine Christin) and the Department of Chemistry (supervised by Dr Jim Reid):

http://www.shef.ac.uk/aps/staff-and-students/-acadstaff/christin http://www.sheffield.ac.uk/-chemistry/staff/profiles/jim_reid This project will combine evolutionary investigations with biochemical work to address the mechanisms that lead to the functional diversification of enzymes. It will focus on the enzyme phosphoenolpyruvate carboxylase (PEPC), which is encoded by a multigene family. Some of the encoded PEPC have been co-opted for a function in C4 photosynthesis, a novel trait that evolved multiple times in flowering plants [Sage et al., 2012]. Adaptation to the new catalytic context involved adaptive changes in the coding sequence, several of which were shared among independent origins of C4 photosynthesis, representing an exceptional example of convergent evolution at the genetic level [Christin et al., 2007; Besnard et al., 2009]. The effect of these changes on the encoded enzymes remain however poorly understood. This project aims to characterize independently evolved C4 forms of PEPC as well as closely related non-C4 enzymes. Analyses of the enzymatic properties in a phylogenetic context will shed new light on the forces that govern evolution at the molecular level.

* Besnard G, Muasya AM, Russier F, Roalson EH, Salamin N, Christin PA. Phylogenomics of C4 photosynthesis in sedges (Cyperaceae): multiple appearances and genetic convergence. Mol. Biol. Evol. 26: 1909-1919 * Christin PA, Salamin N, Savolainen V, Duvall MR, Besnard G. C4 photosynthesis evolved in grasses via parallel adaptive genetic changes. Curr. Biol. 17: 1241-1247 * Sage RF, Sage TL, Kocacinar F. 2012. Photorespiration and the evolution of C4 photosynthesis. Annu. Rev. Plant Biol. 2012. 63: 19-47

The student will integrate into thriving research groups and receive training in evolutionary genetics and biochemistry. Applications are invited from candidates from any country with interest in molecular evolution. Lab experience is highly desired.

The PhD position is funded by the Project Sunshine, and includes a competitive stipend and training opportunities. The student will integrate the Project Sunshine Centre for Doctoral Training:

http://shine.sheffield.ac.uk/training/ Informal inquiries can be made by email to Pascal-Antoine Christin (p.christin@sheffield.ac.uk) or Jim Reid (j.reid@sheffield.ac.uk). Formal applications should be made using our online application form: https:/-

/www.shef.ac.uk/postgradapplication/. The closing date for applications is the 28th of February 2014.

p.christin@sheffield.ac.uk

UStirling LifeHistory DemographyPhenology

NERC-funded PhD Studentship in the United Kingdom open for competitive applications.

Eligibility: UK and European Union applicants only (for details see: www.nerc.ac.uk/funding/application/-studentships/)

This PhD studentship supported by the Natural Environment Research Council, UK (NERC)-IAPETUS Doctoral Training Partnership is now open for applications from interested candidates. Candidates will be competitively assessed across all IAPETUS DTP projects (http://www.iapetus.ac.uk) and will need to meet NERC minimum eligibility requirements (see http://www.nerc.ac.uk/funding/available/-postgrad/eligibility.asp). Successful projects are anticipated to start from Oct 2014. The studentship includes tuition fees, monthly stipend, and research funds depending on eligibility. Please contact Luc Bussière (luc.bussiere@stir.ac.uk) for more information about applying.

Consequences of life history variation for demographic and phenological responses to environmental change

Supervisors: Luc Bussière (University of Stirling), Philip Stephens (University of Durham), Mario Vallejo-Marin (University of Stirling)

Although shifts in phenology (the timings of recurrent biological phenomena) are among the clearest and best-supported consequences of climate change, both the factors predicting phenological shifts and the community consequences of such transitions remain far from clear. Life history traits (which affect age-specific probabilities of survival and reproduction) should play a central role in phenological evolution, but we need research that explores their possible contributions to interspecific diversity in the timing, duration and rate of progression of developmental stages. Assessing the likely consequences of phenological shifts for communities further requires empirical assessments of how shifts in phenology affect the fitness of interacting symbionts, and modelled simulations that explore the demographics of participants under alternate climate change scenarios.

This PhD project will assess whether phenological shifts predictably differ among species characterized by contrasting life histories, and the consequences of such shifts for the fitness of symbionts. We focus on two groups with extraordinary variation in life history traits (hoverflies and dance flies) who provide a valuable pollination service to symbiotic flowering plants (flies are the main pollinators of many plants including members of the family Brassicaceae). Many hoverfly adults feed mainly on pollen and nectar (hence their value as pollinators), but their larvae have tremendously diverse habits, ranging from filter feeders living within rotting vegetation through to predaceous forms that devour other insects. These differences in larval diet could change the sensitivity of species to phenological cues, or alter adult requirements for pollen feeding. Dance flies are also important pollinators (especially in some habitats like the high arctic), and are known for unusu al variation in sexual behaviour, including both classical sex-roles and sex-role reversed species. These differences in mating systems have strong implications for the timing and duration of adult activity.

The PhD project will have three main parts, each dedicated to an important aim:

Part 1: The candidate will use long-term historical data (from museums, recording schemes, and the Rothamsted Insect Survey) to assess covariance between life history traits and phenology across species of hoverflies and dance flies. The candidate will learn to apply advanced statistical models (using likelihood-based parameter exploration and model selection) to summarize phenologies, and ask whether and how life history traits affect parameters in these best-fit equations.

Part 2: We will measure the consequences of variation in life history and phenology for pollination efficiency and seed set using field work on experimental arrays of radishes (Brassicaceae: Raphanus sativus). Flies are frequent and important pollinators, and radishes are self-incompatible (obligate outcrossers), often showing highly variable seed set. In consecutive field seasons, we will experimentally manipulate radish phenology and regress seed set on observations of pollinator phenology and abundance.

Part 3: Using parameters describing the phenology of fly species, including transitions in phenology over time (from part 1), we will simulate changes in the temporal structure of community composition under different climate change scenarios. We will also assess the consequences of such change for the fitness of populations having varying floral phenologies and sensitivities to pollinator identity (based on observations of seed set in part 2).

Application procedure

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UStirling ReproductiveBarriers

Two NERC-funded PhD Studentships in the United Kingdom open for competitive applications

Eligibility: UK and European Union applicants only (for details see: www.nerc.ac.uk/funding/application/studentships/)

Two collaboratively linked PhD studentships supported by the Natural Environment Research Council, UK (NERC)-IAPETUS Doctoral Training Partnership are open for applications from interested candidates. These studentships form an integrated student network built upon the general theme of "The origin and demise of reproductive barriers in non-native species". The studentships are for 4-year programs, based at either the University of Durham (England) or the University of Stirling (Scotland). Candidates will be competitively assessed across all IAPETUS DTP projects (http://www.iapetus.ac.uk) and will need to meet NERC minimum eligibility requirements (see http://www.nerc.ac.uk/funding/available/postgrad/eligibility.asp). Successful projects are anticipated to start from Oct 2014. The studentship includes tuition fees, monthly stipend, and research funds depending on eligibility.

Please contact Adrian Brennan at Durham University (a.c.brennan@durham.ac.uk) or Mario Vallejo-Marín at Stirling University (mario.vallejo@stir.ac.uk) for more information about applying to each project.

First PhD studentship: Evolutionary breakdown of reproductive barriers in introduced monkeyflowers through genome duplication.

University of Stirling, Biological and Environmental Sciences, in partnership with Durham University Application deadline: 13th January 2014

Overview: Hybridisation and whole-genome duplication are key processes in the evolutionary history of plants, and may have important repercussions for the development of new invasive plant threats. The introduction of species into new regions due to human trade and travel has greatly increased the potential of previously isolated species to hybridise. Despite the importance of hybridisation and polyploidisation in the evolutionary history of land plants, and their association with the development of invasiveness, the mechanisms that allow hybrids to overcome reproductive barriers remain obscure. The principal aim of this studentship is to use introduced species of monkeyflowers (Mimulus spp.) with different ploidy levels, to investigate the causes and consequences of inter-specific hybridisation and whole-genome duplication.

Several species of Mimulus with native ranges in the Americas were introduced into the United Kingdom in the early 1800's, and quickly became naturalized and widespread. Hybridization in this group has produced a complex array of widely distributed hybrids in the UK, with varying levels of pollen sterility. We have recently documented that genome duplication in natural hybrids is associated with a dramatic increase in fertility causing the rise of a new allopolyploid species, Mimulus peregrinus, in the last 140 years. However, preliminary studies of synthetically produced Mimulus polyploids indicate that genome duplication does not necessarily result in full restoration of fertility, suggesting that other genetic mechanisms may regulate fertility.

Methodology: In this project, we will use natural and synthetically produced Mimulus hybrids to address the following specific research questions: (1) What are the intrinsic barriers for hybrid formation? (2) What is the contribution of genome duplication to restoring hybrid fertility? (3) Are polyploid hybrids of different origins interfertile? (4) What is the genetic basis of fertility in polyploid hybrids? To answer these questions the student will combine field surveys, greenhouse experiments, and genomic analysis using next generation sequencing. The student will conduct field surveys of natural populations across the UK, and carry out a crossing program in the greenhouse to compare natural and synthetic hybrids. Finally, the student will investigate the genetic basis of pollen fertility in hybrid Mimulus using bulk-segregant analysis and genotyping by sequencing using RAD tags. Genomic analyses will be conducted under the supervision of Dr. Brennan in Durham as well as our project partners in the UK and the US.

Further reading: Abbott R et al. 2013. J Evol Biol. 26:229-246. Modliszewski J L, Willis JH. 2012. Mol Ecol. 21:5280-5298. Soltis DE et al. 2004. Biol J Linn Soc. 82:485-501. Vallejo-Marin M, Lye, GC. 2013. Heredity. 110:111-122. Vallejo-Marin M. 2012. PhytoKeys 14:1-14.

To apply: Please send your CV and a letter of why you are ideally suited for this project to: mario.vallejo@stir.ac.uk. No letters of support are needed at this stage. Application deadline: 13th January 2014. Informal queries are welcome.

Second PhD studentship: The genetic basis of recently developed

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UTasmania AvianPopulationGenetics

A PhD project project has become available at the University of Tasmania studying the population genetics of Providence Petrels and Flesh-footed Shearwaters.

Both species are of conservation concern, with Providence Petrels presently only nesting on two islands (Lord Howe and Phillip Island... adjacent to Norfolk Island), and Flesh-footed shearwater numbers undergoing decline (several colonies throughout New Zealand, Lord Howe, and southern Australia, and St Paul in the Indian Ocean). Emphasis is on the Providence Petrel, which was historically numerous on "mainland" Norfolk Island, and there are interests in re-introducing the species, subsequent to understanding the genetic relationships among extant and extinct colonies.

The structure of the PhD is presently as follows:

Major components: (i) Comparison of Lord Howe and Phillip Island Providence Petrels using genetic markers (microsatellites, mtDNA, and SNPs), morphometrics, and vocalisation data. (ii) Comparison of Lord Howe, Phillip Island, and the extinct "mainland" Norfolk Island colony based on mtDNA, using ancient DNA protocols on paleontological material from Norfolk Island. (iii) Population genetics analysis of Flesh-footed shearwater colonies throughout their range.

Minor components: (i) Reporting of marker polymorphism screening in Providence Petrels (and possibly Flesh-footed shearwaters) (ii) Reporting the potential for sex-biased genetic sampling in synchronously breeding seabirds, and the possible implications for population genetic analyses

This study has recently been vacated by another PhD student for personal reasons, and at present, much of the data have been collected. Therefore, this will be a very efficient PhD project and there also exists strong potential for additional activities within the PhD such as meta-analyses of population genetics studies in seabirds.

IMPORTANT POINTS: 1. The last time this project was advertised there were exactly 50 applicants. Unfortunately, I do not have time to respond to this many people in detail [again], so apologies that my response e-mail could be blunt and succinct ("your background/CV are unsuitable for the project"). 2. This project and the PhD candidature will be administered through the University of Tasmania. The successful applicant will need to apply for and earn a PhD scholarship at the University of Tasmania, with the next round anticipated in early 2014. You will need to have completed a BSc and some subsequent form of research-focussed degree (an MSc, or in the Australian/New Zealand system, an Honours year) to be considered. 3. If you are an Australian or New Zealand citizen or Australian permanent resident, you would receive both a scholarship and fee- waiver (you will receive ~$AUS 24k p.a. to live off, and no up- front fees). 4. If you are not an Australian or New Zealand citizen or Australian permanent resident, you will be liable for upfront fees, at a rate of approximately $AUS 20k p.a. Exceptional applicants may earn a "fee scholarship" from the University, but these are very competitive. Otherwise, I cannot assist with opportunities to pay these fees in any way, and you will be unable to work during your PhD to pay these fees as well.

If you are interested in applying, please send me an e-mail (chris.burridge@utas.edu.au) containing: (i) expression of interest, and some general background of your past experience, qualifications, and expertise relevant to this project (population genetics) (ii) a copy of your CV (iii) copies of all your academic transcripts (BSc and subsequent degrees). Please note I want to see your performance in the individual classes, not just a copy of the final certificate.

Best regards, Chris

Chris Burridge | Lecturer, Molecular Ecology & Evolution School of Zoology | University of Tasmania | Private Bag 55 | Hobart | Tasmania 7001 | Australia Room 320a Life Sciences Building | Ph +61 3 6226 7653 | Fax +61 3 6226 2745 | http://www.evogentas.org Room 320a Life Sciences Building | Ph +61 3 6226 7653 | Fax +61 3 6226 2745 | http://www.evogentas.org

UTurku BalticMarineBiodiversity

PhD position in the project Sea marine biodiversity V addressing the potential of adaptation to climate change in the University of Turku

A position for a PhD-student is open in the project focusing on adaptive potential of Baltic Sea littoral organisms in face of the ongoing environmental changes. Position is funded through the BONUS program by the EU Commissions Research Framework Programme and the Academy of Finland. For description, see http://www.bonusportal.org/-bonus_projects/viable_ecosystem_projects_2012/bambi .The position is located in the Section of Ecology, Department of Biology, University of Turku, Finland (http://www3.sci.utu.fi/biologia/en/).

Environmental change not just drives shifts in species distributions but also generate selection for species traits relevant to tolerate the new environmental conditions. Potential for adaptive responses is crucially dependent on the availability of genetic variation in these traits. In the Baltic Sea, the major predicted changes will be decreasing salinity and increasing temperature. The project will focus on adaptive potential of model species, the seaweeds Fucus vesiculosus and F. radicans and the mesograzer Idotea balthica, to the predicted changes. The species are becoming model species in ecological and evolutionary studies owing to their importance in ecological function of littoral communities, experimental feasibility and progress in gaining genome sequence data. This enables research approaches spanning from genes to phenotypes to fitness, and linking tolerance traits to genetic variation. The doctoral research is expected to focus on the model species and issues such as estimating tolerance and plasticity to salinity and temperature, identifying the genetic basis and/or heritability of tolerance, and estimating effects of community-wide stress on tolerance and on interactions between species. The approaches will be wide-ranging and challenging, but collaboration within the consortium will support the research. The project consortium will provide a multi-disciplinary research environment with expertise ranging from ecology, genetics, ecological genomics and evolutionary biology to spatial modeling, management and environmental politics.

The PhD-student position will be available for about four years, from 1st March 2014 (starting time negotiable) to the end of 2017. A successful applicant is expected to have a Masters degree in ecology, genetics, evolutionary biology or marine sciences or otherwise qualified to apply admission to postgraduate studies in the Faculty of Mathematics and Natural Sciences (for qualifications and procedures, see http://www.utu.fi/en/units/sci/research/-postgraduate/Pages/home.aspx). An ideal candidate shows high motivation and enthusiasm for science, creativity and ability to independent (though supervised) work. Experience in experimental field and laboratory work and skills in statistical analysis will be assets.

Applications for the PhD position will be reviewed starting on 15th Jan 2014; however, candidates will be considered until the position is filled. The salary will be in accordance with the Finnish university norms, about 1950 - 2750 £á/month, the exact level depending on the stage of the PhD-studies and competence.

The application documents should include: 1. Motivation letter explaining why you are interested in and why you are suitable for the position. 2. CV including education and prior research experience. 3. List of relevant publications and a one-page summary of the MSc thesis 4. Name and contact information for two academic referees

Send the above to me by email no later than 15th Jan 2014, preferably as a single pdf file. Feel free to contact me for further enquiries:

Prof. Veijo Jormalainen Section of Ecology Department of Biology FI-20014 University of Turku Finland http://users.utu.fi/veijor/index.html veijo.jormalainen@utu.fi

Veijo Jormalainen <veijor@utu.fi>

UVermont BeetleEvolutionaryGenetics

Graduate Assistantship in the Evolutionary Ecology and Genetics of Colorado potato beetle

Dr. Yolanda Chen, Dept. of Plant and Soil Sciences, University of Vermont

Position availability: Fall 2014

*Research overview: *Colorado Potato Beetle is one of the most serious pests of potato throughout the Northern Hemisphere, yet the evolutionary origins of the pest populations are still unresolved. The beetle

has been extraordinarily successful as an insect pest, rapidly evolving pesticide resistance, climatic, and host plant adaptations. The Insect Agroecology lab at University of Vermont is seeking graduate students with an interest in unraveling the complex evolutionary history of the beetle. Students who would like to combine their interests in phylogeography, genetics, ecology, entomology, agriculture, and genomics are strongly encouraged to apply.

Position Summary: Students will combine population genomics approaches with field ecology and manipulative experiments to understand the evolutionary mechanisms of adaptation.

Requirements: A background in biology, evolution, ecology, genetics or related fields. Ability to do field work under adverse conditions is strongly desired. Previous experience with computer programming in any language would be an additional advantage. Excellent written and oral communication skills. Ability to speak Spanish will also be helpful. Applicants must meet the requirements of the Graduate College at University of Vermont.

*Letters of interest:*If you are interested in the position, email the following: 1) statement of interest in the position and major research interests, 2) CV, 3) GRE scores, and 4) unofficial transcripts directly to Yolanda.Chen@uvm.edu.

Official applications should be submitted in an online application portal through the Graduate College (https://www.applyweb.com/apply/uvmg/-menu.html) by February 15.

Dr. Yolanda Chen Assistant Professor Department of Plant and Soil Sciences University of Vermont Burlington, VT 05405

Phone: +1(802)656-2627 Fax: +1(802)656-4656

Yolanda.Chen@uvm.edu

Uppsala Evolution

SLU Uppsala (Sweden) offers a PhD position for 4 years.

http://www.slu.se/en/education/postgraduate-studies/new-phd-student/Read-more/?sprak=-e&Uid=901 Further Information:

Prof. Christer Björkman email: christer.björkman@slu.se

Dr. Maartje Klapwijk email: maartje.klapwijk@slu.se

Jörg Stephan <jorg.stephan@slu.se>

Uppsala ForestInsectDiversity

A PhD position in Ecology, Forest Entomology is available at the Department of Ecology, SLU, Uppsala. The PhD student will be working in a project that connects ecological theory to practical forestry. Within the project bottom-up and top-down effects of increased diversity will be examined using a pest insect, Neodiprion sertifer, the European Pine Sawfly. The research will involve observational and experimental fieldwork. Please see the advertisement attached for more information. Please inform suitable candidates!

Best regards Christer B

Christer Björkman, professor Department of Ecology Swedish University of Agricultural University PO Box 7044, SE-750 07 Uppsala, Sweden Phone: +46 18 671532 Fax: +46 18 672890 E-mail: christer.bjorkman@slu.se www.slu.se/ecology/-christerbjorkman Christer.Bjorkman@slu.se

UppsalaU 3 MathematicalEvolution

3 PhD Positions, Interdisciplinary Mathematics, Uppsala University

The Centre for Interdisciplinary Mathematics (CIM), Uppsala University, Uppsala, Sweden, invites applications for three PhD positions. CIM carries out innovative interdisciplinary research between the mathematical sciences and other areas of science and industry. For more information see http://www.math.uu.se/cim . The successful applicant will work with an interdisciplinary mathematics project, combining two different disciplines (or more), where at least one is of a mathematical nature.

Applicants must contact a host institution at Uppsala University to discuss potential research projects before submitting their written applications.

The university is striving for a more even gender balance in its research and teaching staff, and women are

especially encouraged to apply for these positions.

The application deadline is January 31. For instructions about how to apply, see http://www.uu.se/en/-jobs/?positionId=29274 For further information about the position, please contact the director of CIM Dr. Elisabeth Larsson (elisabeth.larsson@it.uu.se).

David Waxman from Fudan University in Shanghai (dwaxman.biology@gmail.com), Ingemar Kaj (ingemar.kaj@math.uu.se) and myself (Martin.Lascoux@ebc.uu.se) at Uppsala University would be pleased to co-advise a PhD student. Ingemar, David and I are principally interested in questions in evolutionary genetics (e.g. evolution of local adaptation, quantitative traits architecture, population demographics and rate of evolution). David is a theoretical biologist with a background in theoretical physics, Ingemar Kaj is a mathematician working primarily on stochastic processes and their applications and Martin Lascoux is an evolutionary biologist who has been working with both David and Ingemar. Please contact one of us if you are interested. The position will be located at the evolutionary biology centre in Uppsala (http://www.ebc.uu.se/) or at the mathematics department (http://www.math.uu.se/), with regular contacts with Fudan University (http://-ccsb.fudan.edu.cn/en/Default.aspx) . Both universities are leading institutions in their own countries.

Best regards Martin

Martin Lascoux Department of Ecology and Genetics EBC, Uppsala University Norbyvägen 18D 75236 Uppsala Sweden Tel +46 (0) 18 471 64 16 Fax +46 (0) 18 471 64 57

martin Lascoux <martin.Lascoux@ebc.uu.se>

Vienna PopulationGenetics

Reminder: PhD Call 2014

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

We invite applications from highly motivated and outstanding students with a background in one of the following disciplines: bioinformatics, statistics, evolutionary genetics, functional genetics, theoretical and experimental population genetics. Students from related disciplines, such as physics or mathematics are also welcome to apply.

Topics include:

- Analysing next generation sequencing data and understanding the sampling properties of high throughput technologies - A probabilistic model for bi-allelic mutation-selection-drift - Drosophila population genomics - Analysis of time series data from natural populations - Inference of selection from time series data - Population genetic inference using Pool-Seq data - Evolution of gene expression in Drosophila - Natural variation in transposable element defense systems - Unraveling the molecular basis of adaptation in Cape Verde Islands Arabidopsis - Mutagenesis in the germline with age

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by *January 07, 2014* will be considered. Two letters of recommendation need to be sent directly by the referees.

All information about the about available topics, the training program and the application procedure can be found at www.popgen-vienna.at Dr. Julia Hosp Vienna Graduate School of Population Genetics Coordinator www.popgen-vienna.at c/o Institut für Populationsgenetik Vetmeduni Vienna Veterinärplatz 1 A-1210 Vienna

Tel: +43 1 25077 4338 Fax: +43 1 25077 4390

julia.hosp@gmail.com

WesternWashingtonU EvolutionaryBiol

The Biology Department at Western Washington University has openings for graduate students starting Fall 2014. Faculty members in the department offer a wide range of expertise, from molecular biology to ecology. Graduate students are eligible for teaching assistantships, which fund the majority of tuition and provide a stipend of $12,116 per year. WWU is located in Bellingham, WA, a coastal city north of Seattle at the base of Mt. Baker in the northwestern part of the state.

Potential advisors

Marion Brodhagen: Microbiology, molecular biology,

and chemical ecology. Our lab studies the plant pathogenic fungus Aspergillus and aflatoxin, a potent toxin produced by this fungus. Our biggest projects currently involve the ability of plant secondary metabolites to stop growth and/or toxin production by Aspergillus. Possible new projects in the laboratory involve bacterial secondary metabolites, and their role in host-pathogen interactions and in microbial community ecology.

Eric DeChaine: Arctic and alpine plant systematics and phylogeography. I am hoping to accept one student beginning Fall 2014. The work in my lab is currently focused on unraveling the biogeographic and evolutionary history of arctic-alpine plants of the north Pacific Rim through field, lab, and computer based geographic and genomic analyses.

Dave Hooper: Plant Community and Ecosystem Ecology. I will be accepting one graduate student in fall 2014. My local research is currently focused on assessing ecosystem services associated with different scenarios of riparian restoration in Whatcom County. Student work would combine GIS analyses of ecosystem services and field work, particularly on nutrient retention, to validate modeling results. I also have opportunities focused on analyzing large data sets to understand aspects of biodiversity loss and assembly of plant communities.

Robin Kodner: Marine Microbial Metagenomics. The Kodner lab does interdisciplinary work integrating marine microbial ecology with comparative genomics and bioinformatics for metagenomes. I am recruiting for one student for work on bioinformatics projects. Some experience with sequence analysis and programming required.

Ben Miner: Students in my laboratory focus on how marine organisms alter their morphology and behavior in response to different environmental conditions, typically biotic conditions. Current projects in my lab include research on wasting disease in sea stars, predator-induced hatching plasticity in marine animals, context-dependent inducible offenses and defenses in marine organisms.

Craig Moyer: My interests are marine microbiology and geomicrobiology focusing on molecular approaches for exploring microbial diversity, community structure and ecological interactions. Presently, my lab and I are focused on the study of iron-oxidizing Zetaproteobacteria acting as the ecosystem engineers in microbial mats found at strong redox boundaries, including seep, spring and vent habitats. We are also examining the evolutionary divergence of surface and deep subsurface Zetaproteobacteria in hydrothermal systems.

Merrill Peterson: Ecology and Evolution of Insects. The primary focus of our lab is on insect diversification and diversity, ranging from experimental studies on insect speciation to comparative analyses of the effects of land use on insect community structure. The Peterson lab is currently seeking a student interested in analyzing the mechanistic basis of conspecific sperm precedence in hybridizing Chrysochus beetles. Such a study would combine controlled crosses with molecular and microscopic assays of sperm viability and fertilization success. Additional opportunities for students who wish to examine factors influencing the richness of insect communities in rapidly-declining natural habitats in the region (e.g., lowland prairies, coastal dunes) may also be available.

Lynn Pillitteri: Plant Molecular and Developmental Biology. A potential graduate project in my lab would be aimed at understanding the molecular mechanisms driving cell type differentiation in the model organism, Arabidopsis thaliana.

Dietmar Schwarz: Ecological and Evolutionary Genetics and Genomics, Evolutionary Ecology. Schwarz's lab offers opportunities to study speciation and hybridization in host specific insects (apple maggot flies and relatives). Students would also have the opportunity to collaborate with Alejandro Acevedo-Gutierrez on a molecular study of diet specialization in seals.

Anu Singh-Cundy: Plant Physiology. We study plant reproduction at the physiological, cellular, and molecular levels. Current projects are focused on understanding the role of HD-AGPs, which are proteins that promote pollen tube growth, in members of the Solanaceae and also in Arabidopsis.

More information can be found at: http://-www.biol.wwu.edu/biology/gradprog_brochure.shtml

— / —

Jobs

FloridaIntlU PlantEvolution

Florida International University is a comprehensive university offering 340 majors in 188 degree programs in 23 colleges and schools < http://main.fiu.edu/academics/-colleges-schools/index.html >, with innovative bachelor's, master's and doctoral programs across all disciplines including medicine, public health, law, journalism, hospitality, and architecture. FIU is Carnegie-designated as both a research university with high research activity and a community-engaged university. Located in the heart of the dynamic south Florida urban region, our multiple campuses serve over 50,000 students, placing FIU among the ten largest universities in the nation. Our annual research expenditures in excess of $100 million and our deep commitment to engagement have made FIU the go-to solutions center for issues ranging from local to global. FIU leads the nation in granting bachelor's degrees, including in the STEM fields, to minority students and is first in awarding STEM master's degrees to Hispanics. Our students, faculty, and staff reflect Miami's diverse population, earning FIU the designation of Hispanic-Serving Institution. At FIU, we are proud to be 'Worlds Ahead'!

For more information about FIU, visit fiu.edu < http:/-/www.fiu.edu/ >.

Florida International University's Department of Biological Sciences (biology.fiu.edu), within the School of Environment, Arts and Society (SEAS; environment.fiu.edu) is conducting an open-rank search for an outstanding plant biologist to take a leadership role in the new International Center for Tropical Botany (ICTB). The ICTB, a collaborative project with the National Tropical Botanical Garden, will have offices and research facilities at both the University's main campus and the National Tropical Botanical Garden's Kampong garden. The ICTB builds on the existing strengths of both FIU and NTBG in tropical biology, conservation, agroecology, and botany. The ICTB will focus on research and education on tropical plant diversity, ethnobotany, natural plant products, sustainable agriculture, and conservation. The successful candidate will have research experience relevant to one or more of these areas. The candidate will be expected to teach courses related to his or her field of expertise at the undergraduate and graduate levels and to maintain a rigorous, externally-funded, internationally-recognized research program to strengthen the ICTB's programs and mission. Candidates should have experience working across disciplines and developing local, national and international research partnerships. Position is contin-

gent upon funding.

Qualified candidates are encouraged to apply to Job Opening ID 506980 at careers.fiu.edu and attach a cover letter, curriculum vitae, a summary of research interests and teaching goals, and contact information for at least three individuals who can write letters of recommendation in a single pdf file. To receive full consideration, applications and required materials should be received by February 1, 2014. Review will continue until position is filled.

FIU is a member of the State University System of Florida and is an Equal Opportunity, Equal Access Affirmative Action Employer.

Eric Bishop von Wettberg Biological Sciences Florida International University Miami, Fl, USA 305 348 2298

eric.vonwettberg@gmail.com

FranceCNRS ModelingBiologicalSystemsBioinfo

The French interdisciplinary CNRS commission 51 (CID 51) is recruting 7 people in 2014. The interdisciplinary commission (CID) is concerned by modeling and data analysis of biological systems using computer sciences, physical sciences or mathematical approaches. The commission is looking for candidates that develop innovative approaches to answer to relevant biological questions. The deadline for application is January 6, 2014.

###Positions available###

N51/01 - 3 Directeurs de recherche de 2e classe/3 Senior scientists 2nd class

N51/02 - 2 Chargés de recherche de 2e classe/2 Associate scientists 2nd class

N51/03 - 2 Chargés de recherche de 2e classe pour un laboratoire relevant des sciences de l'information (INS2I)/2 Associate scientists 2nd class wishing to join an INS2I (Institute for Information Sciences and Technologies) CNRS research laboratory

###Online information###

CNRS Website http://www.dgdr.cnrs.fr/-drhchercheurs/concoursch/default-fr.htm Website of the interdisciplinary CNRS commission 51 (CID 51) http://membres-timc.imag.fr/Michael.Blum/CID51/ michael.blum@imag.fr

Heidelberg VisitingPhDScholarship

Dear evoldir,

In my lab we offer a:

Visiting PhD Scholarship Program: Using the Phylogenetic Likelihood Library

The scientific computing group, the home of RAxML, at the Heidelberg Institute for Theoretical Studies (HITS, http://www.h-its.org/) in Heidelberg, Germany is soliciting applications for its visiting PhD student scholarship program.

Visits can last from 3 up to 6 months and we cover all travel expenses and also provide a scholarship of EUR 600 per month.

Applicants shall be enrolled in a Bioinformatics or computer science PhD program and work on likelihood-based phylogenetic inference.

The goal of the scholarship is to either extend or use the Phylogenetic Likelihood Library (PLL) we have recently released (see http://www.libpll.org/). The PLL is a highly optimized and parallelized library that allows for computing the likelihood on phylogenetic trees.

Applicants shall send a short two page CV, a letter of recommendation by their PhD supervisor, and a one page abstract describing how they want to use/extend the PLL to Alexandros Stamatakis (Alexandros.Stamatakis@h-its.org) by January 31st 2014.

Best regards,

Alexis

– 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 alexandros.stamatakis@gmail.com

Houston Technician

The Kelleher and Meisel labs in the Department of Biology and Biochemistry at the University of Houston are jointly hiring a laboratory technician to begin in January of 2014. Preferred candidates will have experience with PCR, RT-PCR, molecular cloning, and western blotting. Experience with immunoprecipitation, immunocytology, Illumina sequencing library prep, and Drosophila husbandry is desired, but not necessary. Proficiency in English is required.

The successful candidate will:

Provide expertise in support of research projects in the Kelleher and Meisel labs. Assist in the supervision and coordination of the activities of personnel engaged in research. Maintain operations and functioning of the labs, including maintaining equipment, chemicals, and other materials. Provide technical guidance when necessary. Ensure experiments are performed according to specifications. Make recommendations to changes in procedure, processes, or experimental design. Assist in the preparation and editing of research papers, proposal, and reports. Perform advanced testing procedures and analyses of data.

The above statements describe the general nature and level of work being performed by individuals assigned to this classification. This is not intended to be an exhaustive list of all responsibilities and duties required of personnel so classified.

Application procedures:

Please apply online at: https://jobs.uh.edu/postings/-19598 For additional information, please consult the laboratory webpages of Dr. Kelleher (http:/-/nsmn1.uh.edu/eskelleh/) and Dr. Meisel (http://-nsmn1.uh.edu/rpmeisel/), email Dr. Kelleher (eskelleher@uh.edu) and Dr. Meisel (rpmeisel@uh.edu), or call Dr. Kelleher (713-743-3640) or Dr. Meisel (713-743-3607).

The University of Houston is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

Richard P. Meisel Assistant Professor Department of Biology and Biochemistry University of Houston Houston, TX 77204-5001 U.S.A.

Office: 421C Science and Research Bldg 2 Lab: 428/433 Science and Research Bldg 2

Phone: 1-713-743-3607 Fax: 1-713-743-2636 email: rpmeisel@uh.edu http://bchs.uh.edu/ ~ rpmeisel rpmeisel@Central.UH.EDU

HumboldtU EvolutionaryBiology

Dear all,

on behalf of Peter Hammerstein and Johannes Vogel I would like to bring this call for applications to your attention:

KöpfeIRI_Logo_RGB_3C

The faculty of Mathematics and Natural Sciences I, Institute of Biology at Humboldt-Universität zu Berlin (HU) invites applications from scientists with experience in research and teaching for a

Full Professorship in "Evolutionary Biology" (Bes.Gr. W3)

starting as soon as possible.

The Professorship is linked to the Integrative Research Institute (IRI) for the Life Sciences (http://www.iri-lifesciences.de). IRI is one of the central activities in the future concept of the HU within the framework of "Excellence Initiative" for interdisciplinary top-level research. The IRI has been founded and is run in cooperation with Charité - Universitätsmedizin Berlin (< http://www.charite.de/ > www.charite.de) and Berlin Institute of Medical Systems Biology of the Max Delbrück Center for Molecular Medicine (< http://-www.mdc-berlin.de/ > www.mdc-berlin.de).

The focus of this experimentally oriented professorship will be molecular and cellular evolution. Research using suitable model systems should center on evolutionary developmental biology questions of cell differentiation or on co-evolution of hosts and pathogens. The professorship shall interlink these questions to the organismic aspects of evolution which are being studied at the Institute for Biology and at the Museum für Naturkunde Berlin (natural history museum). The appointed Professor will have teaching duties in basic and advanced bachelor and master courses on evolution and developmental biology.

Applicants must hold a doctoral degree in natural sciences or related disciplines and have a proven track-record of scientific work in the above mentioned rele-

vant topics. They must meet the legal requirements for appointments of Professors in accordance with Â§100 of the "Berliner Hochschulgesetz".

HU seeks to increase the proportion of women in research and teaching, and specifically encourages qualified female researchers to apply. Preference will be given to disabled persons with equal qualifications. Applications from abroad are welcome.

Please submit your application in English language including CV, reprints of 5 key publications and a short statement on current and future research interests (max. 3 pages) stating the reference number PR/035/13 until January 30, 2014 to Humboldt-Universität zu Berlin, Dekan der Mathematisch-Naturwissenschaftlichen Fakultät I, Prof. Hecht, Unter den Linden 6, 10099 Berlin. Application materials will not be returned. Therefore, you are requested to send only copies of all documents. To accelerate the process, please submit your application also in electronic form at < https://www2.physik/ > https://www2.physik.hu-berlin.de/ssl/evolutionsbio/ . Enquiries may be addressed to the head of the appointments committee, Prof. Peter Hammerstein.

Please visit our website www.hu-berlin.de/-stellenangebote, which gives you access to the legally binding German version.

Yours sincerely,

Elvira Gottardi

–

Dr. Elvira Gottardi Manager IRI for the Life Sciences www.iri-lifesciences.de Humboldt Universität Berlin Philippstr. 13 Haus 18, 4. OG 10115 Berlin

Tel. +49-30-2093-47906 Fax +49-30-2093-47908

Elvira Gottardi <elvira.gottardi@iri-lifesciences.de>

IowaState MicrobialEvolution

The Department of Ecology, Evolution and Organismal Biology at Iowa State University invites applications for a tenure-track position at the Assistant Professor level in Microbial Evolution and Ecology to begin fall 2014. We seek a creative individual investigating microbial communities and microbiomes. Possible research areas may include: ecology and evolution of microbial communities; interactions of microbiomes with host phenotypes, and their change over time; mechanisms underlying the evolution and dynamics of microbiomes; and meta- and functional genomics, metabolomics, or metagenome evolution of microbial communities.

Successful candidates will establish a vibrant, extramurally funded research program and will skillfully contribute to undergraduate and graduate education, including courses in their area(s) of expertise.

Application instructions can be found at www.iastatejobs.com/applicants/-Central?quickFind626. Applicants should submit a cover letter, CV, a research/vision statement that includes how their current or future research is relevant to healthy living (e.g., disease, pollution, ecosystem services) a statement of teaching interests, and up to three reprints. Review of applications is ongoing until February 1, 2014. Submission of three confidential letters of recommendation should be arranged as per instructions in the on-line application system. Please address questions about the position to microbiomes@iastate.edu. Iowa State University values diversity and is an AA/EEO employer with an NSF ADVANCE program.

abroniko@iastate.edu

IowaStateU ConservationBiology

Tenure-track Assistant/Associate Professor position in Wildlife Biology

The Department of Natural Resource Ecology and Management (NREM, www.nrem.iastate.edu) at Iowa State University seeks to fill a 9-month tenure-track Assistant/Associate Professor position in Wildlife Biology. The appointment is expected to be approximately 60% research, 30% teaching, and 10% outreach. The department is seeking a faculty member whose research agenda is focused on characterizing impacts of environmental factors (e.g., climate change, toxins, pathogens) on gene expression, epigenetics, genomics, endocrinology, immunology, and/or physiology of wildlife. The successful candidate will be expected to supervise an independent research program that will attract extramural funding. Teaching responsibilities will contribute to the existing Animal Ecology undergraduate curriculum. The candidate will also have the opportunity to develop a course in her/his area of expertise. The candidate will serve as an advisor to undergraduate students in the Animal Ecology major. Service to the university, profession, and society is expected of this position.

Apply by February 15, 2014 to ensure full consideration.

Please direct questions to Dr. Julie Blanchong, search committee chair, at 515-294-9699 or by email (julieb@iastate.edu).

For the full announcement go to http://-www.iastatejobs.com and search for vacancy # 131322. Iowa State University is an Equal Opportunity/Affirmative Action Employer.

"Blanchong, Julie A [NREM]" <julieb@iastate.edu>

Louisiana FieldAssist MarshVertAdaptation

FIELD ASSISTANTS (2) Seeking two additional field assistants for studies of Seaside Sparrow and Marsh Rice Rat in Plaquemines Parish, Louisiana, 15 March V 30 June, 2013. Fieldwork will take place in Louisiana coastal salt marsh and there is opportunity to enjoy the spectacle of spring migration along the Gulf of Mexico. Duties may include capturing/tagging birds and rodents, collecting and processing blood and tissue samples, finding/monitoring bird nests, and data management. Experience with mist-nets, nest-searching, resighting color-banded birds, taking blood samples from birds, trapping and ear-tagging small mammals, and managing field data desirable. Ability to trailer and pilot a small boat highly desirable for one of the positions. Motivation is a primary consideration: the work is hard and demanding. The team of 4 field assistants will be expected to work both independently and cooperatively, be self-motivated and demonstrate a willingness to learn new skills, and be willing to do minor manipulative research with animals. A demonstrated ability to work in hot and often buggy environments is required. Stipend is equivalent to $1280 - $1800/month, depending on qualifications. Housing is provided. To apply, send a cover letter, CV, and a list of 3 references (with phone #s and/or email addresses) to: Dr. Christy Bergeon Burns atcbburns@agcenter.lsu.edu, or Renewable Natural Resources Bldg. Rm 227, LSU AgCenter, Baton Rouge, LA 70803. LSU AgCenter is an Equal Employment Opportunity employer. Deadline to apply: Dec 31, 2013.

Christine Bergeon Burns <cbergeon@gmail.com>

Munich AvianFieldAssistant

MunichFieldAssistant

EXPERIENCED FIELD ASSISTANTS needed for monitoring and catching breeding passerines at the Ludwig Maximilians University, Munich. Website: http://www.tierisches-meunchen.bio.lmu.de Location: Munich, Bayern, Germany.

Job description: The field assistants will help collect breeding and behavioural data on Great Tits (Parus major) from approximately the beginning of April 2014 to the end of June 2014. The aim of the research is to assess the effects of key environmental traits - i.e. light, noise, and temperature - on the local avifauna. Assistants will work closely with a large, international team consisting of a post-doc, Master and Bachelor students, as well as one other assistant. Field work is physically demanding, and involves cycling with a ladder outdoors in the city in all weather conditions. The breeding season is intense and with typically only 1 day off per week. Duties include behavioural observations, nest monitoring, bird handling (banding, measuring), data entry and data management.

Qualifications/Experience: Candidates must have experience with independent bird handling (preferably with small passerines), including ringing and measuring. Candidates should have a BSc in Biology or a related field. Ideal candidates are highly motivated, well organized and able to work independently, while at the same time able to function well in a big group.

Applications: Review of the applications will begin Mid-January and continue until the positions are filled. To apply, please send (1) a statement of relevant experience, (2) a short resume or CV, and (3) contact information for two references to Philipp Sprau (EM: p.sprau AT lmu.de).

Thank you.

Best regards, Philipp

Dr. Philipp Sprau Ludwig Maximilians Universität München Großhaderner Strasse 2, Raum B02.026 82152 Martinsried Tel.: +49 (0)89 2180 74 214 Tel. Mobil: +49 (0)151 2181 6746 Homepage: www.tierisches-muenchen.bio.lmu.de Max Planck Institut für Ornithologie Eberhard-Gwinner-Strasse, Haus 8 (Raum 8/1.04) 82319 Seewiesen (Starnberg) Tel.: +49 (0) 8157 932 347 Fax: +49 (0) 8157 932 400

"Sprau, Philipp" <psprau@orn.mpg.de>

NatlTaiwanU MarineEvolutionaryBiol

We are welcome evolutionary biologists whose research is related to marine sciences to apply for the faculty position open in our Institute. Please reference the job advertisement below.

Posted by Prof. Wei-Jen Chen (https://-sites.google.com/site/wjchenactinops/), Dec. 3, 2013

The Institute of Oceanography, National Taiwan University (IONTU), invites applications for one to four faculty position(s), at the level of assistant professor or higher, starting on August 1, 2014. Applicants should hold a doctoral degree and specialize in research fields related to marine sciences, preferably in the fields of physical oceanography, marine informatics, chemical oceanography, marine chemistry, marine biogeochemistry, marine geology, marine biology or fishery oceanography. Applicants should send (1) curriculum vitae (including publication list), (2) reprints of up to three publications (published after June, 2010), (3) a proposal for future research and teaching preferences before December 31, 2013 to: Prof. Ching-Ling Wei Chair, Faculty Search Committee Institute of Oceanography, National Taiwan University No. 1, Sec. 4, Roosevelt Road, Taipei, 106 Taiwan Tel: +886-2-2367-7134 Fax: +886-2-2369-2170 Email: weic@ntu.edu.tw

Please visit http://www.oc.ntu.edu.tw for general information of IONTU.

Both regular and electronic mails are acceptable. Please also arrange for three recommendation letters to be sent directly to the Chair of the Faculty Search Committee. Upon receipt of the application, an acknowledgement email will be sent to the applicant within a week. Applicants who do not receive the acknowledgement email please contact the Chair of the Faculty Search Committee via fax or telephone for confirmation.

Wei-Jen CHEN <wjchen.actinops@gmail.com>

PaceU NewYork EvolutionaryBiology

ASSISTANT PROFESSOR, BIOLOGY AND HEALTH SCIENCES, NEW YORK CITY

DYSON COLLEGE OF ARTS AND SCIENCES

PACE UNIVERSITY

The Department of Biology and Health Sciences Department at Pace University in New York City invites applications for an anticipated full-time tenure track position at the rank of Assistant Professor to begin September, 2014. The successful candidate will teach the second semester of the undergraduate General Biology course and other courses in the ecological and environmental sciences. Areas of particular interest for this position include ecology/plant ecology, restoration ecology, and sustainability. Applicants must have an earned PhD and a strong commitment to undergraduate teaching, and will be expected to develop an externally funded research program involving undergraduate students.

For full consideration applicants should submit a letter of interest, curriculum vitae, statement of teaching philosophy, and statement of research interests along with the names of three references to: acampbell2@pace.edu or Ms. Anjelica Campbell, Department of Biology and Health Sciences, Pace University, One Pace Plaza, New York, NY 10038.

Review of applications will begin immediately and will continue until the position is filled.

Pace University is an Equal Employment/Affirmative Action Employer, M/F/H/V, committed to ensuring a diverse learning and working environment. Women and minorities are encouraged to apply.

"Crispo, Erika" <ecrispo@pace.edu>

Perth WAMuseum TechnicalOfficers

see: http://gco.wagov.bigredsky.com/-page.php?pageID=3D160&windowUID=-3D0&AdvertID=156850 Western Australian Museum

Department of Culture and the Arts Technical Officers Pool Ref 13279 Level 3, $62,894 - $68,287 pa, PSGOGA (2011)

The Western Australian Museum is positioning itself through scientific and academic excellence, public programs and relevant exhibitions to keep pace with the rapidly changing face of Western Australia. The Museum has made a major contribution to the collection, conservation and research of the State's natural and social history, maritime heritage and the cultural heritage of Indigenous communities in Western Australia.

Conditions The Western Australian Museum is currently running a Technical Officer pool for a period of 18 months from the initial appointment. Suitable applicants will be placed into a pool and may be offered opportunities as vacancies arise.

Currently there are two full time, fixed term (until 31 December 2018) vacancies available, with the possibility of extension:

Technical Officer - Terrestrial Zoology -13279 Technical Officer - Aquatic Zoology - 13278 Please note position 13278 is subject to a diving certificate and appropriate medical certificate to AS2299, as per the attached JDF.

A current (within 6 months) National Police Clearance Certificate will be required prior to commencement of employment, as per the Department of Culture and the Arts Police Record Screening Policy.

Location This position is located in Welshpool.

Job Description

To undertake laboratory work to generate molecular sequence data for a range of Pilbara fauna. Participate in fieldwork to obtain specimens suitable for molecular analysis. Assist with updating and enhancing the Museum's website to provide data on the Pilbara fauna. Maintain and develop the Museum's frozen collection of animal tissue from the Pilbara region. How to apply for this position

Applicants are required to apply on-line and must provide; a comprehensive CV a three A4 page (maximum) outline on how you would utilise your skills and knowledge in relation to the Work Related Requirements that are listed on the attached Job Description Forms

For further details on how to apply please read the attached Applicant Information Package'. To submit your application, please click on the Apply for Job button.

If you are unable to apply online, please refer to the attached Applicant Information Package (section Submitting Your Application').

If you are experiencing technical difficulties, please contact the 24 hour helpline on (08) 6552 7499 or email recruitment@dca.wa.gov.au for further assistance.

Please note that all of the Essential Work Related Requirements will be assessed at some stage during the selection process.

For further job related information, please contact Mark Harvey on (08) 9212 3737 (not to be contacted for an Applicant Information Package).

hueyjoel@gmail.com

QueensU DeptManager

The Department of Biology, Queen's University, Kingston, Ontario, Canada seeks an experienced, multi-talented individual to manage field and lab research facilities, teaching programs, and general departmental operations and budgets. Review of applicants will begin January 2, 2014 and will continue until the position is filled. Information on Queen's Biology is available at http://www.queensu.ca/biology/index.html For details on the position and application procedures see competition #2013-318 at http://www.queensu.ca/-humanresources/apps/jps/external.php Dr. Peter T. Boag email: boagp@queensu.ca

boagp@queensu.ca

QueensU EvolutionaryBiology

Dear EvolDir members,

Although the job ad below is for a field "ecologist", evolutionary biologists with a major field component to their research, who could thrive at our field station (QUBS) are strongly encouraged to apply.

TIER 2 CANADA RESEARCH CHAIR IN FIELD ECOLOGY Queen's University

The Department of Biology at Queen's University is looking for an exceptional scholar in field ecology who will develop a vigorous research program based at the Queen's University Biological Station (QUBS, http://-queensu.ca/qubs/) as Tier 2 Canada Research Chair.

QUBS has more than 3300 hectares (8300 acres) of mixed deciduous forest, recovering farmland and freshwater habitats with rich diversity of animals and plants. In addition to opportunities to work in natural habitats, there are land and facilities for manipulative ecological experiments. Land holdings provide exclusive access to several lakes and a diversity of wetlands. Many of the lakes within and around QUBS properties, including parts of the Rideau Waterway, support active sport fisheries and some are undergoing rapid environmental change through human development and invasion of non-indigenous species. QUBS includes two main bases of operation, Lake Opinicon and Elbow Lake, each with excellent facilities and accommodations located ~ 50 km north of our main campus in Kingston. The Department is home to an active ecology & evolution group, with particular expertise in evolutionary and population genetics, behavioural ecology, experimental evolution, limnology and community ecology.

We are looking for an individual with a strong record of research in field-based ecology working with any taxa at any level of organization (from integrative biology of individuals through populations, communities and ecosystems). Research areas we are particularly interested in include (but are not limited to) responses of organisms, communities and ecosystems to anthropogenic change (including biological invasions and climate change), range limits in changing environments, plant-animal interactions, and ecosystem/community/population processes at the land-water interface.

The successful candidate will be appointed as Tier 2 Canada Research Chair in Field Ecology at the rank of Assistant or Associate Professor. The candidate will be required to work with the Department and the University Research Services to prepare the formal CRC nomination; the appointment will be subject to final approval by the Canada Research Chair Secretariat. Eligibility criteria and CRC Program information can be found at the following website: http://www.chairs-chaires.gc.ca. Applicants must have obtained their Ph.D. within the last 10 years and have post-doctoral experience. The successful candidate will develop a strong research program supported by diverse funding and contribute to training at the graduate and undergraduate levels in lecture, lab and the field.

Review of applications will begin 13 December 2013 and will continue until the position is filled; the expected date of appointment is 1 July 2015. Please visit the departmental website (http://www.queensu.ca/biology) for application information. The University invites applications from all qualified individuals.

Queen's is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, Aboriginal people, persons with disabilities and persons of any sexual orientation or gender identity. All qualified candidates are encouraged to apply: however in accordance with Canadian Immigration requirements, Canadian citizens and Permanent Residents of Canada will be given priority.

Academic staff at Queen's University are governed by a Collective Agreement between the Queen's University Faculty Association (QUFA) and the University. http://www.queensu.ca/provost/faculty/-facultyrelations/qufa/collectiveagreement.html .
Christopher Eckert <chris.eckert@queensu.ca>

RiceU EvolutionaryBiology

FACULTY POSITION IN ECOLOGY AND EVOLUTIONARY BIOLOGY. The Department of Ecology and Evolutionary Biology at Rice University (website: http://eeb.rice.edu/) anticipates a faculty position at any rank. We invite applications in any area of ecology and evolutionary biology but are especially interested in applications in the areas of evolutionary ecology, population genetics, evolution of life history traits, or evolutionary genomics. We welcome applicants who employ theory, experiments, or some combination. Rice is a private university with a strong commitment to the highest standards of research and undergraduate and graduate education. Please electronically submit applications including curriculum vitae, statements of research and teaching interests, and arrange to have three letters of reference sent 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 January 21, 2014. 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

Project Coordinator

Dept of Ecology and Evolutionary Biology

Rice University

Diane Hatton <rdh@rice.edu>

RowanU IntegrativeBiol

The Department of Biological Sciences (College of Science and Mathematics) and the newly established School of Biomedical Sciences at Rowan University seek an outstanding teacher and scholar for a joint tenure-track Assistant Professor position. The successful candidate is expected to develop an externally funded research program in Integrative Biology and Physiology that includes undergraduate and/or graduate (MS) students. Applicants must have a doctoral or equivalent degree, post-doctoral experience, documented evidence of high quality research productivity, and a strong commitment to teaching at the undergraduate level. The candidate will contribute to the development of curricular and research initiatives in both programs.

We encourage applications from candidates with a successful record of research that integrates multiple levels of biology such as physiology, development, immunology, pathology, virology, or related areas. Relevance of the candidate's research program to human health is highly desirable.

The Department of Biological Sciences' mission is to provide rigorous, broad student-centered training in small classes using active learning approaches. The Department offers a BS in Biological Sciences and co-sponsors the BS and MS programs in Bioinformatics.

The School of Biomedical Sciences is the home for new interdisciplinary biomedical initiatives, and currently consists of the undergraduate Translational Biomedical Sciences Program that will admit its first class in Fall 2014. The program includes faculty members with joint appointments across the College of Science and Mathematics and provides opportunities to collaborate with both the allopathic and osteopathic medical schools at Rowan University.

Teaching responsibilities will include a combination of undergraduate Core Biology lab courses, upper-level Biology lab courses (such as Human Physiology, Immunology, Virology, or other courses in the applicant's area of expertise), courses in Translational Biomedical Sciences (such as Systems Physiology, Genetics of Pathogens, Molecular and Developmental Biology), and graduate courses. Teaching experience and evidence of undergraduate and graduate student research mentorship are preferred.

Rowan University is a comprehensive public institution with a present enrollment of over 13,000 students. The main university campus is located in the suburban, residential town of Glassboro, NJ, and is less than 20 miles from Philadelphia. Additional campuses are located in Camden and Stratford. The university offers bachelors and graduate programs, an M.D. degree through the Cooper Medical School of Rowan University, and a D.O. degree through the Rowan University School of Osteopathic Medicine.

The application must be submitted through our online application system as a single file (PDF format) containing a curriculum vitae, a detailed description of research interests and plans, a statement of teaching philosophy, and graduate transcripts (copies acceptable). Three letters of recommendation should be sent via email directly to joslin@rowan.edu and richmond@rowan.edu.

The application deadline is December 9th, 2013.

Inquiries may be sent to Dr. Courtney Richmond (richmond@rowan.edu).

Rowan University values diversity and is committed to equal opportunity in employment.

srinivasan@rowan.edu

RowanU MicrobialMetagenomics

The Department of Biological Sciences at Rowan University seeks an outstanding teacher and scholar to develop an externally funded research program in Microbial Metagenomics that includes undergraduate and graduate (MS) students. Applicants must have a doctoral or equivalent degree, postdoctoral or comparable professional experience, documented evidence of high quality research productivity, and a strong commitment to teaching at the undergraduate level. In addition, the successful candidate will participate in service to the department and University.

We encourage applications from candidates with a successful record of microbiome research in humans and/or model systems relevant to human health that involves

one or more of the following: host-microbe interactions; development and signaling; immunology; population genetics, evolution and/or ecology of indigenous microbial communities; and/or metabolomics. A record of external research support and/or postdoctoral research support is highly desirable. Collaborations with faculty in science, medical, and/or engineering programs throughout the Rowan campus will be highly encouraged.

Prior teaching experience at the university level is preferred. Teaching responsibilities for the successful candidate are expected to include some combination of undergraduate Core Biology lab courses (Evolution/Adaptation/Diversity, Introductory Genetics, Introductory Cell Biology, and/or Global Ecology), upper level lab courses (Microbiology, Environmental Microbiology, and/or a course in the applicant's area of expertise), and possibly graduate courses. A typical teaching load per year for research-active junior faculty is 3 lecture-lab courses and a lecture or seminar course. Evidence of undergraduate and graduate student research mentorship is also desired.

The Department's mission is to provide rigorous and broad student-centered training in biology, using small classes and active learning. The Department offers a BS in Biological Sciences and co-sponsors the BS and MS programs in Bioinformatics. The Department presently consists of 14 tenure-track faculty members. The Department is housed in a modern science building shared by more than 40 tenure-track science faculty.

Rowan University is a comprehensive state-designated research institution with approximately 14,000 students. Its main campus is located in Glassboro, N.J., 20-miles southeast of Philadelphia, and it has a branch campus and medical school in Camden and a second medical school in nearby Stratford. Rowan is only the second university in the country to offer M.D. and D.O. medical-degree granting programs. The institution is also home to the South Jersey Technology Park, which fosters the translation of applied research into commercial products and processes. Its business incubator also supports that mission. The University boasts eight colleges–Rohrer College of Business and colleges of Communication and Creative Arts, Education, Engineering, Graduate and Continuing Education, Humanities and Social Sciences, Performing Arts, and Science and Mathematics and has been called upon by the state to create a College of Health Sciences.

Applications must be sent through an automated applicant tracking system (http://www.rowan.edu/jobs) under job #13GF012888. The application will consist of a cover letter, curriculum vitae, a statement of research plans, a statement of teaching philosophy, and graduate transcripts (copies acceptable).

Three letters of recommendation should be sent via email directly by references to joslin@rowan.edu and obrien@rowan.edu.

Consideration of applications will begin 12/09/2013 until the position is filled. Inquiries may be sent to Terry O'Brien (obrien@rowan.edu). Rowan University values diversity and is committed to equal opportunity in employment.

All positions are contingent upon budget appropriations.

Dayalan G. Srinivasan Assistant Professor, Department of Biological Sciences Bioinformatics Program Coordinator Rowan University 201F Science Hall 201 Mullica Hill Road Glassboro, NJ 08028 srinivasan@rowan.edu Office: 856-256-4500 ext. 3585

srinivasan@rowan.edu

RoyalOntarioMuseum InvertCurator

The Royal Ontario Museum (ROM) connects visitors to their world and each other. The ROM is an indispensable resource for building community by nurturing discovery and inspiring wonder. The ROM invites everyone to explore and enjoy extraordinary experiences of science and civilization.

Invertebrate Zoologist - The Royal Ontario Museum

The Royal Ontario Museum (ROM) houses some of Canada's most important collections in both Natural History and World Cultures. The Department of Natural History at the ROM (http://www.rom.on.ca/en) currently invites applications for the position of an entry-level (equivalent to Assistant Professor) Curator of Invertebrate Zoology (exclusive of terrestrial arthropods) to conduct field and collections-related research.

The successful applicant will be expected to develop a program of externally funded scholarly research and publications; curate and continue building the disciplinary collection of invertebrates; participate in the development and rotation of new permanent galleries and travelling exhibitions; and actively participate and contribute to development of public programming in a variety of formats from on-site to on-line. The successful candidate will be the public spokesperson for Invertebrate Zoology at the ROM.

We seek a candidate who conducts conceptually driven, collection-based research on the systematics and evolution of any group of invertebrates outside of terrestrial arthropods. We seek applications from candidates whose research programs fit well with the highly collaborative and interdisciplinary research in the ROM's Department of Natural History and complements our close partnership with the Department of Ecology and Evolutionary Biology at the University of Toronto (http://www.eeb.utoronto.ca/). Successful applicants will have a Ph.D. in systematic biology and be well versed in modern phylogenetic methods for analyzing DNA and/or morphological datasets, phylogenomics, evolutionary biology, or historical biogeography; a record of scholarly publication in peer-reviewed journals; be qualified for cross-appointment to the University of Toronto, demonstrate potential for teaching undergraduate and graduate students, and be eligible for NSERC funding in support of their research (i.e. proven record of successful grant applications). Experience in a museum or equivalent environment is preferable.

The Royal Ontario Museum is a leading institution in the study of Systematics and Evolution with a recognized group of curators performing research in temperate and tropical regions of the Americas, Asia, Oceania and Africa. Strong links exist between the Department of Natural History and the Department of Ecology and Evolutionary Biology, University of Toronto, the Ontario Ministry of Natural Resources and Parks Canada.

Applications for the position will be accepted until January 15, 2014. Informal inquiries before application are welcome and should be directed to the Chair of the Search Committee, Dr. Allan J. Baker (allanb@rom.on.ca). Applicants should provide a curriculum vitae, a summary of their research, and an outline of their proposed research, and should arrange to have three confidential letters of recommendation sent on their behalf to:

Human Resources and Organizational Development Department The Royal Ontario Museum 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6 Fax: (416) 586-5827

All qualified candidates are encouraged to apply; however Canadians and permanent residents of Canada will be given priority. Salary and rank are commensurate with experience as stipulated in Agreement between the ROM and the ROM Curatorial Association.

The ROM is committed to fair and accessible employment practices. Upon request, suitable accommodations are available under the Accessibility for Ontarians with Disabilities Act (AODA) to applicants invited to an interview.

Hernán López-Fernández, Ph.D. Curator of Freshwater Fishes Royal Ontario Museum 100 Queen's Park, Toronto Ontario M5S 2C6, Canada

Email: hernanl@rom.on.ca, hlopez_fernandez@yahoo.com

Hernan Lopez-Fernandez <hernanl@rom.on.ca>

SienaC NewYork VertebrateEvolution

Please see our job ad, below. We would welcome applications from anyone with expertise in the ecology and/or evolution of vertebrates, and whose research has some field component. The ability to teach Vertebrate Biology and General Ecology is desired, other upper-level classes relevant to the candidate's interests are possible.

Tenure Track Position in Biology

Assistant Professor, tenure-track position, starting fall 2014 – Vertebrate field biologist. Candidate must be broadly trained in biology, and have a Ph.D. in the biological sciences. Post-doctoral research or teaching experience strongly preferred. Successful candidate will be committed to teaching undergraduates and to developing a research program that involves undergraduates. A research lab in our modern facility and initial startup funds will be provided. Teaching duties include upper division general ecology and vertebrate biology courses with laboratories, for majors. In addition, all biology faculty assist with introductory level courses for biology majors. The teaching load is 9 contact hours per semester. Candidates with research expertise in any area of field biology will be considered. Siena College is a four-year liberal arts college with approximately 3000 students. The Biology Department consists of 14 full-time faculty members and over 300 majors. Additional information about this position, our department, course descriptions, and facilities can be found at www.siena.edu/biology/ .Further questions about the position can be directed to Dr. Kenneth Helm, helm@siena.edu. To apply, submit a pdf document file that includes a cover letter, curriculum vitae, statement of teaching experience and interests, a statement of research interests, and three letters of recommendation (submitted separately). Electronic submission through Interfolio is required; please submit materials to ap-

ply.interfolio.com/23969 no later than January 6, 2014. Only complete applications will be considered. Applications will be reviewed beginning January 6, 2014. For questions or further information, please contact Eileen Martino, Biology Department Administrator, School of Science at emartino@siena.edu

Equal Employment Opportunity Statement

Siena College is committed to attracting, supporting, and retaining a diverse faculty. We actively encourage applications from women, minorities, persons with disabilities, veterans, and others who may make a positive contribution to the diversification of ideas and perspectives.

Siena College is an Equal Opportunity Employer and encourages applications from all interested candidates. As an Equal Opportunity Employer M/F/D/V, Siena College surveys all job applicants in accordance with the U.S. Department of Labor's affirmative action requirements. Therefore, we request that in addition to your application, you complete the Equal Employment Opportunity Data Form provided on the Interfolio site. Any information you choose to provide on the Equal Employment Opportunity Data Form will be treated as personal and confidential and will be kept separate from your application for employment. Your cooperation is important to maintain an effective equal opportunity program at Siena College and is greatly appreciated.

Sarah K Berke Assistant Professor of Biology Siena College Loudonville NY 12211

skberke@gmail.com

SouthernArkansasU WildlifeBiology

Southern Arkansas U: Wildlife Biology/Freshwater Ecology

The Biology department is seeking applicants for a nine-month, tenure-track Assistant Professor in Biology position with an emphasis in Wildlife & Conservation, Freshwater Ecology, beginning August 2014. Preference will be given to candidates who are broadly trained and can provide instruction in a variety of introductory and core courses, including marine biology. The department is located in a new 64,000 square foot science building with a Natural Resource Research Lab. A field station is available on Lake Columbia near campus, and the university is affiliated with the Gulf Coast Marine Laboratory at Ocean Springs, MS. Rank and salary dependent upon education and experience.

Duties: teach general biology and should be prepared to teach a variety of core courses within the new wildlife biology major; engage in scholarly activity; develop a student-oriented research program; serve on committees; and engage in recruitment, retention, and advising of students; and, perform other duties as assigned.

Qualifications: Ph.D. in Biology or related field, ABD may be considered; ability to teach undergraduate students; evidence or potential for excellence in teaching research, and service is required. Evidence or potential for excellent teaching, a strong publication record, history of external grant funding, administrative experience, and strong oral and written communication skills. All SAU employees are expected to demonstrate excellence in interpersonal behaviors and be committed to effective collaboration with colleagues.

Applicants should send a letter of application, curriculum vitae, transcripts, and the contact information of five (5) references to Human Resources, Southern Arkansas University, P.O. Box 9288, Magnolia, AR 71754-9288 or emailed to HR@saumag.edu in PDF format. Applications will be reviewed as received and accepted until the position is filled. AA/EOE. Non-listed references may be contacted.

Abraham Tucker <AbrahamTucker@saumag.edu>

Taipei 2 MicrobialDiversityBioinformatics

Positions: Ecology, Microbial Diversity or Bioinformatics The Biodiversity Research Center, Academia Sinica (BRCAS, see homepage at http://biodiv.sinica.edu.tw/), Taipei, Taiwan, invites applications for two tenure track positions in terrestrial ecology, microbial diversity or bioinformatics. The rank is open, though junior scientists are preferred. Candidates with a research interest in terrestrial ecology, microbial diversity, microbial genomics, or bioinformatics are encouraged to apply. Candidates with good postdoctoral research experience are preferred.

BRCAS is still in an expansion mode. The center provides each PI with some internal support and good start-ups for new PIs. BRCAS is strong in marine biodiversity and molecular and genomic evolution. It is in charge of a sequencing core with one 454,

two HISeq2500$B!G(Bs and one MiSeq and Academia Sinica is well equipped with modern research facilities. The center wishes to strengthen research in terrestrial ecology, microbial diversity and computational genomics. The positions will be open until filled; however, the first review will be conducted in early March 2014. An applicant should submit the names and e-mail addresses of three references along with CV (including a list of publications), 3$B!](B5 representative papers (pdf files), and a statement of past achievements and future research interests to Ms. Miao-Suey Lin (zomslin@gate.sinica.edu.tw). Please indicate the position you want to apply.

Wen-Hsiung Li <wli@uchicago.edu>

UAlabama Huntsville GenomicsChair

Endowed Chair in Biological Sciences

The University of Alabama in Huntsville (UAH) is seeking an accomplished investigator for the Pei-Ling Chan Endowed Chair in the Department of Biological Sciences. The successful candidate will be a leading scientist in the areas of genetics, genomics, and/or bioinformatics, will contribute to the Departments undergraduate and graduate teaching programs, and will play a key role in developing the collaborative relationship between UAH and the non-profit research institute, HudsonAlpha Institute for Biotechnology (www.hudsonalpha.org and http://research.hudsonalpha.org), which is dedicated to research in genomics and genetics.

UAH is one of three institutions in the University of Alabama System and has a current enrollment of approximately 5900 undergraduates and 1800 graduate students. Federally supported research expenditures exceed $80 million per year. The University is widely known for its research in space science, engineering, and information technology. Existing strengths in the Department of Biological Sciences include ecological and evolutionary genetics and genomics, and structural and synthetic biology.

Huntsville is located in the beautiful Tennessee Valley of North Alabama and is home to NASA Marshall Space Flight Center, the Army's Redstone Arsenal federal campus, and the countrys second largest research park, Cummings Research Park, where more than 285 high-technology companies are situated. Within Cummings, the HudsonAlpha Institute for Biotechnology has created a 155-acre biotechnology campus touting state-of-the-art facilities and genomics technology and a team of leading genomic scientists with decades of experience in large-scale projects such as The Human Genome Project, The Cancer Genome Atlas, and the Encyclopedia of DNA Elements Project (ENCODE). As the city that built the International Space Station and the rockets that put humans on the moon, the City of Huntsville is rich in heritage and diversity, as well as in cultural and recreational activities. Huntsville residents enjoy one of the highest per-capita incomes in the country, in a metropolitan area of approximately 430,000 people. For more information about UAH and Huntsville, Alabama, please visit www.uah.edu and http://www.huntsvillealabamausa.com. . An applicant or nominee for the Pei-Ling Chan Chair should be a recognized authority in her or his field and must have credentials in research and teaching appropriate for appointment as a senior Associate Professor or Professor. A strong record of funded research is expected.

Applicants should send a CV, a statement of teaching philosophy, and contact information for three references to:

Prof. John D. Fix Chan Chair Search Committee Office of the Dean, College of Science The University of Alabama in Huntsville Huntsville, AL 35899.

For further information or questions, contact Dean Fix (fixj@uah.edu). Review of complete applications will begin on 1 October 2013 and continue until the position is filled. UAH is an Equal Opportunity/Affirmative Action Institution. Women and minorities are strongly encouraged to apply.

Dr. Luciano M. Matzkin Assistant Professor Director of the Graduate Program Department of Biological Sciences The University of Alabama Huntsville 301 Sparkman Drive Huntsville, AL 35899 Office (256) 824-4326 Lab (256) 824-6968 http://www.uah.edu/biology/LAB/matzkin/ Luciano Matzkin <lmm0015@uah.edu>

UCincinnati IntegrativeBiolChem

We are interested in individuals that complement our strength in Evolution and that have research that could be placed within an evolutionary context.

Thank you, Stephanie

The Department of Biological Sciences, University of Cincinnati (http://www.artsci.uc.edu/departments/-biology.html) is seeking an Integrative Biologist at the Assistant Professor level. Individuals should be conducting research at the interface of biology and chemistry. We encourage applicants from a broad range of disciplines, but are especially interested in those that complement existing departmental strengths in Evolution, Sensory Biology and Behavior, and Environmental Change and Biological Resilience. Applicants must hold a Ph.D. and have postdoctoral experience. The successful candidate is expected to build an outstanding, externally-funded research program, contribute to undergraduate and graduate teaching, and fulfill service duties. To apply, submit a cover letter, curriculum vita, and statements of research interests and teaching philosophy. The research statement should include links to three representative publications. Have three letters of recommendation sent separately to: wischer@ucmail.uc.edu. Review of applications will begin January 5, 2014 until the position fills. The University of Cincinnati is an affirmative action/equal opportunity employer. Women, minorities, disabled persons, and veterans are encouraged to apply.

https://www.jobsatuc.com/applicants/jsp/shared/-frameset/Frameset.jsp?time=1385605124988 Working Title Assistant Professor (Biology) Position Number 213UC6765 Department A&S Biological Sciences

"Rollmann, Stephanie (rollmasm)" <rollmasm@ucmail.uc.edu>

UGeorgia InfectiousDiseaseEvol

ASSISTANT PROFESSOR POSITION EMERGING INFECTIOUS DISEASE AND VECTOR ECOLOGY UNIVERSITY OF GEORGIA

The College of Veterinary Medicine and the Odum School of Ecology at the University of Georgia invite applications for a joint appointment, tenure- track Assistant Professor in the area of emerging infectious diseases and vector ecology. Candidates should have a strong question-driven research program that uses leading-edge empirical and computational approaches to address the most challenging problems associated with infectious disease emergence and global change. Areas of research might include, but are not limited to: pathogen and vector responses to global change; determinants of host shifts; modeling infectious disease dynamics across scales of organization; and evolutionary strategies for limiting the spread of insecticide and drug resistance in vectors and pathogens. The University of Georgia has world-renowned programs in both Ecology (http://www.ecology.uga.edu/) and Veterinary Medicine (http://www.vet.uga.edu), and this faculty position is intended to strengthen ties between units that offer much support for collaboration in areas of undergraduate education, graduate training and research.

The successful candidate will be expected to maintain a rigorous, externally funded research program, and will contribute to undergraduate and graduate teaching and mentoring. Applicants must have a PhD and/or MD or DVM, one or more years of postdoctoral experience, and evidence of teaching and research productivity. To apply, candidates should: Combine into a single PDF file a (I) cover letter indicating career goals, (II) curriculum vitae, (III) statement of research accomplishments and future goals (2 pg. max.), (IV) statement of teaching philosophy and experiences regarding instruction and mentoring (2 pg. max.). In a separate PDF file, candidates should combine three reprints of research papers. These two files should be submitted online at http://webapps.ecology.uga.edu/facultysearch/EID. Candidates should arrange to have three letters of recommendation submitted via the same web site. Applications received by January 31, 2014 will receive full consideration. The anticipated start date for the position is August 2014. The University of Georgia is an EEO/AA institution committed to increasing the diversity of its faculty and students, and sustaining a work and learning environment that is inclusive. Women, minorities and people with disabilities are encouraged to apply. Georgia is well known for its quality of life in regard to both outdoor and urban activities. The University of Georgia, the oldest state-chartered university in the United States, is a land and sea grant institution located in the city of Athens, 70 miles northeast of Atlanta.

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.william.park@gmail.com

UGeorgia Griffin InsectGenomics

Research Professional I position in insect genetics and genomics. Brendan Hunt, Department of Entomology, University of Georgia, Griffin Campus.

Three years of funding, with possible extension, is available for one Research Professional I position in the Hunt Lab at the University of Georgia, Griffin Campus.

Starting salary: $28,716 - $33,023. Location: UGA Griffin Campus in Griffin, GA (~40 miles south of Atlanta).

The Hunt Lab uses genetic and bioinformatic tools to investigate evolution, development, and behavior in insect systems. The Research Professional will assist in the coordination and execution of research in a molecular genetics laboratory, and will have the opportunity to provide input into research design and direction. Co-authorship of publications and the development of new areas of expertise are expected outcomes. Responsibilities will include assisting in the coordination and execution of molecular genetic protocols, including nucleic acid extraction, PCR, qPCR, RNAi, and assisting in the coordination and execution of insect rearing and experimentation. A bachelor's degree or master's degree in the biological sciences, genetics, or related, is required. Applicants should have research experience employing basic molecular genetic techniques.

Contact Brendan Hunt at huntbg@uga.edu for more information. Apply online at https://-www.ugajobsearch.com/applicants/jsp/shared/-position/JobDetails_css.jsp?postingId=217046
huntbg@uga.edu

UKonstanz 2 MolecularEvolution

At the Department of Biology at the University of Konstanz in Germany we have two openings as

Assistant Professor/Group leader

The persons we are looking for should work ideally in the fields of either molecular evolution, comparative genomics, and / or the evolution of developmental mechanisms. The positions are for Ph.D. biologists, 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 make up the evolutionary biology group in the Department of Biology at the University of Konstanz in Germany: http://www.evolutionsbiologie.uni-konstanz.de/index.php?section=172 Our taxonomic emphasis is on fish, particularly on the cichlids, zebrafish and medaka model systems. We are interested in the origin of adaptations and speciation in cichlid fish of the adaptive radiations from Nicaragua and Africa. For publications of the lab see: http://www.evolutionsbiologie.uni-konstanz.de/-index.php?section=92. We are currently supported by an ERC advanced grant for genomic, population genomic, and ecological work on the repeated adaptive radiations of cichlid fish from crater lakes in Nicaragua.

Space in a modern fish facility is available and the exclusive support of a 50% part-time technician will be provided to each of these two new groups. Wet lab space, equipment, departmental facilities and annual financial support for research expenses are provided by the university. 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 southern German border to Switzerland.

Appointments are initially for two to three years and are renewable for several years after that. Habilitation is possible, and a modest amount of teaching (English or German at the BSc and MSc level) is required and the supervision of undergraduate and graduate students is expected.

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 is committed to further the compatibility of work and family life.

Additional information can be obtained from: axel.meyer@uni- 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, 2014.

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

ULeipzig SciAssist BehaviouralEvolution

Job Market 208/2013

Leipzig, December 12, 2013

The Faculty of Biological Science, Pharmacy and Psychology, Institute of Biology, Professorship of Behavioral Ecology offers as from February 1, 2014 the following position:

Scientific assistant (initially limited to 3 years) Salary: Entgeltgruppe 13 TV-L

Tasks: - preparation and implementation of teaching at the Bachelor and Master level in Behavioral Ecology and partial assistance in the practical course in Zoology (4 SWS) - supervision of BSc, MSc and PhD students - procurement of third-party funds and implementation of own research profile with special focus on Behavioral Ecology

Requirements: - an excellent university degree in Biology, PhD degree desirable - successful procurement of third-party funds and strong publication record in Behavioral Ecology - advanced statistical knowledge, particular in âRâ - excellent English skills - high self-motivation and very good organizational skills - ability to work in a team as well as fully independently, flexibility, enthusiasm for supervision of students - preferable: experience with genetic analysis (microsatellites or SNP) or NGS, experience with GC-MS analysis for olfactory communication or experience with handling large data sets respectively

For more Information contact Prof. Dr. Anja Widdig (widdig@rz.uni-leipzig.de). For information on research see: http://www.eva.mpg.de/pks/ Applications are accepted until January 2, 2014. All applications should make reference to the file number 208/2013, include the usual supporting documentation and be directed to (preferentially as pdf): dekanat.bio@uni-leipzig.de. or:

Universität Leipzig Fakultät für Biowissenschaften, Pharmazie und Psychologie Frau Dekanin Professor Dr. Andrea Robitzki Brüderstraße 32, 04103 Leipzig

Applying via email is questionable under data protection law. The sender assumes full responsibility.

Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability.

Anja Widdig, PhD

Professor of Behavioural Ecology Institute of Biology Faculty of Bioscience, Pharmacy and Psychology University of Leipzig Talstrasse 33 D-04103 Leipzig Germany Phone: +49-(0)341-9736-707 Fax: +49-(0)341-9736-848 Email: widdig@rz.uni-leipzig.de

Emmy Noether Fellow Head, Jr. Research Group "Primate Kin Selection" Department of Primatology Max Planck Institute for Evolutionary Anthropology Deutscher Platz 6 D-04103 Leipzig Germany Phone: +49-(0)341-3550-221 Fax: +49-(0)341-3550-299 Email: anja.widdig@eva.mpg.de homepage: http://www.eva.mpg.de/pks/ Anja Widdig <anja.widdig@eva.mpg.de>

UMiami Bioinformatics

Bioinformatician/Molecular Core Facility Supervisor

The University of Miami seeks a Bioinformatician with expertise in computational biology and development and analysis of next-generation sequencing (NGS) datasets to join our integrative Biology Department, which pursues functional studies of genotype and phenotype, development and neuroscience, evolutionary population genomics and statistical and quantitative genetics (http://www.as.miami.edu/biology/).

Qualifications: Ph.D. degree in biological or computational sciences and three years relevant research experience. We seek a Bioinformatician with experience analyzing next-generation sequencing data (e.g., RNA-Seq, Sequence Capture, RAD-Seq, or de novo whole genome). Capability with UNIX and understanding of scripting languages such as Perl or Python and C++, SQL, or PHP are required. Familiarity with bioinformatics workflows and pipeline development is essential. Experience in a molecular genetics lab and preparing customized Illumina or other types of next-generation sequencing libraries is highly desirable.

Duties: The individual will be responsible for oversight and development of the department's computational biology and genome analysis program in our Molecular Core Facility. In addition to independent research,

duties include collaborative work with faculty including training and mentoring graduate and undergraduate students, developing NGS sequencing protocols and bioinformatics workshops, compiling and interpreting results and collaborating on proposals and publications. Additional duties include supervising equipment use in the facility.

This is a full-time research professional position. Salary is competitive and commensurate with qualifications. Send application materials, including letter of application, CV, and 3 letters of reference by email to bioinformatician@bio.miami.edu. Address questions to kmccrack@bio.miami.edu. Application review will begin January 2, 2014 and continue until position is filled.

The University of Miami is an affirmative action, equal opportunity employer committed to expanding the diversity of its faculty. Women, persons with disabilities, and members of other underrepresented groups are encouraged to apply.

Kevin G. McCracken Kushlan Chair in Waterbird Biology & Conservation Department of Biology & Rosenstiel School of Marine and Atmospheric Sciences University of Miami Coral Gables, FL 33146, U.S.A. Tel. +1 (305) 284-3973 email: kmccrack@bio.miami.edu

kmccrack@bio.miami.edu

UMontana WildlifeConservation

ASSISTANT PROFESSOR, WILDLIFE POPULATION ECOLOGY (856-254)

University of Montana

The University of Montana College of Forestry and Conservation and Wildlife Biology Program seeks an individual with teaching and research experience in wildlife population ecology. This is a nine-month, tenure-track position as an Assistant Professor of Wildlife Biology in the College of Forestry and Conservation. Employment will begin fall 2014. We welcome applications from individuals of diverse backgrounds, experience and perspectives.

RESPONSIBILITIES: This appointment involves responsibilities primarily in the Wildlife Biology Program within the College of Forestry and Conservation (CFC). Wildlife Biology, administered by the CFC, is a joint program among the College, the Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit. There are ~330 undergraduate and 45 graduate students in Wildlife Biology.

Specific responsibilities include: 1) teach a senior-level wildlife population ecology course and undergraduate or graduate classes in ecology or wildlife biology; 2) develop a vigorous, externally funded research program; 3) advise undergraduate students, and direct graduate student research in Wildlife Biology at the M.S. and Ph.D. level; and 4) participate in Wildlife Biology, CFC, and University committees, and interact with state, federal, and private conservation organizations.

ACADEMIC AND PROFESSIONAL QUALIFICATIONS: The candidate must possess: 1) a Ph.D. in the area of wildlife population ecology or a related field at the time of appointment; 2) a strong record of research and scholarship in the field of wildlife population ecology, including publications in peer-reviewed journals and successful development of competitive externally-funded grants; 3) experience and genuine interest in teaching; 4) a proven ability to communicate effectively with students, professionals, and the general public. Candidates with post-doctoral and teaching experience as well as experience working with natural resource agencies are especially encouraged to apply. Preference will be given to applicants whose research complements research of other faculty in Wildlife Biology (www.cfc.umt.edu/wbio).

TO APPLY: Visit the UM Jobs website at http://-bit.ly/1aHhfv4. Applicants must upload the following application materials online to ensure full consideration: CV; statements of research and teaching interests; 3 representative examples of publications; and names of three references. Screening of applications will begin January 3, 2014 and continue until position is filled. Inquiries pertaining to the announcement can be directed to Paul Lukacs, Search Committee Chair at (406)-243-5675 or via email at paul.lukacs@umontana.edu.

The University of Montana is one of the nation's outstanding public universities, committed to liberal arts education, research, and strong professional programs. UM is located in Missoula, Montana, a northern Rocky Mountain city that lies at the center of five valleys where three great rivers converge. Located between Yellowstone and Glacier National Parks, Missoula boasts a blend of small-town charm and urban sophistication. It has a thriving arts and cultural scene with 8 museums, 30 art galleries, a symphony orchestra, internationally known writers and festivals, a professional modern dance troupe and a children's theater that tours worldwide. The surrounding areas offer abundant recreational options, including hiking, biking, skiing, hunting, rafting, fly-fishing and bird-watching. As a result, this University position offers an unparal-

leled quality of life.

The University of Montana is an ADA/EOE/AA/Veteran's Preference Employer

jeffrey.m.good@gmail.com

UNorthCarolina Asheville EvolutionaryBiol

The Biology Department at the University of North Carolina at Asheville (UNC Asheville) anticipates hiring a tenure-track Assistant Professor beginning Fall 2014. The successful candidate will have a PhD in Biology or an appropriate discipline, demonstrated teaching experience and the potential for engaging undergraduates in a research program. Teaching duties include introductory courses for the major and advanced offerings in microbiology and molecular biology. Opportunities exist for developing courses outside of the department that contribute to the core curriculum.

Located in the Blue Ridge Mountains, UNC Asheville is the designated public liberal arts institution in the UNC system, and emphasizes quality teaching and mentoring of undergraduates in research, scholarship and service. UNC Asheville is committed to increasing the diversity of its faculty, staff and student body. Women, minorities and people with disabilities are encouraged to apply. Applications should include the following documents in PDF form: a cover letter; a statement of teaching philosophy; a description of a research program with plans for incorporating undergraduates; a CV highlighting both teaching and research accomplishments; and three letters of reference.

Materials may be submitted electronically to Dr. Gregg Kormanik, Search Committee Chair, to kormanik@unca.edu. Review begins 2 January, 2014 and continues until the position is filled. The University of North Carolina at Asheville is an Equal Opportunity/Affirmative Action employer.

rhale@unca.edu

URhodeIsland EvolutionaryBioTeaching

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Assistant Professor in Biological Sciences with teaching specialization

**

Applications are invited for a tenure-track, academic-year Assistant Professor position in the Department of Biological Sciences at the University of Rhode Island. Candidates must have a Ph.D. in Biology or Biology Education by June 2014. Primary area of research must be development of innovative pedagogy for college biology course instruction. A successful candidate must have a record of excellent teaching and scholarship, a demonstrated interest in engaging and innovative approaches to undergraduate biology education, and knowledge and experience in assessment strategies. The candidate will collaborate with STEM colleagues to improve science teaching, and will be expected to secure external funding in STEM education. Duties may include teaching and/or coordinating gateway biology courses, developing and implementing course changes to improve student success, exploring alternatives to traditional lecture style presentations including blended learning, and applying scientific teaching principles and assessment strategies to measure success. Visit https://jobs.uri.eduto apply electronically and view complete details. Refer to Posting# 6001276. Only online applications will be accepted until Jan. 27, 2014 and will require three attachments in PDF format: a cover letter, CV and "other document" containing a teaching statement, research statement, and the contact information for three references. *URI is an AA/EEO employer and values diversity.URI is an E-Verify employer.*

– Steven Q. Irvine, Ph. D., Associate Professor Department of Biological Sciences Integrative and Evolutionary Biology, Graduate Coordinator University of Rhode Island, Kingston RI 02881 Office: CBLS 281 401-874-9204 http://cels.uri.edu/bio/BIO_ProfileView.aspx?id=2 http://cels.uri.edu/Irvine/Irvine_lab/Home.html ———————010100080202040607030608

UWesternAustralia BeeEvolution

RESEARCH ASSISTANT PROFESSOR | REF: 492752 | Centre for Integrative Bee Research (ARC CoE

Plant Energy Biology)

* 2 year appointment available immediately * Salary range Level B $87,179 - $103,526 p.a.

The Centre for Integrative Bee Research is (CIBER < http://www.ciber.science.uwa.edu.au/ >) located at The University of Western Australia and dedicated to facilitating interdisciplinary research on honeybees. The ultimate goal is to better understand honeybee reproduction, immunity and ecology and counter the dramatic losses currently occurring globally.

Key responsibilities

The successful applicant designs, executes and analyses research using lab and field based approaches to understand interactions between honeybees and their fungal pathogen Nosema apis.. To do this, he/she will set up and run experiments using honeybees from CIBER's bee yard at UWA or from external collaborators. The work is done in close collaboration with the Australian Centre for Necrotrophic Fungal Pathogens at Curtin University and the Swiss Federal Institute for Technology (ETH Zurich, Switzerland). The successful applicant works closely with other members of the CIBER team in designing the use of proteomics and genomics experiments to investigate molecular interactions between the honeybees immune system and the parasite. The work requires detailed knowledge of standard proteomic technologies such as protein separation, quantification, identification using mass spectrometry and bioinformatics analyses. The successful applicant is also involved in maintaining and troubleshooting the mass spectrometry facility at the ARC Centre of Excellence in Plant Energy Biologyhttp://www.plantenergy.uwa.edu.au/ in collaboration with other researchers and manufacturers.

About you:

The successful applicant will have a PhD in Protein Biochemistry or Molecular Biology or related discipline and experiences in mass spectrometry, protein extraction and quantitative proteomics. Very good computing and data management skills are essential. Furthermore preparing manuscripts for publication and supervising students is required. Working experiences with insects and/or bees are desirable.

Contact: Prof Baer at email boris.baer@uwa.edu.au Closing date: Friday 31 January 2014

How to apply: Applications must be submitted online. Full details of the position's responsibilities and the selection criteria are outlined in the position description. Applicants should clearly demonstrate how they meet the selection criteria.

For more information and to apply see http://external.jobs.uwa.edu.au/cw/en/job/492752/research-assistant-professor-ref-492752 To support our bee work, visit www.futurebeesfund.org Prof. Boris Baer Director Centre for Integrative Bee Research (CIBER) Bayliss building M316 The University of Western Australia Crawley WA 6009 Australia phone: +61 8 6488 4495 fax: +61 8 6488 4401 E-mail: boris.baer@uwa.edu.au Website: www.ciber.science.uwa.edu.au Facebook: http://www.facebook.com/pages/Centre-for-Integrative-Bee-Research-CIBER/107607792730734 boris.baer@uwa.edu.au

UZurich FieldAssist Birds Lapland

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

For the upcoming field season (3 March - 8 June 2014) we are looking for 2 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. The study site 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. We will work 5-6 days per week in the field depending on the workload of the experiments. Observe that temperatures in the beginning of the season can be as low as -30C. The work is physically strenuous at times in particular during the snow melting period in April.

From March until beginning of May will be doing most of the fieldwork on X-country skis, and given that only the edge of the study site is accessible by car, we ski up to 15km per day. Thus, a previous knowledge of X-country skiing is helpful.

The team will vary in size depending on the weeks; a field technician, a MSc student and the volunteers will be present during the whole field season.

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) X-country or general skiing skills advisable (5)

Knowledge in observing & handling birds is a plus (6) Driving licence (7) 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 send to Michael Griesser michael.griesser@uzh.ch

Applications received until 5th January 2014 will be given full consideration.

For further information on the project, see: http://www.aim.uzh.ch/Research/birdfamilies/-JayResearch.html Michael Griesser Anthropological Institute & Museum University of Zurich - Campus Irchel Winterthurerstrasse 190 8057 Zürich Switzerland

http://www.aim.uzh.ch/Research/birdfamilies/-mgriesser.html http://www.prodoc-evolcoop.uzh.ch/-index.html michael.griesser@uzh.ch

WilliamJewellCollege VertEvoDevo

William Jewell College Assistant Professor of Biology V Vertebrate Evolutionary Developmental Biologist

The Department of Biology seeks applicants for a tenure-track Assistant Professor of Biology position to begin August 2014. The successful candidate will be trained in vertebrate developmental biology. Preferred candidates will have postdoctoral experience and a research program that can be advanced through the mentoring of undergraduates in research. Teaching responsibilities will include courses in cellular and molecular biology, genetics, human physiology, the departments Oxbridge Honors program and in the Colleges core curriculum. Other responsibilities will include academic advising, involvement in College and departmental committees and activities, and continued research activity and publication. Qualifications are a Ph.D. in biology or related discipline, evidence of successful teaching at the college level, and a strong record of publication.

Review of applicants will begin Nov. 15, 2013 and continue until position is filled. More information about the position and application procedures can be found on the Colleges website, www.jewell.edu under Employment. William Jewell College is an equal opportunity employer.

Qualifications:

* Ph.D. in Biology or related area with research experience in vertebrate developmental biology * Capacity to teach human physiology * Postdoctoral research experience preferred * Evidence of successful teaching at the college level * Experience mentoring undergraduate research * A strong record of publication.

Duties and Responsibilities:

* Teaching responsibilities within the Department of biology will include: * Courses in Cellular and Molecular Biology, Genetics and Human Physiology and their associated labs as well as upper level courses in the general area of cellular and molecular biology. * Mentoring undergraduate research as part of the departments 4 semester, required undergraduate research program. * Tutorials in the Oxbridge Honors program. * The opportunity to develop new courses in the candidates area of expertise is encouraged. * Teaching contribution to the Colleges Core curriculum. * Continued creative production and publication, academic advising, and involvement in College and departmental committees and activities.

The above statements are intended to describe the general nature and level of work being performed by employees in this position. They are not intended to be an exhaustive list of all duties, responsibilities, and qualifications of employees assigned to this job.

Application Procedures

Candidates must submit the following documents in PDF or MS Word format via email to jobs@william.jewell.edu.

* Letter of application * William Jewell Application * Curriculum vitae * Response to the college mission * Statement of teaching philosophy * Evidence of teaching effectiveness * Scholarly/Creative goals * Transcripts (copies are acceptable until finalists are selected) * Three letters of recommendation (for finalists only)

Applicants who need accommodation for the application or interview process: please make accommodation requests in advance to the Office of Human Resources.

William Jewell College Office of Human Resources 5000 College Hill Box 1017 Liberty, MO 6406 (816) 415-5992

Availability Review of applications will begin Nov. 15, 2013 and continue until position is filled. All Final Candidates will be required to pass successfully a criminal background check prior to beginning employment.

Our Mission: William Jewell College promises students an outstanding liberal arts education that cultivates leadership, service, and spiritual growth within a com-

munity inspired by Christian ideals and committed to open, rigorous intellectual pursuits.

William Jewell College is an equal opportunity employer

Rose M. Reynolds, Ph.D. Assistant Professor | Department of Biology 500 College Hill, Liberty, MO 64068 | 816.415.7894 (office) | 816.415.5027 (fax)

William Jewell College: Live What You Learn. | www.jewell.edu Please join Jewell in conservation efforts. Print this email only if necessary. Rose Reynolds

"Reynolds, Rose" <reynoldsr@william.jewell.edu>

Other

ASN Graduate Student Award

Please encourage your students to apply for the American Society of Naturalists Student Research Award. The details are listed below. The deadline is January 1, 2014.

Sincerely, Becky Fuller

The ASN Student Research Award goes to six student members of the American Society of Naturalists, who hold a bachelor?s degree or equivalent, have passed to candidacy in a Ph.D. program (or equivalent), must be at least one year from completing the Ph.D., and who have not received this award previously. The recipients of the award receive $2,000 and an announcement in the American Naturalist. They will be asked to send a brief report on how the money helped to sponsor their research.

An applicant must be a member of the ASN, must hold a bachelor?s degree or equivalent, must have passed to candidacy in a Ph.D. program or equivalent, and must be at least one year from completing the Ph.D. Applicants should send a two-page proposal (not including references–11 point font minimum with standard margins). In addition, applicants should include a budget with justification (one page), a short curriculum vitae (two pages), a statement from the Ph.D. supervisor that verifies that the applicant meets the eligibility requirements, and the supervisor?s recommendation supporting the research proposed by the student (one page). Projects in all types of research (i.e., laboratory, field, theory) are encouraged. A total of six proposals will receive awards. Proposals will be judged on originality, strength, and significance of the questions being addressed, prospects for significant results, and the match between the proposed research and the ASN mission. All materials should be compiled into one PDF file and sent via e-mail to Rebecca Fuller (fuller@life.illinois.edu) with ?ASN Student Research

Award? in the subject line. Deadline for submission of all materials is January 1, 2014.

Becky Fuller <fuller@life.illinois.edu>

AmazonBiodiversity CallProposals

Annual call for proposals CEBA 2014, French Guiana

The CEnter for the study of Biodiversity in Amazonia (CEBA) is a Laboratory of Excellence based in French Guiana aimed at fostering knowledge on terrestrial biodiversity. The Labex CEBA aims to coordinate research capacity in France on the topic of Amazonian terrestrial biodiversity, and to reinforce collaborations with South American and other international partners. Details are available at http://www.labex-ceba.fr The Labex CEBA opens an annual competitive call for proposals to encourage innovative research on biodiversity in French Guiana. Projects will be evaluated by the Scientific Board and by external referees.

The submission deadline is January 24th, 2014.

To access the call for proposals form: http://www.labex-ceba.fr/en/appel-a-projets-annuel-ceba/
Amaia Iribar

CEBA-Scientific project manager

EDB-Laboratoire Evolution et Diversité Biologique UMR 5174 Université Paul Sabatier Toulouse III 118 route de Narbonne 31062 Toulouse

Amaia Iribar-Pelozuelo <amaya.pelozuelo@univ-tlse3.fr>

AmericanSocNaturalists awards

The American Society of Naturalists (ASN) solicits nominations and applications for the following awards (deadline is January 1st, 2014, for each):

The Edward O. Wilson Naturalist Award: This is given to an active investigator in mid-career who has made significant contributions to the knowledge of a particular ecosystem or group of organisms. Individuals whose research and writing illuminate principles of evolutionary biology and an enhanced aesthetic appreciation of natural history will merit special consideration. The recipient need not be a member of the Society. The award will consist of an especially appropriate work of art and a prize of $2,000, presented at the annual meeting. A letter of nomination, curriculum vitae including a publication list, and three key publications should be sent electronically to Douglas Schemske (schem@msu.edu). Please indicate "E. O. Wilson Award" in the subject line.

The Sewall Wright Award: This honors a senior but active investigator who is making fundamental contributions to the Society's goals in promoting the conceptual unification of the natural biological sciences. The award includes an honorarium of $1,000. The recipient need not be a member of the Society. A letter of nomination and curriculum vitae (including publication list) should be sent electronically to Michael Wade (mjwade@indiana.edu). Please indicate "Sewall Wright Award" in the subject line.

The Jasper Loftus-Hills Young Investigator Award: Jasper Loftus-Hills (1946-1974) was an Australian biologist of exceptional promise who had published 16 articles when he was killed by a hit-and-run driver while recording frog calls along a Texas highway, three years after receiving his degree. The award was established in 1984 to recognize promising outstanding work by investigators who received their doctorates in the three years preceding the application deadline, or who are in their final year of graduate school. It involves presentation of a research paper in the Young Investigator's Symposium at the ASN annual meeting and includes a $500 prize, a travel allowance of $700, cost of registration for the meetings, and a supplement of $500 in case of intercontinental travel. Four awards are made annually. Recipients need not be members of the Society. The prize committee encourages direct applications and welcomes suggestions of people who should be encouraged to apply. Applications should consist of no more than three pages that summarize the applicant's work (excluding tables, figures, and references), no more than four appropriate reprints, and a CV. Two letters from individuals familiar with the applicant's work should be sent separately. All application materials should be sent electronically to Leonie Moyle (lmoyle@indiana.edu). Please indicate "Young Investigators' Award" in the subject line, and for reference letters, the name of the applicant.

The ASN Student Research Awards: These awards support research by student members that advances the goals of the society: the conceptual unification of ecology, evolution, and behavior. Each award consists of $2,000. A total of 10 proposals will receive awards (increased from 6 in 2013). The applicant must be

a member of the ASN (membership is international), must hold a bachelor's degree or equivalent, must have passed to candidacy in a Ph.D. program or equivalent, and must be at least one year from completing the Ph.D. Applicants should send a two-page proposal (not including references), a budget with justification (one page), a short curriculum vitae (two pages), plus a statement from the Ph.D. supervisor that verifies that the applicant meets the eligibility requirements, as well as indicating support for the proposed research (one page). Projects in all areas (i.e., laboratory, field, theory) are encouraged. Proposals will be judged on originality, strength, and significance of the questions being addressed plus the match between the proposed research and the ASN mission. All materials should be compiled into one PDF file and sent by January 1, 2014 to Rebecca Fuller (fuller@life.illinois.edu), with "ASN Student Research Award" in the subject line. See details on the Awards page.http://www.amnat.org/-awards.html#SRA Lists of past winners of all the awards can be found here: http://www.amnat.org/-awards.html The American Society of Naturalists asn@press.uchicago.edu

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Editors Blog: comments.amnat.org Forthcoming Papers: http://www.amnat.org/an/newpapers.html American Society of Naturalists: http://-www.amnat.org/home.html Trevor Price Department of Ecology and Evolution University of Chicago

773-702-5176

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

Austria Internships EvolutionaryBiol

The IST Austria ISTernship program offers summer internships to outstanding BS and MS students interested in basic research in Biology, Computer Science, Mathematics, Physics, Neuroscience and inter-disciplinary areas. Interns will choose a group to work in, will be assigned a specific project and will conduct research under the close supervision of one of the members of the faculty and, for experimental labs, a lab mentor.

Duration: 8 -12 weeks between May 15 and September 15

Benefits: - Salary - full social security coverage - reimbursement of travel costs - subsidised housing

To apply for the program and to see a list of IST Austria faculty members participating in the program visit http://ist.ac.at/research/isternship . The deadline for applications is FEBRUARY 15, 2014

To learn more about IST Austria please visit www.ist.ac.at .For inquiries, please contact istintern@ist.ac.at. For further information, please refer to the ISTERNSHIP website: http://ist.ac.at/research/-isternship/ Nick.Barton@ist.ac.at

GradStudent Policy Leadership Award

Announcement: Graduate Student Science Policy Leadership Award

The American Society of Mammalogists is recruiting applicants for the Graduate Student Science Policy Leadership Award. Recipients of this award will receive an expense-paid trip to Washington DC to participate in public policy training and a Congressional Visits Day. Recipients will meet with federal agency scientists and Congressional policy makers. It provides graduate students with incredibly valuable networking opportunities and outreach experience for furthering their careers and diversifying their skills in the natural sciences. Prior recipients of the award have gone on to successful careers in academia, public policy, agency research, and teaching.

Qualifications include enrollment in a graduate degree program focused on mammal sciences, an expressed interest in public policy, and membership in the American Society of Mammalogists. Students may register for membership at the time of application.

Deadline for applications is January 15th, 2014

Further information can be found at: http://-www.mammalsociety.org/committees/graduate-student-science-policy-leadership-award or contact Dr. Natalie Dawson at natalie.dawson@umontana.edu

natalie.dawson@umontana.edu na-

talie.dawson@umontana.edu

howard.rundle@uottawa.ca

Location EVOLUTION 2016

Re: Location for future joint annual meetings of the ASN/SSB/SSE (aka the 'Evolution meeting')

As the new Chief Meeting Organizer responsible for Evolution 2016 and beyond, I am soliciting suggestions as to potential locations for future meetings, with particular emphasis on 2016 as time is getting tight. These need not be major cities, but preferred locations will:

-Be relatively easy to travel to from within N. America

-Have a meeting venue that can handle 2000+ people, including 12+ good sized seminar rooms and a large plenary hall, that are in VERY CLOSE PROXIMITY (i.e. no more running between buildings). This will almost certainly be a conference center as opposed to a university.

-Have a meeting venue that is centrally located such that attendees have access to a good selection of local restaurants/pubs/bars

-Have a range of accommodation options including lower-cost student residences

-Be somewhere interesting to visit (think night life, cultural activities, natural history)

Portland is a good example of such a location and we are considering a return visit there in the future (but not in 2016).

Suggesting a potential location does not, in any way, commit you to being involved in organizing a meeting should your suggestion ultimately be selected. I simply want to know about places I otherwise might not consider. Suggestions should be sent to evolution.meetings@gmail.com and should include the location along with any information you have concerning the specific venue (i.e. convention center), as well any details pertinent to the above desired qualities.

The ASN/SSB/SSE appreciate your help.

Howard Rundle

Howard D. Rundle, Associate Professor Department of Biology, 30 Marie-Curie Priv. University of Ottawa, Ottawa, ON, K1N 6N5, CANADA

Ph: +1 613-562-5800 x2835; Fax: +1 613-562-5486; Skype: howarddrundle http://www.science.uottawa.ca/~hrund050

MountainLake Fellowships

The University of Virginia's, Mountain Lake Biological Station (MLBS) in the southern Appalachians 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 March 14, 2014. 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).

Melissa Ivy Wender Office Manager Mountain Lake Biological Station mwender@virginia.edu University of Virginia 064 Gilmer Hall (PO Box 400327, Cville, VA 22904)

1-434-982-5486

www.mlbs.org < https://www.facebook.com/pages/-Mountain-Lake-Biological-Station/56574851014?ref=-stream >

Member, Provost Employee Communication Council pecc.provost.virginia.edu

Mountain Lake Biological Station <mlbs@virginia.edu>

MountainLakeBioStation Fellowships

Early-Career Fellowships, Mountain Lake Biological

Station

The University of Virginia's Mountain Lake Biological Station (MLBS) is excited to offer a limited number of fellowships to cover residency and station use costs for researchers exploring new projects or collecting preliminary data. An Early Career Fellowship offers a rare opportunity to spend up to 2 months at MLBS, one of North America's premier field stations, at no cost to the researcher. MLBS welcomes researchers from any discipline that can benefit from the Station experience and facilities.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 that includes a CV and 2-3 page outline of the proposed research to mlbs@virginia.edu. Review of proposals will begin March 14, 2014.For more information about the fellowship program, research opportunities, or MLBS, please visit our website: mlbs.org and contact the Director Dr. Butch Brodie at bbrodie@virginia.edu

enagy@virginia.edu

Namibia VolFieldAssist BaboonEvolution

Dear all,

We are currently recruiting field assistants for the 2014-2015 field season on the Tsaobis Baboon Project. If you could please circulate the advert below (and attached flyer) to anyone you think might be interested in voluntary fieldwork in Namibia, that'd be great.

Thanks in advance!

Cheers, Alice and Cass

Alice Baniel and Cassandra Raby PhD students, Institute of Zoology, Zoological Society of London

Tsaobis Baboon Project - Volunteer Field Assistants

The Tsaobis Baboon Project is a long-term study of desert baboons in Namibia. Based at the Institute of Zoology (the research arm of the Zoological Society of London), and affiliated with the Gobabeb Research and Training Centre (Namibia), our aim is to carry out fundamental research in behavioural ecology and population ecology, and to inform conservation policy and practice for social species.

We are seeking to appoint six volunteer fieldworkers for the 2014-2015 field season, between late April 2014 and late January 2015. A range of 6-month and 3-month volunteer positions are available over this period. The fieldwork will primarily involve daily follows of baboon troops on foot, collecting behavioural data from individually recognisable animals and their associated ecological conditions. Research over this field season will focus on three themes:

* Sexual coercion and conflicts over reproduction * Social networks and information transfer * Climate, behaviour, and host-parasite dynamics

Successful applicants will specialise in one of these three research areas, as well as contributing to the wider long-term study. Further information about the Tsaobis Baboon Project, the volunteer fieldworker positions, and the application procedure can be found on the Project's webpages:

www.zsl.org/tsaobisbaboonproject< http://-www.zsl.org/tsaobisbaboonproject >

The deadline for applications is 9am Monday 6th January 2014

If you are unable to make these dates, there will be a second recruitment call for the last nine months of the 2014-2015 field season (October 2014 to July 2015) in May 2014.

The Zoological Society of London is incorporated by Royal Charter Principal Office England. Company Number RC000749 Registered address: Regent's Park, London, England NW1 4RY Registered Charity in England and Wales no. 208728

Alice.Baniel@ioz.ac.uk

NeuchatelU 2VolFieldAssist HouseSparrows

Neuchâtel University, Switzerland, 2 Volunteer Field Assistant

Job Description:

VOLUNTEER FIELD ASSISTANT POSITION to study oxidative stress in relation to social status in house sparrows in Switzerland.

We are seeking 2 research assistant for the upcoming

breeding season to join a project investigating the impact of oxidative stress and social status on the development of reproductive strategies in house sparrow. The project is based at the University of Neuchatel, Switzerland (PI: Prof. Fabrice Helfenstein, PhD student: Jacqueline Huber) and will be conducted in the vicinity of Neuchâtel and Bern, Switzerland. The work will start on 1st of April and will continue throughout early/mid July. Our project investigates how males with different positions in a dominance hierarchy allocate their antioxidant resources to the protection of their sperm vs. the protection of their somatic functions, and how such allocation strategies affect the quality of the sperm they produce. The work of the volunteer will consist in field and lab work. This includes assisting the PhD student with catching and banding birds, behavioural observations, sample collection, data management and data analysis. This is a volunteer field assistant position, thus the applicant should cover his/her own accommodation and food. Travel expenses might be covered for European applicants (partly for overseas applicants), and a possible stipend could be granted at the end of the season.

Qualifications: (1) Ability to work and live in small groups and sociable personality, (2) Fluent in English, (3) Ability to endure long working days, (4) Knowledge in observing & handling birds is highly desirable, (5) Driving license is helpful, (6) Basic knowledge of French or German is helpful although not essential.

To Apply: Applications - including a CV and a letter of motivation (1 pg.) - should be send to : JACQUELINE HUBER (jacqueline.huber@unine.ch). Please use "Volunteer Field Assistant in Switzerland" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 15 February 2014 will be given full consideration. For further information on the lab & project, see www2.unine.ch/ecophy

Thank you. Jacqueline Huber

Ph.D. Student Institute of Biology Evolutionary Ecophysiology University of Neuchâtel Rue Emilie-Argand 11 CH-2000 Neuchatel Switzerland

Room D319 jacqueline.huber@unine.ch

Tel. +41 (0)32 718 3032

jacky_huber@hotmail.com

Paper request JEB 1929

I am trying to get a pdf copy of two papers from the same journal (Journal of Experimental Biology). Unfortunately the journal is not subscribed by my University library.

The papers are

Metabolic activity and duration of life. I. Influence of temperature on longevity in Daphnia magna. (1929). Journal of Experimental Biology. 53 (2) 221-242

Metabolic activity and duration of life. II. Metabolic rates and their relation to longevity in Daphnia magna. (1929). Journal of Experimental Biology 53 (2) 243-268

Best regards

Miguel

Miguel Barbosa Visiting Postdoctoral Researcher Scottish Oceans Institute School of Biology University of St Andrews KL16 8LB Scotland

"Miguel Barbosa(Gmail)" <migosas@gmail.com>

Paper request thanks

Dear EvolDir members,

many thanks for your replies. I got the two papers I needed.

All the best

Miguel

Miguel Barbosa Visiting Postdoctoral Researcher Scottish Oceans Institute School of Biology University of St Andrews KL16 8LB Scotland

"Miguel Barbosa(Gmail)" <migosas@gmail.com>

Phyloseminar DanielKsepka Dec3

Daniel Ksepka (NESCENT) Including Fossil Taxa in Phylogenies: Advances and Issues December 3, 2013 10:00 AM PT

The fossil record offers a rich source of macroevolutionary data. Fossils can reveal transitional forms that could not be predicted from extant taxa alone, reveal unexpected biogeographic patterns, and provide temporal information crucial for inferring rates of evolution and correlations between evolution and abiotic events. At the same time, including fossil taxa in phylogenetic analyses presents many challenges. Currently, there are a wide variety of methods for including fossil data in phylogenetic analyses ranging from indirect use of fossil ages to inform divergence dates to simultaneous analyses of fossil and extant taxa under various optimality criteria and with varying levels of constraints. One important consideration remains that fossils typically provide only morphological data, which can lead to problems related to missing data and potential violation of common assumptions for model-based phylogeny inference methods designed primarily for molecular sequence data. Morphological character data are typically harvested from from fossils taxa not at random, but with an intentional bias towards parsimony-informative characters (with apomorphies omitted from matrices). Combined with issues related to sparse codings in large combined matrices, care must be taken to avoid spurious inferences.

See http://phyloseminar.org/ for more details.

ematsen@gmail.com

Phyloseminar GrahamSlater Dec10

Graham Slater National Museum of Natural History Phylogenetic Paleobiology: What do we stand to gain from integrating fossils and phylogenies in macroevolutionary analyses? December 10, 2013 1:00 PM ET

The aim of macroevolutionary science is to understand the patterns and processes responsible for generating organismal diversity in space and time. Although macroevolutionary change typically occurs over geologic timescales and has traditionally been studied by paleobiologists, comparative biologists have become increasingly interested in macroevolutionary questions, utilizing time-calibrated molecular phylogenies of extant taxa as a framework for testing hypotheses about rates of evolution. In this seminar, Ill examine how integrating fossils and phylogenies can increase our power to test and answer fundamental questions about tempo and mode in phenotypic evolution. Integrating fossil taxa into phylogenies of extant taxa is worth the effort: on a per taxon basis, fossils contribute more information about macroevolutionary pattern and process and increase our ability to distinguish processes that leave similar signals in extant species datasets. Ill discuss some recent work, and highlight how fossil information can be used to inform macroevolutionary inference when a combined phylogeny is lacking. One theme emerges from all of this work; we stand to gain a better understanding of macroevolution not when we approach it as biologists or paleontologists but, as G.G. Simpson recommended 60 years ago, as practitioners of both.

– Frederick "Erick" Matsen, Assistant Member Fred Hutchinson Cancer Research Center http://-matsen.fhcrc.org/ Erick Matsen <matsen@fhcrc.org>

PlantSoil paper

I'm looking for a pdf copy of the following article:

Inderjit, Ragan M. Callaway. 2003. Experimental designs for the study of allelopathy. Plant and Soil. 256: 1-11.

Thank you in advance to anyone who can provide it to me.

Regards

Nina Internicola

Internicola Nina <nina.internicola@gmail.com>

Software LAMARC 2 1 9 release

We have just released LAMARC version 2.1.9. LAMARC is a program which performs likelihood or Bayesian coalescent analysis of population genetic data in order to estimate population size, growth rate, subpopulation sizes and immigration rates, recombination rate, and population divergence times.

Version 2.1.9 is an important bug fix release. In version 2.1.8 inference of population divergence did not work correctly and all results involving divergence were

invalid. The new version additionally corrects crashes when converting files and when using monomorphic DNA loci, but these do not invalidate any previous successful runs.

LAMARC 2.1.9 can be freely downloaded from:

http://evolution.gs.washington.edu/lamarc/-index.html If you have visited this site before it is possible you will have to refresh your browser to see the new version.

Questions or comments about this release can be directed to the LAMARC mailing list lamarc@uw.edu.

Sincerely, The LAMARC development team Mary Kuhner Jon Yamato lamarc@uw.edu

mkkuhner@u.washington.edu

Software kSNP MicrobialSNPs

Announcing availability of kSNP v2: a program for SNP identification in microbial genomes without genome alignment.

One of the major barriers to SNP analysis of microbial genome sequences is that multiple alignment of more than about 30 bacterial genomes is not currently practical. kSNP circumvents the alignment problem by identifying SNPs from data sets that can include finished genome sequence, assembled genomes, and raw-read (unassembled) genomes. It is capable of identifying SNPs in sets of hundreds of genomes and runs on Mac OSX and Linux 64-bit computers in a few minutes to a few hours depending on the size of the data set.

kSNP and its applications are described in detail in Gardner SN, Hall BG (2013) When Whole-Genome Alignments Just Won't Work: kSNP v2 Software for Alignment-Free SNP Discovery and Phylogenetics of Hundreds of Microbial Genomes. PLoS ONE 8(12): e81760. doi:10.1371/journal.pone.0081760 http://www.plosone.org/article/-info%3Adoi%2F10.1371%2Fjournal.pone.0081760 . kSNP v2 is available at https://sourceforge.net/projects/ksnp as executables for Mac OS X and for Linux 64-bit operating systems, and as source code; a complete User Guide is provided.

Abstract

Effective use of rapid and inexpensive whole genome sequencing for microbes requires fast, memory efficient bioinformatics tools for sequence comparison. The kSNP v2 software finds single nucleotide polymorphisms (SNPs) in whole genome data. kSNP v2 has numerous improvements over kSNP v1 including SNP gene annotation; better scaling for draft genomes available as assembled contigs or raw, unassembled reads; a tool to identify the optimal value of k; distribution of packages of executables for Linux and Mac OS X for ease of installation and user-friendly use; and a detailed User Guide. SNP discovery is based on k-mer analysis, and requires no multiple sequence alignment or the selection of a single reference genome. Most target sets with hundreds of genomes complete in minutes to hours. SNP phylogenies are built by maximum likelihood, parsimony, and distance, based on all SNPs, only core SNPs, or SNPs present in some intermediate user-specified fraction of targets. The SNP-based trees that result are consistent with known taxonomy. kSNP v2 can handle many gigabases of sequence in a single run, and if one or more annotated genomes are included in the target set, SNPs are annotated with protein coding and other information (UTRs, etc.) from Genbank file(s). We demonstrate application of kSNP v2 on sets of viral and bacterial genomes, and discuss in detail analysis of a set of 68 finished E. coli and Shigella genomes and a set of the same genomes to which have been added 47 assemblies and four "raw read" genomes of H104:H4 strains from the recent European E. coli outbreak that resulted in both bloody diarrhea and hemolytic uremic syndrome (HUS), and caused at least 50 deaths.

Barry G. Hall Bellingham Research Institute

Shea N. Gardner Lawrence Livermore National Laboratory

barryghall@gmail.com

SouthAfrica VolFieldAssist MammalConservation

Rationale

The Biodiversity and Climate Research Centre (BiK-F) of Frankfurt-am-Main (Germany) is looking for 3 to 6 highly motivated field assistants for a 21-weeks-fieldwork in three protected areas located in South Africa and Botswana from May to September 2014. In this study we will conduct road transects along which we will record data on environmental variables (rainfall, vegetation, fire frequency, etc.), large mammals and park visitors in order to make a joint analysis of ecolog-

ical processes and ecosystem services (wildlife tourism) at the local and regional scale.

The successful applicants will provide assistance in locating and counting large mammals (ungulates and predators) and tourists along 5 km road transects, interviewing visitors, driving vehicles along the transects, and gathering other data such as vegetation structure, visibility, etc. The research team will comprise four people at a time, split in two teams of two people in two field vehicles (4 wheel drives).

â Protected Areas: - Kgalagadi Transfrontier National Park (South Africa / Botswana) - Hluhluwe-Umfolozi Game Reserve (South Africa) - Chobe National Park (Botswana)

â Accommodation: hotels outside the parks, public camping within the parks.

â Number of road transects: 40 per park, 120 in total, each replicated 3 times.

Number of positions available: 3 to 6 positions.

Tasks Work in tandem in one of the two expedition cars. Drive along 5 km road transects. Conduct animal (ungulates and predators) and visitor counts from the car. Record all necessary environmental data along the transects. Conduct tourist interviews at picnic and campsites.

Academic requirements Master studies in Ecology, Biology or equivalent. Final year of Bachelor studies in Ecology, Biology or equivalent will also be considered.

Length of fieldwork 21 weeks: from May 2014 to September 2014. The field assistant can apply either for the whole field season (3 parks) or a reduced field season (one or two parks only). Please state your availability in the application.

Required skills Strong scientific ethic (rigor, curiosity, autonomy, motivation). Strong interest in mammals, experience in mammal counting is a plus. Ability to work in a group or in tandem, for long hours (from 7am to 7pm) and in remote areas. Very good communication skills for the interviews; good spoken English. Valid international driving licence, with ability to drive long distances.

Appreciated skills Experience in African mammals identification. Experience in 4x4 driving and maintenance. Previous work experience in remote and isolated areas.

Material consideration Plane tickets, car rental and fuel, accommodation, health care and field equipment is provided by BiK-F.

Preliminary Planning 1st May - 4th May: Departure from Germany, arrival at Johannesburg 5 May - 22 June: field in the Kgalagadi (South Africa + Botswana) 30 June - 1st August: field in Hluhluwe (South Africa) 8 August - 19 September: field in Chobe (Botswana) 20 August: return to Johannesburg and departure to Germany

Research Institute Biodiversity and Climate Research Centre (BiK-F) Georg-Voigt-Str. 14-16 60325 - Frankfurt-am-Main Germany

website http://www.bik-f.de/

Responsible for the project

Ugo Arbieu Research staff (PhD candidate) Biodiversity and Climate Research Centre (BiK-F) Project Area B: Biodiversity Dynamics and Climate Georg-Voigt-Str. 14-16 (Room 2.01) 60325 - Frankfurt-am-Main Germany Tél. (work): +49 (0) 69 7542 1876 E-mail: ugo.arbieu@senckenberg.de

Prof. Katrin Böhning-Gaese Executive Director Biodiversity and Climate Research Centre (BiK-F) Georg-Voigt-Str. 14-16 60325 - Frankfurt am Main Germany E-mail: katrin.boehning-gaese@senckenberg.de

Ugo Arbieu <Ugo.Arbieu@senckenberg.de>

UZurich VolFieldAssist BirdEvolution

UZurich FieldAssist BirdEvolution

Expenses-paid ïassistant positions to study evolution of family living and cooperative breeding in birds in Spain.

We are seeking 3 or 4 applicants for ïresearch volunteers for the upcoming breeding season to join our ïproject investigating the evolution of family living and cooperative breeding in birds. The research is conducted in Andalusia, southern Spain. Starting dates range from beginning of March to the beginning April and work will continue until the middle of June or end of June.

Our project researches the shifts in parental investment patterns in pair living, kin-group living and cooperatively breeding birds. The project is based at the University of Zurich, Switzerland (PI Michael Griesser, PhD student Emeline Mourocq and Gretchen Wagner).

The work of the volunteer(s) will consist of carrying out ïexperiments, locating nests, assisting the main field assistant with catching and ringing birds, behavioral observations and data management. This work will give

insight into experimental ïand is carried out in scenic semi-arid habitats of southern Spain. Depending on the field workload, we work up to 6 days per week and the days can be long (10-12 hours), including field work and data entry. Observe that temperatures at the beginning of the ïseason can be below 0ÂC, and later in the breeding season be easily above 35ÂC. The work can be physically strenuous at times.

Qualiï:

(1) BSc or higher in Biology or similar qualiï

(2) Ability to work and live in small groups and sociable personality

(3) Good ability to climb (trees or walls)

(4) Previous ïexperience a plus

(5) Good physical condition and ability to endure long, physically demanding days

(6) Knowledge in observing & handling birds is a plus

(7) Driving license is helpful

(8) Fluent in English and good ability in Spanish

These are expenses-paid ïassistant positions, covering accommodation, food, and travel expenses of up to 300â¬*toandfromthestudysite*.

Applications - including a CV, a letter of motivation (1 pg.) and the name of two referees - should be sent to both:

Emeline Mourocq: emeline.mourocq@uzh.ch and

Gretchen Wagner: gretchen.wagner@uzh.ch

Please use "Volunteer Field Assistant Position in Spain" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 15th February 2014 will be given full consideration.

For further information on the project, see:

http:// www.aim.uzh.ch/Research/birdfamilies.html

http://www.aim.uzh.ch/Research/birdfamilies/mourocq.html http://www.aim.uzh.ch/Research/birdfamilies/wagner.html emeline mourocq <emeline.mourocq@uzh.ch>

WageningenU VolFieldAssist AvianPhenotypicVariation

Volunteer field assistant position to study the maintenance of phenotypic variation in great tits in the Netherlands

We are looking for a research assistant for the upcoming breeding season to join our project investigating sexual selection and reproductive investment in great tits (Parus major). The research will be conducted in the Netherlands near Arnhem and will last throughout the breeding season, from April until the end of June.

Our project investigates the potential of individual differences in mate choice and reproductive investment to maintain phenotypic variation in great tits. During the breeding season we will study parental investment of the great tits breeding in the study area in relation to plumage characters and partner quality. The project is based at the Wageningen University and is in collaboration with the Netherlands Institute of Ecology.

The volunteer will help the PhD student working on the project in the field. The work will involve monitoring the breeding birds in the study area, cross fostering of chicks, making video and audio recordings of the nest and banding the offspring.

We ask:

- Candidates should preferably have a BSc or higher in biology, behavioural ecology or a similar qualification - Ability to work in a team, good social and organizational skills - Willingness to work long days and if needed during weekends - Experience in handling and banding birds preferred - Driving license - Proficient level of English language

We offer: This is a voluntary position but we may be able to offer travel and accommodation costs to the right candidate. For further information, please contact Lies Zandberg (lies.zandberg@wur.nl) or Dr. Camilla Hinde (camilla.hinde@wur.nl) or check the website of the research group (www. bhe.wur.nl).

Application deadline 30 January 2014. Applications consisting of a CV and a motivation letter should be sent to Lies Zandberg (lies.zandberg@wur.nl)

lies.zandberg@wur.nl

PostDocs

AntibodyEvolution PathogenInteractions

Two postdoctoral positions are available in the Cobey Lab at the University of Chicago (http://-cobeylab.uchicago.edu/). Research in the Cobey Lab focuses on the ecological and evolutionary dynamics of host-pathogen interactions. Both positions are computational and involve significant applied and theoretical components.

The aim of the first position is to investigate the evolution of antibody repertoires. This work involves evaluating the ruggedness of antibody fitness landscapes and competition between immune cells to understand the factors shaping pathogen evolution within hosts and host populations. Ideal applicants will have background in computational biology, population dynamics, population genetics, or molecular evolution and an interest in immunology.

The aim of the second position is to evaluate models to predict and explain pathogen interactions using time-series and longitudinal data. This position is ideal for applicants with strong skills in statistical inference, epidemiology, or theoretical ecology. This work involves

collaboration with colleagues at Argonne National Laboratory.

Both positions are for one year, with the possibility to extend the length of the appointment. Postdoctoral fellows are expected to be highly motivated, creative, collaborative, and technically skilled (e.g., in computation, statistics, or nonlinear dynamics) and to be great communicators. Assuming good progress on their initial aims, fellows will be encouraged to develop their own research directions under the broad interests of the lab.

Applications should be sent to Sarah Cobey (cobey@uchicago.edu) and include as a single file a cover letter, CV, contact information for three references, and a few representative publications. Application review will begin immediately.

cobey@uchicago.edu

BEACON MichiganStateU Evolution

BEACON Center for the Study of Evolution in Action

BEACON Distinguished Postdoctoral Fellows Program

**

BEACON is an NSF Science and Technology Center headquartered at Michigan State University with partners at North Carolina A&T State University, University of Idaho, University of Texas at Austin, and University of Washington. BEACON brings together biologists, computer scientists, and engineers to study evolutionary dynamics using biological and computational techniques and to apply evolutionary principles to engineering problems. We seek outstanding post-doctoral scholars to pursue interdisciplinary research on evolution in action with BEACON faculty members, in the fields of biology, computer science, and/or engineering.

Applicants will propose a research project within the scope of BEACON's mission and must have two BEACON faculty sponsors who will serve as research mentors should the fellowship be awarded. One sponsor must be MSU faculty; the other sponsor may be from any of the five BEACON institutions. Preference is given for interdisciplinary research. The post-doc fellow will be based at Michigan State University in East Lansing. Please see our website (http://www.beacon-center.org) for information about BEACON mission, participants and ongoing research projects.

Applicants must submit the following, in a single PDF, to BEACON Managing Director Danielle Whittaker via email (djwhitta@msu.edu):

1.CV

2.A two-page description of their research plan

3.A one-page summary of their doctoral research

4.Letters of support from two BEACON sponsors (one must be from MSU)

5.Two additional letters of recommendation

Fellowships last two years and include a salary of $50,000/year and modest funds to support research and travel. The successful applicant will help foster collaborations among faculty and disciplines and serve as a professional model for pre-doctoral trainees.

A Ph.D. in biology, computer science, engineering or related fields is required. Current MSU graduate students or postdocs are not eligible for this fellowship. US citizens or permanent residents only. Minority applicants are especially encouraged to apply. MSU is an Equal Opportunity/Affirmative Action Employer.

The deadline for applications is January 10, 2014. Finalists will be invited to give research seminars in early February, and the award will be announced in late February.

Danielle J. Whittaker, Ph.D. Managing Director BEACON Center for the Study of Evolution in Action 567 Wilson Road, Room 1441E Michigan State University East Lansing, MI 48824 (517) 884-2561 djwhitta@msu.edu http://beacon-center.org djwhitta@msu.edu

BielefeldU BehaviouralEvolution

* Two Year Postdoctoral Research Associate Position, Bielefeld University, Germany*

—— Modelling behavioural syndroms and phenotypic plasticity of behaviour ——

Application deadline: January 16, 2014

A researcher position is available within the Evolutionary Biology research group of Prof. Dr. Klaus Reinhold at Bielefeld University. The project "Mod-

elling adaptive phenotypic plasticity of behaviour and the evolution of behavioural syndromes" belongs to a group of seven related projects within the DFG funded research group 'Reduction of phenotypic plasticity in behaviour by early experience: functional consequences of an adaptive mechanism?' The main aim of our project is to examine theoretical aspects of adaptive phenotypic plasticity of behaviour. Besides working on more general models of adaptive variation in behavioural phenotypes, the successful candidate is expected to interact with the empiricists in the research group with the aim to collaborate on modelling behaviour. Further information can be found on the following pages with regard to the research group http://www.uni-bielefeld.de/biologie/fg1232/ and the department http://www.uni-bielefeld.de/%28en%29/-biologie/Evolutionsbiologie/index.html The successful candidate should have a strong training in theoretical biology, preferably with a background in evolutionary biology or behavioural ecology. However, strong candidates form other research fields with a documented interest in questions regarding evolutionary biology will also be considered.

We expect candidates to have good communication skills and the ability to work independently as well as in a team. Experience with one or several programming languages (for example C++, R) would be beneficial. Applications in English or German should be sent by e-mail and should include a cover letter, a C.V., a statement of research interests, a list of publications, and names and e-mail addresses of two references, preferably within a single PDF. We especially encourage women to apply. Interviews are planned to be held in February 2014.

Payment is based on the German TVL E 13 scale (approx. 40,000 per year depending on experience). Bielefeld University is an equal opportunity employer and encourages disabled persons to apply. Disabled applicants with suitable qualifications will be preferentially considered. The university also aims at increasing the number of women in fields where they are underrepresented, and therefore encourages them to apply. Given equal qualifications and skills between top ranked applicants, women will be preferentially considered.

The closing date for applications will be January 16, 2014.

For further inquiry and for sending your applications please use the following address: Klaus.Reinhold@uni-bielefeld.de

Prof. Dr. Klaus Reinhold, Bielefeld University

Klaus Reinhold <klaus.reinhold@uni-bielefeld.de>

Biogeco France EvolutionaryQuantGenetics

Post doc position in evolutionary quantitative genetics

—Job description: The general goal of the project is to predict evolutionary responses of tree phenology to environmental changes under different ecological settings. These predictions will be based on observations conducted in situ and in common garden experiments, and make use of modeling approaches (METAPOP simulation engine). A major goal of the project is to consider explicitly interactions between gene flow, plasticity and microevolution, and to apply predictive models under real ecological settings.

—Scientific environment: The post doc position is part of the recently granted ANR project MECC (MEchanisms of adaptation to Climate Change: how will phenotypic plasticity, microevolution and migration affect forest tree phenology). The working location will be at the Biogeco research unit (20 km south-west of Bordeaux, France: https://-www4.bordeaux-aquitaine.inra.fr/biogeco_eng/). Biogeco has long standing experience in monitoring oak phenology along environmental gradients, in dissecting genetic variation in provenance/progeny tests and QTL experiments, in developing evolutionary modeling approaches of quantitative traits.

—Expected profile: We seek for a scientist with a PhD degree and experience in the field of evolutionary quantitative genetics. Knowledge of tree ecology and practice of computer programming will be helpful. Candidates should be fluent in English and have experience in paper writing.

—Application: Application with CV, a brief statement of research interests, contact information for two professional references and publication list should be submitted in an electronic form to Dr. Antoine Kremer (antoine.kremer@pierroton.inra.fr). Review of applications will begin on January 10 2014 and continue until the position is filled. Do not hesitate to e-mail us for further details or questions. The position is open for 18 months, and can be extended.

Sophie Gerber <sophie.gerber@pierroton.inra.fr>

CEFE Montpellier PlantMetapopulationDynamics

POSTDOCTORAL POSITION IN PLANT METAPOPULATION DYNAMICS : INTRODUCING SEED DORMANCY IN COLONIZATION/ EXTINCTION MODELS AT CENTRE D 'ECOLOGIE FONCTIONNELLE ET EVOLUTIVE (CNRS, UMR 5175, FRANCE).

We are seeking a highly motivated Postdoctoral Fellow to investigate plant metapopulation dynamics, using a combination of methodological development and data analysis. The post-doctoral position is funded for one year by Région Languedoc Roussillon and is part of a 'Chercheur d 'Avenir ' project (2012-15).

CONTEXT: Metapopulation dynamics hypothesize that the spatial distribution of species at the regional scale results from extinction/colonization dynamics of local populations. Spatially realistic models have been developed in animals (Hanski and Gaggioti, 2004) which allow characterizing colonization kernels and extinction parameters from temporal presence/absence data in a set of suitable patches. Plant dynamics has largely been left apart from the metapopulation dynamics framework and the applicability of metapopulation framework to plants has been questioned in the literature (Freckleton and Watkinson, 2002). One of the reasons is the existence of seed dormancy with persistent seed bank in the soil that allows a population to recover without dispersal events even after a long period of absence of reproductive plants. The postdoctoral project is part of a 4-year research project on plant metapopulations which aims at (1) developing models for the joint estimation of dispersal, dormancy and extinction from presence/absence data (2) analyzing field data from plant metapopulations. Using hidden Markov models (Mackenzie et al, 2009), we have recently shown that (i) dormancy (as well as dispersal and extinction) can be inferred from simulated time series of presence-absence data , (ii) hidden Markov models offer a reliable way to estimate colonization and extinction rates for plant metapopulations with a seed bank (Fréville et al, 2013).

POST-DOCTORAL PROJECT DESCRIPTION: The first aim of the postdoctoral project is to improve the model of Fréville et al (2013) by introducing, (1) limited dispersal (dispersal kernel), (2) habitat heterogeneity, for various metapopulation scenarios (Levins ' model, island/mainland models, rescue effect, see Gotelli, 1991). The second aim of the postdoctoral project is to analyze available plant metapopulation data that have already been collected in annual plant communities in urban alignments of patches around trees in Montpellier and Paris (Pr. Machon group, MNHN Paris). Metapopulation parameters ' estimates will for instance allow testing evolutionary ecology hypotheses such as the dispersal dormancy trade-off. For more information, please contact Dr Pierre-Olivier Cheptou by email (pierre-olivier.cheptou@cefe.cnrs.fr).

RESEARCH ENVIRONMENT: The postdoctoral fellow will jointly work with evolutionary ecologists (P.-O Cheptou and H. Fréville) and biostatisticians (R. Pradel and R. Choquet) at the CEFE-CNRS (UMR 5175) in Montpellier (France) in the Biodiversity and Conservation department. The CEFE (http://-www.cefe.cnrs.fr/) is a large french research center in Ecology with ˜ 140 staff members. It develops research in a wide range of disciplines, including evolutionary biology, population dynamics, quantitative genetics and conservation biology.

QUALIFICATIONS: A PhD degree in Ecology/Evolutionary Ecology is required. The applicant should be well acquainted with biostatistics and theories in evolutionary ecology. Documented experience in programming (R, Winbugs, Matlab, etc) and in basic mathematical tools is required. The ideal candidate will be able to work both independently and as part of a team.

STARTING DATE: 1st of March 2014 ; the preferred start date is slightly flexible and will depend on the timeframe of the most qualified applicant.

GROSS SALARY: 2300 euros minimum (depending on experience)

APPLICATION: The application deadline is February 15th 2014 and interviews will take place shortly afterwards. Candidates interested in the position should send (1) a cover letter summarizing their research interests and expertise relevant to the project, (2) a Curriculum Vitae, (3) a listing of publications, and (4) the names and contact information for at least two referees who can provide recommendations. The application should be sent as a single pdf file to P.-O Cheptou (pierre-olivier.cheptou@cefe.cnrs.fr).

RELATED PUBLICATIONS :

Cheptou P.-O. A. Dornier. 2012 Urban metapopulation dynamics and evolution of dispersal traits in the weed Crepis sancta, chapter 24 pp 304-3013 in ' Informed Dispersal and Spatial Evolutionary Ecology, ' J. Clobert, M. Baguette, T. Benton, and J. Bullock,

eds. Oxford University Press

Choquet, R., Rouan, L., Pradel, R. (2009). Program E-SURGE: a software application for fitting Multievent models Series: Environmental and

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

CNRS Toulouse EvolutionaryBiology

The Institute for Advanced Study in Toulouse (France) recruits post-docs. The IAST seeks to attract applicants from many disciplines, including anthropology, biology, economics, history, law, philosophy, political science, and psychology. A strong interest in cross-disciplinary approaches is a pre-requisite.

Successful candidates will be offered a two-year contract (with no teaching obligations), renewable for a third year. The deadline is December 31st. A full description of the Postdoctoral Fellowship Program can be found here: http://www.iast.fr/applications/-postdoctoral-fellowship If you have question regarding the biology program within the IAST, please feel free to contact its Program Director, Ingela Alger (ingela.alger@tse-fr.eu)

Ingela Alger CNRS senior researcher @ TSE (LERNA) Program Director in Biology @ Institute for Advanced Study in Toulouse Université Toulouse 1 Capitole 21 Allée de Brienne 31 015 Toulouse cedex 6 France + 33 - (0)5 61 12 85 17

Ingela Alger <ingela.alger@tse-fr.eu>

CSIRO Canberra FinchGenomics

OCE Postdoctoral Fellow - Evolutionary Rescue through Physiological Genomics of Australian Finches

. Contribute to research with real impact! . Offering outstanding career development and professional support. . Join CSIRO, Australia's premier science and technology research organisation.

The Position: CSIRO offers PhD graduates an opportunity to launch their scientific careers through our Office of the Chief Executive (OCE) Postdoctoral Fellowships. Successful applicants will work with leaders in the field of science and receive personal development and learning opportunities.

Applications are invited for a 3 year OCE Postdoctoral Fellowship in Evolutionary Rescue (ER). ER posits that evolution might occur sufficiently fast to arrest population decline under new environmental challenges and allow population recovery before extinction occurs. It stresses short-term evolutionary dynamics and focuses on genetic variants of large effects and absolute rather than relative fitness. This project addresses an emerging key area in Evolutionary Rescue - the genetic and genomic mechanisms of adaptation to climate change.

It will use the tools provided by the published, annotated Zebra Finch genome as "roadmap" for genomic study of how the 17 other native Australian and five introduced finches have adapted to diverse climates. For example, two native species are confined to the continent's wettest temperate forests, one to tropical forests, nine to monsoonal savannas, two to arid deserts and four to inland eastern Australia. Australian finches, therefore, are a comparative system with which we can explore genomic underpinnings of traits important in adaptation to climate change and gene-environment interactions in natural populations.

Location: Crace, Canberra, ACT, Australia Salary: AUD$81K - AUD$88K plus up to 15.4% superannuation Tenure: Specified Term of 3 Years Reference: ACT13/01522

To be successful in this position you will need: . A PhD, or will shortly satisfy requirements for a PhD, in a relevant field with not more than 3 years postdoctoral working experience. . Demonstrated ability to conduct innovative research in vertebrate genomics and informatics. . Demonstrated ability to develop experimental plans and pursue novel research approaches. . Demonstrated originality, creativity and innovation in solving problems and introducing new directions and approaches.

Who we are: The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is one of the largest and most diverse scientific organisations in the world. By igniting the creative spirit of our people, we deliver great science and innovative solutions that benefit industry, society and the environment.

About CSIRO Ecosystem Sciences: At CSIRO Ecosys-

tem Sciences we apply multidisciplinary science to the sustainability of Australia's agriculture and forestry, built environments, biodiversity, communities, and industries. We do this through research into environmental, biological, economic and societal interactions.

For full position details and to apply, visit: http://www.csiro.au/careers and quote reference number: ACT13/01522

Applications close: 2 Feb 2014

NoniLauder Recruitment Consultant Human Resources CSIRO E Noni.Lauder@csiro.au T +618 8303 8870OR+61 8303 8437 PMB 2, Glen Osmond SA 5064 www.csiro.au | www.csiro.au/careers PLEASE NOTE Please note that I work part-time and that I am abscent on Wednesdays.

Noni.Lauder@csiro.au

GhentU PDF or PhD PlantBioinformatics

Dear colleagues,

we currently have an open position for a Postdoc or PhD student in Plant Bioinformatics, to work on sugarcane transcriptomics, next-generation sequencing data analysis and comparative genomics.

More info: http://bioinformatics.psb.ugent.be/cig/jobs.html kind regards, Klaas Vandepoele

Prof. Dr. Klaas Vandepoele Tel. 32 (0)9 33 13822 VIB Department of Plant Systems Biology, Ghent University Technologiepark 927, 9052 Gent, Belgium E-mail: Klaas.Vandepoele@psb.vib-ugent.be Website: http://bioinformatics.psb.ugent.be/cig/ Twitter: http://twitter.com/plaza_genomics klaas.vandepoele@psb.vib-ugent.be

HeinrichHeineU Germany MetabolicModeling

Postdoc position at the Heinrich Heine University Duesseldorf, Germany

We aim to improve existing modeling approaches such as FBA by including more realistic biological details; we then want to use these methods to understand the evolution of metabolic systems. This position is for a someone with a strong background in biochemistry and/or with experience in metabolic modeling.

If interested, please contact: Martin Lercher lercher@cs.uni-duesseldorf.de Tel. +49 211 81-10546

lercher@cs.uni-duesseldorf.de

INRA AvignonFrance ForestGenetics

Title: What are the processes that maintain adaptive genetic diversity within populations in forest tree species at small spatial and temporal ecological scales?

Rationale and scientific content: Diversifying selection structures the adaptive genetic diversity of forest trees. Range-wide geographic clines for important fitness-related traits such as phenology or insect / drought resistance are well-known in forest trees. Landscape-scale clines also exist for the same traits and at this scale, Qst values are typically higher than Fst values, indicating the potential role of selection on population differentiation at multiple scales (Le Corre and Krémer 2012). Despite this strong differentiation (explaining up to 30% of total adaptive genetic variance in phenology for example), standing genetic variation and phenotypic trait diversity remain large within populations for these traits and the genes involved in these adaptive traits generally show a weak population structure (Merilä et al 2001; Rockman 2012). Trait-marker or environment-marker association studies investigate the polymorphism associated to established differentiation among populations or among environments. At the within-population level, individual components of fitness (survival and reproductive success) can also be estimated, informing on locally on-going selection processes.

The goal of this post-doctoral project is to investigate how genotypes, phenotypes, environments and fitness are linked at among- and within-population levels and how selection proceeds when populations adapt to sharp ecological changes. In particular, it will address the issue of which main drivers are responsible for the maintenance of adaptive genetic diversity within tree populations. The post-doc is part of the French ANR project FLAG: Forest tree ecological genetics: interplay of gene flow and environmental variability in shaping lo-

cal adaptation and genetic adaptive potential ((http://-/www.ecofog.gf/spip.php?article635).

As a first part of the project, simulation studies will be used to characterize the effect of (1) local demographic changes (drift or niche filling lag due to recent recolonization dynamics), (2) intensive gene flow between divergent populations and (3) diversifying selection within population due to heterogeneous environmental filtering conditions, on standing genetic variation within and among- populations. Using an individual-based demographic model for trees and simple genetic architecture model (L-shaped additive effects of the QTLs) with different gene flow and selection patterns in the landscape, the thresholds beyond which differentiation appears notwithstanding high within-population diversity will be identified. Particular attention will be devoted to how QTL-alleles and their disequilibrium become distributed among populations and whether the QTLs involved in population differentiation remain polymorphic within populations. The study will then be extended to markers located in the neighborhood of the QTLs, and to sampling design of markers/QTLs mimicking the candidate gene approach commonly used in tree species (with typically few genes containing many non-independent markers).

In a second step, experimental data issued from the FLAG project will be used to identify the most likely adaptation scenarios in various case studies. Phenotypic and genotypic data from replicated short scale ecological gradients will be analyzed using common statistical frameworks. Data sets contain adult and juvenile phenotypes and genotypes measured in situ used to assess the reproductive success of the adults, as well as progenies (juvenile stage) phenotypes and genotypes measured in common gardens from which parental genetic values can be estimated for the traits of interest. Model species for which data are available include Temperate, Mediterranean and Tropical conifers and broadleaves. The phenotypic traits available are related to survival, growth, seed output, water efficiency under drought conditions and vegetative bud phenology. Genotypes available are both neutral (microsatellites) and potentially adaptive (SNPs at candidate genes). Understanding which processes primarily act on standing genetic variation of key adaptive traits will make it possible for forest managers to adapt their strategies. Depending on the background of the selected candidate and his/her preferences, either step one, step two or both could be emphasized during the duration of the post-doc.

References: Le Corre V and Kremer A, 2012. The genetic differentiation at quantitative trait loci under local adaptation. Molecular Ecology 21:1548-1566 Merilä J et al, 2001. Explaining stasis: microevolutionary studies in natural populations. Genetica 112:199-222. Rockman MV, 2012. The QTN program and the alleles that matter for

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INRA France PopulationGeneticsMixedPloidy

Postdoctoral fellowship 12 months ***Methodology of analysis of the evolutionary history of species with various ploidy levels***

A 12 month postdoctoral fellowship is opened as part of the FloRHiGe project (2013-2015), granted by the French region 'Pays de la Loire'. The postdoc will work at the Research Institute of Horticulture and Seeds, in the team 'Genetics and Diversity in Ornamental plants' (GDO, http://www6.angers-nantes.inra.fr/-irhs_eng/Research/GDO) and will be located at INRA of Angers, in the West of France.

Scientific rationale Reliable methods, especially approximate Bayesian computation (ABC), have been developed to estimate demographic parameters of species evolutionary history and to compare several models, sometimes complex (Csilléry et al. 2010 ; Bertorelle et al. 2010 ; Clotault et al. 2012). These conceptual developments and corresponding computer programs were created initially for diploid species. However polyploidy affects numerous species, especially in Flowering plants. Besides larger effective population size in polyploids, coalescence analyses may be complicated by the occurrence of various allele segregation types: polysomic, disomic, mixed or clade-specific segregation types, like the unbalanced meiosis in the Caninae section of the Rosa genus (Ritz and Wissemann 2011). Studies about the development of inferential methods of the evolutionary history of polyploid populations considering these parameters are very rare and only partially address this topic (Jakobsson et al. 2006 ; Arnold et al. 2012 ; St-Onge et al. 2012).

Topical rationale bound to the project The FloRHiGe project aims at identifying the success factors of the varietal innovation of the rosebush in the XVIIIth and

XIXth centuries in France by a genetics and history interdisciplinary approach. The genetic resources of the rosebushes of this period include numerous hybrids of various ploidy levels (2 × to 6 ×), preserved and propagated by vegetative way in rose gardens. One of the objectives of the project FloRHiGe is to characterize the structure of the genetic diversity of 1500 of these rosebushes and to infer the evolutionary history of the corresponding populations. This study will be realized by means of neutral microsatellite markers, currently gone into production. The molecular evolution of about fifty genes distributed on the genome, including candidate genes, will then be studied on a sub-sample of rosebushes to look for signatures of selection.

Task of the postdoctoral fellow The recruited researcher will be in charge of developing a method of analysis of the evolutionary history of populations with mixed ploidy levels, taking into account various modes of genetic segregation found in polyploids and a perennial life history associated with a sexual and asexual mode of reproduction. Cognitively, this work will be the opportunity to test the impact of these various parameters on the evolutionary history. Practically, the work will have to result in a method allowing to analyze the evolutionary history of the sample of the project FloRHiGe. This work should lead to the redaction of two publications as first author and as collaborator.

Required skills Excellent skills in population genetics and statistics are required to achieve this project. A prior experience on the ABC methods as well as programming language skills would be very appreciated. A first experience on the genetics of polyploids would be helpful.

Closing of the applications: January 13th 2014 *Effective start date*: February or March 2014 *Gross monthly salary*: 2398.50 euro *Applications to be sent to / Information to be taken with*: Jérémy Clotault - jeremy.clotault@univ-angers.fr Phone: +33 (0)2 41 73 53 62 or +33 (0)2 41 22 57 68 Thank you for sending CV, cover letter and contact details of at least two references.

jeremy.clotault@univ-angers.fr

INRA Montpellier OliveTreePopulationGenomics

Postdoctoral position in population genomics of the Mediterranean olive tree (INRA Montpellier, UMR AGAP, France)

The AFEF team (INRA & Montpellier SupAgro) opens a post-doctoral position in the field of population genomics on the Mediterranean olive tree. This 18-month post-doctoral project will be developed within the OliveMed project "Linking genes under domestication to phenotype traits in the Mediterranean olive tree: towards sustainable management by building a network of phenotyping platforms for association mapping studies", supported by Agropolis Fondation, Montpellier.

Scientific project: Detection of genes under domestication is currently carried out in the hosting unit, using a comparative genomics approach and analyzing the RNAseq of wild and domesticated olives within the ARCAD project SP1 [1]. However, our recent results show that olive tree domestication was strongly impacted by diffusion from eastern to western Mediterranean areas [2]. Our findings indicate that evolutionary factors such as migration and admixture are important to understand olive diversification in the central and western Mediterranean areas. In a first step, in order to overcome the hidden effects of migration and admixture, we aim to detect genes under domestication using a simple model combining demographic and selection effects by analyzing wild and cultivated olive trees from the primary center of domestication. In a second step, we aim to extend this domestication gene detection by analyzing a representative sample of Mediterranean olive genetic diversity, taking migration and admixture effects into account.

The post-doctoral work will specifically focus on: i) the construction and validation of an inference model on the evolutionary history of the olive tree (MCMC and ABC approaches), ii) the detection of SNPs under selection using a suitable inference model and genomic analysis of RNA sequences (annotation, gene arrays), iii) the construction of a SNP chip based on SNPs under selection, including those that will be mapped on the F1 hybrid population under study in the hosting team. [1] http://www.arcad-project.org/-research_projects/comparative_population_genomics [2] Proc R Soc B. 280: 20122833 (2013); Ann Bot 112: doi:10.1093/aob/mct196 (2013)

Term, location and scientific environment: Work can be initiated as early as April 2014 but no later than October 2014. Support is for 18 months with a possible additional year based on realizations and funding. This position will be supervised by Dr. Bouchaib Khadari (INRA Associate Researcher, UMR AGAP) and will be based in Montpellier at UMR AGAP, CIRAD Lavalette campus. The host unit, UMR AGAP, is a large research

unit consisting of several teams with scientists working on the domestication process and on genes linked to these traits on different plants of agronomic importance. The successful applicant will conduct his/her research in this rewarding scientific environment. For RNAseq data processing, the post-doctoral fellow will closely work with a bioinformatics team (ID, UMR AGAP) while, for inference models, he/she will interact with colleagues from other units in Montpellier (ISEM-CNRS, UMR CBGP and UMR DIADE) and Toulouse (UMR EDB). He/she will also interact with several Mediterranean team partners in the OliveMed project (INRA Marrakech, Morocco; ORS Bornova, Izmir, Turkey; IFAPA & Univ. Cordoba, Spain; CNR Perugia, Italy).

Eligibility and skills: Agropolis Fondation (AF) typically considers applications from candidates who have not resided or carried out their main activity (work, studies, etc.) in France for more than 12 months in the 3 years immediately prior to the date of submission of the proposal and who have been awarded their PhD degree within the last 3 years upon the date of application. However, AF encourages excellent candidates who do not entirely fulfill these conditions to contact the foundation, as they might be funded if no otherwise eligible candidates satisfy the scientific requirements for the position. The successful applicant is expected to have scientific skills and interests in population genomics and modeling for the inference of the evolutionary history of a perennial crop species such as olive. Bioinformatics experience for RNAseq data processing is not necessary but skills in NGS data analysis will be considered positively. Demonstrated writing skills will be appreciated.

For application, please submit a letter of application with your curriculum vitae and indicate the names of three references to the contact scientist:

Dr. Bouchaib Khadari khadari@supagro.inra.fr

AFEF Team, UMR AGAP Campus CIRAD Bâtiment 3, Bureau 02 TA A 108/03, Avenue Agropolis 34398 Montpellier cedex 5 France Tél: (33) 04 67 61 59 00 Fax: (33) 04 67 61 55 96

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INRA Rennes TheoreticalPopulationGenetics PartialAsexuality

Postdoctoral position in theoretical population genetics and evolution of partially asexual species, available for 16 months starting in winter/spring 2014, Rennes, France.

Context: Many species reproduce using both sexual and asexual events. Yet, population genetics concepts and models underlying the interpretation of molecular data are based on the assumption of either pure sexual or pure asexual reproduction. We use full and approximated Markov chains, diffusion processes, stochastic differential equations and optimized individual-based simulations (for complex life cycles) to propose inferential methods (bayesian and learning machine), new parameters and frameworks to analyze and understand how partial asexuality dynamically shapes and structures the genomic diversity in such species. The candidate will join a transversal research team (Mathematics, Computing and Evolution) aiming at developing theoretical population genetics models to understand how such reproductive modes influence the genetic diversity of metapopulations, and to revise expectations of population composition under partial asexuality.

The candidate will work in the framework of a French national research project (ANR Clonix) aiming at providing new tools to understand the ecology and evolution of partially clonal organisms that offer opportunities to co-author collaborative applied and theoretical papers. The candidate will be in charge of formalizing advances obtained through models development and simulations, and synthetize their consequences to propose new "null models" describing the expected genetic composition of partly asexual populations. The work will be performed in collaboration with Sophie Arnaud-Haond (Ifremer Sète http://-annuaire.ifremer.fr/cv/17007/en/). Strong capacity of team interaction is required in order to timely share the advances obtained through modelling and simulations, and propose adapted theoretical approaches altogether to the involved partners.

Competences: The candidate should have at least a strong backgrounds either in theoretical population genetics, or/and computing (Unix Batch scripts, C and Python) or/and mathematics (linear algebra, Markov chains, stochastic differential equations). Team work and multiple hand programming skills are required.

Conditions: The position is funded for 16 or 17 months, following the classical French government contract of employment and salary (from 1750EUR to 1880EUR net salary depending on experience, plus extra salary benefits including medical insurance, children cares, public transport and lunch contributions). Though near the sea and situated in a very touristic region, life in French Britany is relatively cheap considering European standard. Rennes is a student city (~60.000 university students over 300.000 inhabitants) with a lot of facilities for newcomers.

Application: Candidates should submit an application in English consisting of a CV with full list of publications, talks and posters; a motivation letter (2 pages max. that summarize past researches and how they are compatible and connect with the postdoc proposal) plus one optional page (max.) of idea/project or why this postdoc may help your long-term research perspectives. Please mention clearly your competences that are consistent with this postdoc proposal. We will plan a visioconference call after the application deadline with candidates suitable for this project.

Application should be sent before the 24th January, 2013 (UTC+01:00 time zone) at solenn.stoeckel@rennes.inra.fr with subject "[ANR Clonix Postdoc Application]

If you need more information, we can exchange by mails and phone calls before the deadline.

Solenn Stoeckel

Institute for Genetics, Environment and Plant Protection

UMR 1349, INRA/AgroCampus Rennes/Université Rennes1

Domaine de la Motte, BP 35327, F-35653 Le Rheu cedex

Rennes, France

phone: +33 (0)2 23 48 70 83

email: solenn.stoeckel@rennes.inra.fr

Links

Institute: http://www6.rennes.inra.fr/igepp_eng/-ABOUT-IGEPP Research project: http://-wwz.ifremer.fr/clonix/ solenn.stoeckel@rennes.inra.fr

INRA Rennes TheoreticalPopulationGenetics PartialAsexuality Erratum

Postdoctoral position in theoretical population genetics and evolution of partially asexual species, available for 12 months up to 16, starting in winter/spring 2014, Rennes, France.

Context: Many species reproduce using both sexual and asexual events. Yet, population genetics concepts and models underlying the interpretation of molecular data are based on the assumption of either pure sexual or pure asexual reproduction. We use full and approximated Markov chains, diffusion processes, stochastic differential equations and optimized individual-based simulations (for complex life cycles) to propose inferential methods (bayesian and learning machine), new parameters and frameworks to analyze and understand how partial asexuality dynamically shapes and structures the genomic diversity in such species. The candidate will join a transversal research team (maths, computing and evolution) aiming at developing theoretical population genetics models to understand how such reproductive modes influence the genetic diversity of metapopulations, and to revise expectations of population composition under partial asexuality. The candidate will work in the framework of a French national research project (ANR Clonix) aiming at providing new tools to understand the ecology and evolution of partially clonal organisms that offer opportunities to co-author collaborative applied and theoretical papers. The candidate will be in charge of formalizing advances obtained through models development and simulations and synthetize their consequences to propose new "null models" describing the expected genetic composition of partly asexual populations. The work will be performed in collaboration with Sophie Arnaud-Haond lab (Ifremer Sète http://annuaire.ifremer.fr/cv/17007/en/). Thus, strong capacity of team interaction is required in order to timely share the advances obtained through modelling and simulations, and propose adapted theoretical approaches altogether to the involved partners.

Competences: The candidate should have at least a strong backgrounds either in theoretical population genetics, or/and computing (Unix Batch scripts, C and Python) or/and mathematics (linear algebra, Markov chains, stochastic differential equations). Team work

and multiple hand programming skills are required.

Conditions: The position is funded for 12 months minimum, up to 16 months, following the classical French government contract of employment and salary (from 1750euro to 1880euro net salary depending on experience, plus extra salary benefits including medical insurance, children cares, public transport and lunch contributions). Though near the sea and situated in a very touristic region, life in French Britany is relatively cheap considering European standard. Rennes is a student city (~60.000 university students over 300.000 inhabitants) with a lot of facilities for newcomers.

Application: Candidates should submit an application in english consisting of a CV with full list of publications, talks and posters; a motivation letter (2 pages max. that summarize past researches and how they are compatible and connect with the postdoc proposal) plus one optional page (max.) of idea/project or why this postdoc may help your long-term research perspectives. Please mention clearly your competences that are consistent with this postdoc proposal. We will plan a visioconference call after the application deadline with candidates suitable for this project.

Application should be sent before the 6th January, 2013 at solenn.stoeckel@rennes.inra.fr with subject "[ANR Clonix Postdoc Application]

If you need more information, we can exchange by mails and phone calls before the deadline.

Solenn Stoeckel Institute for Genetics, Environment and Plant Protection UMR 1349, INRA/AgroCampus Rennes/Université Rennes1 Domaine de la Motte, BP 35327, F-35653 Le Rheu cedex Rennes, France phone: +33 (0)2 23 48 70 83 email: solenn.stoeckel@rennes.inra.fr

Institute: http://www6.rennes.inra.fr/igepp_eng/-ABOUT-IGEPP Research project: http://-wwz.ifremer.fr/clonix/ solenn.stoeckel@rennes.inra.fr

ISTAustria EvolutionaryTheory

A postdoctoral position is available, for research in evolutionary theory. Possible topics include quantitative genetics, evolution of recombination, speciation, spatial population structure, and evolutionary computation, but other areas can be considered.

The position will be available for up to three years; the salary scale starts at euro 47,250 p.a. Applicants should have a Ph.D. in a relevant area (including population genetics, computer science, mathematics and physics), with strong mathematical and computing skills, and an interest in fundamental research.

The Institute of Science and Technology is a new multidisciplinary research institute, located in the Wienerwald, just outside Vienna (www.ist-austria.ac.at). The Institute encourages multidisciplinary research, and has strong groups at the interface between biology and physics, in mathematics, and in computer science. There are close links with other evolution groups in Vienna (see www.univie.ac.at/evolvienna).

For further details, please contact nick.barton@ist.ac.at. Applications should be sent by December 31st, and should include a CV, a statement of research interests, and names of referees.

Nick.Barton@ist.ac.at

IowaStateU EvolutionaryEcology

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. The goal is to explore how these major factors affect population dynamics and sex-ratio evolution in nature. This now 26-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. 'Omics expertise highly welcomed as well.

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 2014. 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) Mitchell et al. (2013) Proc R Soc Lond B 280:in press. 2) Telemeco et al. (2013) Am Nat 181:637-648. 3) Refsnider & Janzen (2012) Biol Conserv 152:90-95. 4) McGaugh & Janzen (2011) J Evol Biol 24:784-794. 5) Bowden et al. (2011) Physiol Biochem Zool 84:204-211. 6) McGaugh et al. (2010) Proc R Soc Lond B 277:1219-1226. 7) Refsnider & Janzen (2010) Annu Rev Ecol Evol Syst 41:39-57. 8) Schwanz et al. (2010) Ecology 91:3016-3026. 9) Schwanz et al. (2010) Evolution 64:1331-1345.

To apply, e-mail Fredric Janzen (fjanzen@iastate.edu) with a CV, contact information for three references, and a brief ($<$ 1 page) cover letter explaining your research interests. Review of applicants will begin immediately and end by 31 January, at which point a suitable candidate will be selected. I will be at the SICB meeting in Austin from 3-7 January, so please let me know if you wish to learn more about the position in person.

fjanzen@iastate.edu

LaKretzCenter California ConservationBiology

The UCLA La Kretz Center for California Conservation Science (http://www.environment.ucla.edu/lakretz/) invites applications for its Postdoctoral Fellowship in California Conservation Science. Consistent with our mission, we seek a postdoctoral scholar who simultaneously conducts innovative research and interfaces with the conservation and management agencies that direct and lead California conservation. Our emphasis is on biological conservation, and the successful candidate could work in any discipline that provides the scientific underpinnings for the preservation, protection, management, or restoration of at-risk species, environments, or ecological communities. We will consider candidates who have recently completed their PhD, or will have completed it by the start date for this position. We envision hiring one Fellow each year, building a team of conservation scientists with a passion for California and its biodiversity.

The La Kretz Fellowship is for two years, subject to review after the first year. Our expected start date is late summer, 2014. The successful applicant will be expected to conduct research that bridges the interests of at least one UCLA faculty member who is also a La Kretz affiliate (http://www.environment.ucla.edu/lakretz/people/affiliates.asp) with priority science concerns of resource management agencies in California. Our primary partners are currently the National Park Service, CA State Parks, and the Santa Monica Mountains Recreation and Conservation Agency, although partnerships with other federal, state and local resource management groups and NGOs, including Natural History Museums, are also appropriate. We strongly encourage applicants to contact their faculty mentor to develop a research and agency collaboration plan, and to describe that plan in their application. We also anticipate that the Fellow will also work with Brad Shaffer, Director of the La Kretz Center, to help develop collaborative research projects that further the mission of the Center. The position has an annual salary of approximately $40,000 plus full benefits, and the Fellow will have the option to reside at the newly renovated La Kretz Field Station (http://www.environment.ucla.edu/lakretz/fieldstation/), located in the Santa Monica Mountains about 25 miles from campus.

Interested candidates should submit a cover letter, CV, short (1-2 page) description of research and management accomplishments, short (2 page) description of proposed research including potential faculty and agency mentor(s), and copies of two publications, all as a single PDF file, to Mario Colon, Administrative Assistant, at mario.colon@ucla.edu. You should also have three letters of recommendation, including one from your Ph.D. advisor, sent under separate emails. The deadline for completed applications is 20 January, 2014. E-mail questions to Brad Shaffer (Director of the La Kretz Center) to brad.shaffer@ucla.edu.

The University of California is an affirmative action/equal opportunity employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

Mario Colon Administrative Assistant mario.colon@ucla.edu

La Kretz Center <lakretz@ioes.ucla.edu>

LeibnizInst Berlin HostParasiteInteractions

The Department of Ecosystem Research of the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) in Berlin together with the Free University of Berlin, invite applications for the position of:

Postdoc in Evolutionary Biology

Application deadline: 15.02.2014; Starting date: May 2014 or as soon as possible thereafter (interviews will be conducted in March); Duration of the position: 2 years

Project area: *"Host-parasite interactions in aquatic systems"*

The Postdoc will join the research group of Justyna Wolinska. The group is currently located at the Ludwig Maximilian University of Munich (Germany), but will move to Berlin in March 2014. The candidate is given the opportunity to develop their own research project. Depending on the interests / expertise of the Postdoc candidate, he / she might, for example, work in one of the following disciplines:

- molecular signatures of host-parasite coevolution in the wild

- genomics of host-parasite coevolution

- host-parasite coevolution and global environmental change (including field, experimental, and/or theoretical approaches).

So far the group has been exploring *Daphnia*-microparasites, but suggestions for other model host-parasite systems are welcome.

The Postdoc will have access to the unique, innovative experimental infrastructure of the IGB, to support molecular, microbial, and biogeochemical research. In addition, IGB is an active member of the Berlin Centre for Genomics in Biodiversity Research. We offer a stimulating working environment with plenty of possibilities for collaborations within the IGB and Free University of Berlin. Moreover, the group has established active international collaborations. Generous funds are available to cover attendance at national and international conferences as well as research stays in other universities.

The ideal candidate should have a PhD in evolutionary biology, ecology, molecular biology, bioinformatics or a related field. Ideally, he / she should have worked on host-parasite interactions, but this is not a must. We are seeking a highly motivated person who has an ambition to stay in academia. A record of successful publication is expected. We expect strong analytical and data handling skills and the ability to communicate within a cross-disciplinary research centre. Excellent writing skills in English, good work ethic, and creative thinking are desired. The working language of the group is English.

Applications should include 1) a letter of interest with a description of relevant experience, 2) curriculum vitae, 3) a list of publications, 4) a short description of the proposed research (max. 2 pages, including references), 5) names and contact information of three academic referees. Applications should be submitted as a SINGLE (!) PDF document to the following e-mail address: wolinska@bio.lmu.de, with the subject line: " Postdoc application <your family name>".

Inquiries can be made to Justyna Wolinska, e-mail: wolinska@bio.lmu.de.

The selection of the postdoctoral candidate will be based on his or her academic record and proposed research project.

Justyna Wolinska

Justyna Wolinska Ludwig-Maximilians-Universität München Department Biologie II Evolutionsökologie Grosshaderner Str. 2 82152 Planegg-Martinsried, Germany

Phone: +49 (0)89 2180 74201 Fax: +49 (0)89 2180 74204 email: wolinska@bio.lmu.de < http://www.evolutionary-ecology.bio.lmu.de/people/assistant_profs/wolinska/index.html >

< http://www.evolutionary-ecology.bio.lmu.de/ >

justyna.wolinska@gmail.com

LeidenU GeneticLinguisticEvolution

The Leiden University Centre for Linguistics (LUCL, http://www.hum.leiden.edu/lucl/), one of the institutes of the Faculty of Humanities, Leiden University, is hosting a research programme entitled "The Linguistic Past of Mesoamerica and the Andes: A search for early migratory relations between North and South America" funded by the European Research Council (ERC Ad-

vanced Grant). This programme focuses on the identification of linguistic, genetic and archaeological relations between Mesoamerica and the Middle Andes before European contact. It is conducted in collaboration with the Max Planck Institute for Evolutionary Anthropology in Leipzig (Germany).

As of February 2014 (or 1 June 2014 at the latest) we are looking for:

A POSTDOCTORAL RESEARCHER IN INTERDISCIPLINARY GENETICS-LINGUISTICS (3 years, 38 hrs a week)

Faculty of Humanities, vacancy number: 13-360.

Research at LUCL Leiden University has a longstanding tradition in research in the world's languages and features unique linguistic expertise. LUCL combines current theoretical insights and modern experimental methods in its research profile area âLanguage Diversity in the World'. For more information, see: http://www.research.leiden.edu/research-profiles/language-diversity/ and more specifically for the project http://mesandlingk.eu/ . Your profile The candidate should have: - PhD in human population genetics or equivalent or closely related field - Molecular genetics laboratory experience is essential - Experience with genetic field research is desirable - Familiarity with literature on human population genetics of the Americas - Elementary knowledge of Spanish is considered a qualification - Ability to work independently

The candidate is supposed to carry out the following task - Contribute to the assessment of linguistic, archaeological and human population genetics perspectives on the migration to the Americas, as well as subsequent migrations of human groups within the Americas.Two research outcomes, in particular, are expected, - one being a genetic study of the Purépecha, a Mesoamerican group often suspected to have connections to South America, - the other being the development of a database of genetic distances among Native American groups, to be correlated with linguistic distances provided by other project members. For laboratory work and general collaboration arrangements are to be negotiated with Prof.Dr. Peter de Knijff (Leiden University Medical Center) and/or Prof.Dr. Mark Stoneking (Max Planck Institute for Evolutionary Anthropology, Leipzig). Although the post-doc will be hosted by LUCL, periodic visits to the MPI-EVA in Leipzig are envisaged.

What we offer The position is for three years with a full-time appointment. Initially the employee will receive a one year contract. Salary range from gross â¬2.427, $-toâ¬3.831, -permonth(payscale10), commensuratewithqualifications, withadditionalholidayandend-of-yearbonuses.Candidatesfromoutsidetheâ$

How to apply Applicants are kindly requested to submit the following documents electronically (in English):

1. A letter stating your motivation for the position 2. Curriculum vitae 3. References: the names of two persons whom we may contact for further information. 4. Copies of your academic transcripts 5. Copy of your PhD thesis and other relevant publications in English that is representative for your research qualities

Please submit these documents in two files: I - containing documents 1 to 4 (PDF or Word file,) using your last name underscore 1 as document name (e.g. BROWN_1.pdf). II - containing document 5 (PDF or Word file), using your last name underscore 2 as document name (e.g. BROWN_2.pdf).

If the documents are not in the requested format, the application will not be taken into account.

For further information on this project please contact: Prof. Dr. Willem Adelaar, w.f.h.adelaar@hum.leidenuniv.nl or on practical matters Marianne Boere, m.a.boere@hum.leidenuniv.nl.

Applicants should submit their application (documents as described above) before 3 January 2014. Applications should be sent to vacatures-lucl@hum.leidenuniv.nl, clearly indicating the application number. The selection procedure will take place in January and selected candidates will be invited for an interview in the second half of January or in February. You are kindly requested to be available in this period.

Acquisition following this advertisement is not appreciated.

Mrs. M.A. Boere Leiden University Centre for Linguistics (LUCL) Project Assistant ERC Project The Linguistic Past of Mesoamerica and the Andes (MesAndLin(g)k) P.N. van Eyckhof 2/room 2.05c

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MaxPlanck Tuebingen HIV Evolution

Post-doc positions at Max-Planck Tuebingen: HIV

Evolution/Theoretical Population Genetics

Post-doctoral positions are available in the Max-Planck-Research group of Richard Neher in Tuebingen, Germany. Our group works on HIV evolution and theoretical population genetics. HIV evolves very rapidly and the evolutionary dynamics can be studied in longitudinal samples. In addition, the abundance of cross-sectional data allows as to investigate the patterns of molecular evolution on time scales ranging from month to millions of years.

Our group combines empirical research, a collaboration with Prof. Jan Albert at the Karolinska Institute in Stockholm, Sweden, who is using deep sequencing methods to obtain detailed snapshots of HIV populations at densely spaced time points, with theory. Dynamical data is a much richer source of evolutionary information that static snapshots and we will use this data to parameterize models of HIV evolution. In addition to sequence information, our modeling of HIV evolution builds on structural information at the level of RNA genome and the viral proteins as well as the interaction of the viral population with the host immune system. One focus of the lab is the evolution of regulatory features and RNA secondary structures. Our empirical work on HIV is complemented by theoretical work on the dynamics of rapidly evolving population.

* evolution of RNA structures and non-protein aspects of the HIV genome * drug resistance evolution in HIV * drug resistance evolution in bacteria * development of methods to predict evolution

The projects are funded by Max-Planck-Society, an ERC Starting Grant on HIV evolution, and a collaborative grant on translation efficiency in viruses together with Tamir Tuller at Tel-Aviv university.

We are looking for highly motivated applicants with a strong background in mathematics, as well as proficiency in at least one programming and one scripting language (python, preferably). A PhD in a relevant discipline (physics, math, biology, or computer science/bioinformatics, etc) is required. Prior exposure to population genetics and bioinformatics is desirable, but absolutely not necessary.

The institute 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 evolution. Tuebingen boasts one of Germany's top universities and a vibrant cultural life with easy connections to major European cities.

Applicants should send an application (statement of research interest, CV, publication list, contact details of three references, merged into a single PDF) directly to

richard.neher@tuebingen.mpg.de

Salary will be according to the public service employee pay scale (TVOED 13). For informal inquiries about the position, contact me via email.

You can find general information about our group and the institute at

www.eb.tuebingen.mpg.de/research-groups/richard-neher and neherlab.wordpress.com

Relevant publications:

Genealogies of rapidly adapting populations. Richard A. Neher and Oskar Hallatschek. PNAS, 2013

Mathematical modeling of escape of HIV from cytotoxic T lymphocyte responses. V. Ganusov*, R. Neher*, A Perelson, JSTAT, 2013

Quantifying selection against synonymous mutations in HIV-1 env evolution. Fabio Zanini and Richard A. Neher. Journal of Virology, 2013.

Recombination rate and selection strength in HIV intra-patient evolution. R. Neher and T. Leitner. PLoS Comput Biol, 2010

richard.neher@tuebingen.mpg.de

McMasterU AncientMicrobialGenomes

A Postdoctoral position is available immediately to work on ancient microbial genomics at McMaster University under the direction of Prof.H.Poinar, Prof. Brian Golding and Prof. Edward Holmes.

Job Description: Advances in genome sequencing abilities and advances in techniques for the recovery of ancient DNA will be combined in this study to elucidate the genomes of ancient bacteria.

We are looking for a postdoctoral fellow to analyze data from several ancient microbial genome projects and to direct portions of these projects. The successful candidate will participate in the analysis/annotation of the isolated genomes and will develop new approaches to investigate the evolution of bacterial genomes.

Requirements: A PhD in bioinformatics, computer science, genetics or other relevant topic; a strong background in statistics; proficient in one or more scripting languages; experience with the analysis of large ge-

nomic data sets; a good publication record.

The PhD degree must have been awarded within three years of the application deadline.

The candidate should be able to work independently and to have demonstrated the ability to develop with a project by generating new ideas and collaborative skills.

Individuals interested in the position should send (1) a cover letter summarizing their research interests and expertise relevant to the project (2) a Curriculum Vitae, (3) a listing of publications, and (4) the names and contact information for at least two people who can provide recommendations. The application should be sent as a single pdf file to Prof. Hendrik Poinar (poinarh@mcmaster.ca), Prof. Edward Holmes (edward.holmes@sydney.edu.au) and Prof. Brian Golding (golding@mcmaster.ca)

Hendrik Poinar <poinarh@mcmaster.ca>

NMNH Paris HybridZones

Post-doctoral Research Associate in Sensory Ecology

A post-doctoral position is available in the laboratory "Adaptive Mechanisms: from Organisms to Communities" (CNRS/MNHN, www.mabiodiv.cnrs.fr) to work on a project relating to sensory ecology of hybrid zones in lentic environments, starting in January-February 2014. The position is for one year. The net salary is 1715 EUR per month. The job location is at the National Museum of Natural History in Brunoy, 25 km South-East of Paris, France. Experiments will also be conducted in the laboratory GECCO (Group Ecology and Conservation of Vertebrates) at the University of Angers.

The project investigates the effect of proximal environmental factors (water colour, turbidity, nitrate) on the expression of secondary sexual traits and sexual preferences in Lissotriton newts. The main objective is to determine how the signalling environment modulates the efficiency of sexual communication and influences the dynamics of their hybrid zone. It is funded by the French National Research Agency (ANR).

The successful applicant will have a recent PhD, with a background in sensory ecology, behavioral ecology, or evolutionary ecology of animal communication. Experience with color signals, visual systems, behavioral experiments, and database management (Access) are additional desired skills. The appointee will also supervise a Master student to conduct his experiments. The position requires proven analytical, written, self-motivation, and interpersonal skills. Ability to communicate in written and spoken English is required.

Applicants should send their CV, a cover letter describing their motivation and prior experience, and letters or contact information of two references to Marc Théry _thery@mnhn.fr_ and Jean Secondi _jean.secondi@univ-angers.fr_.

Marc Théry Directeur de Recherche au CNRS Responsable de l'équipe Mécanismes adaptatifs et évolution UMR CNRS/MNHN 7179 Muséum National d'Histoire Naturelle 1 avenue du petit château 91800 Brunoy tel: +33 (0)1 60 47 92 29 http://www.mabiodiv.cnrs.fr/ Marc THERY <thery@mnhn.fr>

NorthCarolinaStateU EvolutionFungi

NC State University

Department of Plant Pathology

Post-doctoral Associate V Ecosystem Services and Evolution of Emerging Fungal Plant Diseases- Black Sigatoka

Starting February 2014 (start date flexible)

The Department of Plant Pathology at NC State University in Raleigh is hiring a full-time postdoctoral associate one year beginning in January 2014. The postdoctoral fellow will join a research team of faculty from 5 universities that is working on a project funded but the National Academy Sciences Keck Futures Initiative on Ecosystem Services and the evolution of Emerging Plant Diseases in Africa. They will also actively participate in a Rockefeller funded Bellagio Conference in April in Italy.

The postdoctoral fellow will work on two main aspects of this analysis. These include 1) Writing a paper that uses an ecosystem services framework to ask the question §Can the spread of emerging plant pathogens and pests be reduced using ecosystem service impact modeling and transformational technologies? and 2) Research on the evolution of an emerging plant pathogen . Black sigatoka of banana will be used as a model system to study the population genetics and impacts of novel management strategies on the disease.

During their training, postdoctoral associate will receive close mentoring from two program faculty. They will attend seminars and meetings, present their research at national research conferences, write papers, and hone their skills in specific methodological techniques. In addition, the postdoctoral associate will gain practical experience by helping to plan and run a large research project and by supervising graduate and undergraduate student research assistants.

Qualifications: PhD degree with expertise in ecology, evolution and population genetics of fungal pathogens is required. Required: A basic understanding of ecosystem services (ES) concepts as well as use of ES models to understand environmental impacts of management decisions is also important. Skills and experience using next generation sequencing technologies and phylogenomics software tools to study evolutionary relationships of fungal pathogens or related organisisms is required. Applicants from a variety of disciplines (e.g., plant pathology, plant biology ecology, evolutionary biology or genetics) are encouraged to apply. Successful applicants must have a good command of qualitative and/or quantitative methods used in the population genetics and ecology. Finally, applicants must have received their doctoral degree by the start date. The fellowship includes a competitive salary and plus health insurance.

To Apply: A letter of interest, curriculum vitae, three letters of reference and two publications or papers should be submitted by email by January 30th. Your letter of interest must detail how your skills and interests match specific opportunities provided by the postdoctoral fellowship. An application at the NCState employment website is also required. Please direct inquiries to Dr. Jean Ristaino jean_ristaino@ncsu.edu

NC State University is an equal opportunity employer committed to excellence through diversity

Jean Ristaino <jbr@ncsu.edu>

PanamaTexas EvolutionaryEcol

The Department of Geology and Geophysics at Texas A&M University, College Station, Texas, and the Smithsonian Tropical Research Institute, Panama, are pleased to announce the availability of a postdoctoral fellowship funded through a National Science Foundation grant and private donations.

The project, entitled 'Elements of an extinction: Exploring the delayed Caribbean extinction with stable isotopes and trace elements', will integrate biotic and geochemical data to explore the environmental and ecological causes of the Plio-Pleistocene Caribbean extinction, with particular focus on the purported 1-2 m.y. delay in extinction.

The study combines O, C, and clumped isotope proxies, and P/Ca ratios with taxonomic and ecological data from the framework of the Panama Paleontology Project (PPP).

More information is available at www.nsf.gov/awardsearch/-showAward?AWD_ID25683&HistoricalAwardsúlse . The initial appointment is for 18 months, with possible support for an additional 12 months. Outstanding young scholars, eager to bridge disciplines and embark upon novel research are invited to apply. Applicants must have attained their Ph.D. prior to the 1st of August, 2014.

The ideal candidate will have a strong foundation in macroevolution and/or paleoecology, good quantitative and analytical skills and a solid understanding of stable isotopes. The successful candidate will perform stable isotope and trace element analyses (with assistance from lab personnel) and use the results to resolve the drivers of ecological change and evolutionary turnover in the Caribbean.

The successful researcher will be a joint fellow at Texas A&M University and the Smithsonian Tropical Research Institute, Panama, and will be expected to spend time at both institutions.

Review of applications will begin on the 10th February, 2014, and continue until position is filled. Interviews will take place either via Skype or at the North American Paleontological Convention in Florida (February, 2014).

Applicants of any nationality may apply. Applications should include a cover letter, curriculum vitae, brief statement of research interests, and the names and addresses of three referees.

Please submit materials to Ethan L. Grossman (egrossman@tamu.edu). Applicants should contact Ethan Grossman or Aaron O'Dea (odeaa@si.edu) for further information.

Texas A&M University is an affirmative action/equal opportunity employer committed to diversity. The Smithsonian Tropical Research Institute does not discriminate in employment on the basis of race, color, religion, sex (including pregnancy and gender iden-

tity), national origin, political affiliation, sexual orientation, marital status, disability, genetic information, age, membership in an employee organization, retaliation, parental status, military service, or other non-merit factor.

Dr. Aaron O'Dea Smithsonian Tropical Research Institute http://aaronodea.wordpress.com http://-marinehistoricalecology.wordpress.com odeaa@si.edu Tel: +507 212 8065 (Panama)

aaronodea@gmail.com

SeoulNatlU EvolutionDiseaseResistance

Evolution of Amphibian Host Resistance to Virulent Chytrid Fungus

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.

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 to resist or tolerate these and other pathogens.

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 international research group is multidisciplinary and highly interactive. The project makes use of excellent next-generation sequencing facilities available in our school.

Seoul National University is one of the leading universities in Asia and ranks internationally 35th overall and among the top 50 biology departments (QS World University rankings, 2013). The campus is nestled in a mountain reserve on the outskirts of Seoul and offers excellent opportunities for outdoor activities as well as the full range of cultural activities of an exciting, dynamic city that combines traditional and modern lifestyles.

Subsidized housing and meals are available on campus. Inexpensive public transport, with multi-lingual signage and announcements, and vibrant international districts in Seoul make living quite easy.

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 2 880 4403 (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>

waldman@snu.ac.kr

SouthAfrica DroughtAdaptation

Postdoc-Position:

Reducing Daily Energy Expenditure as an Adaptive Responses to Droughts:

Evolution, Physiology and Behavior

(University of the Witwatersrand, South Arica; Succulent Karoo Research Station; CNRS Strasbourg, France)

A 24 month postdoc position is available in the fields of Eco-Physiology and Behavioral Ecology in the Striped Mouse Research Group www.stripedmouse.com of Neville Pillay http://www.wits.ac.za/academic/-science/apes/staff/academicstaff/pillay/7019/ and Carsten Schradin http://www.iphc.cnrs.fr/-Carsten-Schradin-.html. The postdoc will be employed by the University of the Witwatersrand, collect data in the field at the Succulent Karoo Research Station, and do lab work at the Institut Pluridisciplinaire Hubert Curien, Département d'Ecologie Physiologie et Ethologie (DEPE), France's largest eco-physiology lab with one the world's best isotope laboratories lead by Stephane Blanc http://www.iphc.cnrs.fr/-Stephane-Blanc-.html .

Research topic. Biologists study how species survive and reproduce in a changing world. The postdoc

will study behavioral and physiological adaptation to droughts, one consequence of global warming, asking whether and how individuals can decrease their energy expenditure during periods with low food availability. Energy availability restricts survival and reproduction and often changes seasonally, such that animals have to adjust their energy expenditure. Measuring changes in resting metabolic rate (RMR) can help us to understand the extent to which animals can reduce their basal metabolism during periods of food shortage. Behavioral changes, especially reduced activity, might reduce energy expenditure to a larger extent than a reduction in RMR can, and both processes might co-occur. Thus, to answer the question how animals can cope with reduced energy availability it is crucial to understand whether they can reduce daily energy expenditure (DEE) and to measure changes in both behavior and in RMR to understand the underlying mechanisms.

The postdoc will study striped mice (Rhabdomys pumilio) in South Africa during their annual dry season. The field site is well established, and the population has been permanently monitored by a team at the research station for over a decade. All field techniques have been used successfully previously but not in combination. The postdoc will measure RMR using respirometry, and he / she will do behavioral observations to determine activity budgets. Blood samples will be collected and analyzed in Strasbourg to determine DEE, water turnover, and body composition using the doubly-labeled water method.

Objectives

1. Compare RMR between moist and dry seasons.

2. Compare activity budgets between moist and dry season.

3. Compare DEE between moist and dry season.

4. By comparing results obtained from 3. with 1. and 2. we will be able to estimate the level of energy savings due to reduction in RMR and reduction in activity.

5. We can also calculate the water turnover and thus water savings due to reduced energy expenditure, which will be crucial to survive drought periods characterized by water limitation.

6. We will determine body composition (fat content) during different seasons.

Salary: This position is funded by the University of the Witwatersrand with a very competitive salary of R154 000/ year, which allows for a comfortable standard of living in South Africa. In addition, medical aid is paid by the University as well as relocation costs of R10 000.

Starting date: Preferably beginning of 2014, latest in May 2014.

Profile and requirements for the candidate:

You can produce outstanding academic results!

Strong background in eco-physiology and/or behavioral ecology.

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 personal skills and working with an established research team.

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 or more referees to Neville Pillay (Neville.Pillay@wits.ac.za) and Carsten Schradin (carsten.schradin@iphc.cnrs.fr). There is no deadline; we will review one application after another until the position is filled.

carsten.schradin@iphc.cnrs.fr

StanfordU SoilFungalDiversity

Postdoctoral position at Stanford in plant & microbial community ecology

A postdoctoral fellow position is available in the Peay Lab at Stanford University (http://-www.stanford.edu/ ~ kpeay/) to conduct NSF-funded research on large-scale patterns of taxonomic, functional and genetic diversity of soil fungal communities and their links to plant community dynamics & ecosystem function.

Specific research projects in this broad area will be developed based on the strengths & interests of the successful candidate, with additional opportunities to develop independent and collaborative research. Experience in one or more of the following fields is desirable: fungal and/or bacterial molecular ecology, macroecology, metagenomics/transcriptomics, bioinformatics, plant ecology, or ecosystems ecology. Initial appoint-

ment will be for one year, with the possibility of extension for one or two additional years, contingent on performance and funding availability. Start date is preferably May 2014, but is flexible.

To apply, please e-mail a cover letter, CV, and the names and contact information of three references as a single pdf to Kabir Peay (kpeay@stanford.edu), with the subject line as "Postdoc application <your name>". Review of applications will begin on Jan 15, 2013, and continue until a suitable candidate is identified

Kabir G. Peay, Ph.D Assistant Professor Dept. of Biology Stanford University Email: kpeay@stanford.edu Web: www.stanford.edu/~kpeay/ kpeay@stanford.edu

UArizona EcoEvolutionaryTheory ClonalInterference

_Postdoc position in eco-evolutionary theory _

A postdoc position is available to work with PI Joanna Masel (http://eebweb.arizona.edu/faculty/masel) at the University of Arizona in Tucson. A popular tourist destination surrounded on all four sides by mountainous national and state parks, Tucson is a vibrant city of nearly a million people with an attractive climate. The EEB department in Tucson was ranked in the top 10 by US News & World Report.

We seek to study evolutionary rescue in the presence of clonal interference, via a model of asexual population genetics (based on Desai & Fisher 2007). This model will be modified so that genotypes specify absolute fitness in a deteriorating environment, rather than relative fitness as is the norm in population genetics. The project will explore the integration of density-dependence terms r and K with the classical population genetics fitness term of w, as part of an eco-evo theoretical synthesis. A strong quantitative background together with computational and/or modeling experience is required. A background in evolutionary and/or ecological theory is strongly preferred.

The Masel group's main research interests http://www.eebweb.arizona.edu/faculty/masel/research/index.html are in robustness and evolvability, using a mixture of analytical theory, bioinformatic and simulation approaches. Contact Joanna Masel at masel@u.arizona.edu for more information and to apply. The position is available immediately and renewable over multiple years.

masel@email.arizona.edu

UArizona GeneNetworkEvolution

Postdoc position in the evolution of gene networks

A postdoc position is available to work with PI Joanna Masel (http://eebweb.arizona.edu/faculty/masel) at the University of Arizona in Tucson. A popular tourist destination surrounded on all four sides by mountainous national and state parks, Tucson is a vibrant city of nearly a million people with an attractive climate. The EEB department in Tucson was ranked in the top 10 by US News & World Report.

The project involves completing the implementation of a "toy" computational model of transcriptional networks that is realistic enough to be related to yeast data yet simple enough for evolution to be rapidly simulated. The model will then be used to study a range of questions, including network topology and the evolution of robustness/canalization to mutation, to the environment, and to the stochasticity associated with small numbers of molecules in cells. Excellent scientific programming skills are required, with proven software management skills preferred. Experience in evolutionary biology, genomics, systems biology, mathematical modeling and/or the biology of transcription factors and their binding sites is preferred.

The Masel group's main research interests http://www.eebweb.arizona.edu/faculty/masel/research/index.html are in robustness and evolvability, using a mixture of analytical theory, bioinformatic and simulation approaches. Contact Joanna Masel at masel@u.arizona.edu for more information and to apply. The position is available immediately and renewable over multiple years.

masel@email.arizona.edu

UAuckland NZ Phylodynamics

Post Doctoral Research Position

Closing date: 19 January 2014.

Department of Computer Science University of Auckland

Salary Range: $77,000-85,000 per annum

The Computational Evolution Group at the University of Auckland seek a postdoctoral researcher to join our team researching phylodynamics, the study of infectious disease epidemiology via phylogenetic techniques.

This research will be led by Prof Alexei Drummond and Dr David Welch and will be in collaboration with Dr Tanja Stadler at ETH Zurich. The position with be based within the Computational Evolution Group at the University of Auckland. Our group has considerable experience developing phylogenetic models and their application to infectious diseases and is responsible for the development of the widely-used BEAST phylogenetic software.

The project's primary objective is to produce a flexible yet practical framework for conducting phylogenetics-based inference under sophisticated epidemiological models. This involves a substantial program of research to develop, analyse, implement and apply inference under phylodynamic methods in usable software.

This is a full time post for a fixed-term of 2-2.5 years, depending on start time and experience. The position is funded by a Royal Society of New Zealand Marsden Grant.

Applicants should have a PhD in a relevant field (such as statistics, applied mathematics, computer science or bioinformatics), a demonstrable research interest in phylogenetics and computer programming experience. Some knowledge of infectious disease epidemiology would be an advantage.

More information about the research interests of the project leaders is available from our websites:-

http://www.cs.auckland.ac.nz/ ~ alexei http://www.cs.auckland.ac.nz/ ~ davidw http://www.tb.ethz.ch/people/tstadler http://compevol.auckland.ac.nz/ Host Institution: The University of Auckland is New Zealand's leading university. In the 2013 QS survey, the Computer Science Department ranked 38th in the world. The University of Auckland has a strong international focus and is the only New Zealand member of Universitas 21 and the Association of Pacific Rim Universities - international consortia of research-led universities. Auckland is ranked third out of 221 world cities for quality of living in the 2012 Mercer Quality of Living Survey (see www.mercer.com/qualityofliving).

All enquiries about the position should be directed to Prof Alexei Drummond: alexei@cs.auckland.ac.nz

All applications must be submitted online via the University of Auckland careers website: see http://tinyurl.com/compevol

david.welch@auckland.ac.nz

UBayreuth Germany PlantEvolution

The Department of Plant Ecology (Working Group Functional and Tropical Plant Ecology, Prof. Dr. Engelbrecht) at the University of Bayreuth, Germany, offers a

*Senior Scientist/Post-Doctoral Position in Plant Ecology *

(Akademischer Rat/Akademische Rätin auf Zeit, A13, full time)

The position is initially offered for 3 years.

The research group examines the mechanisms determining plant distribution patterns and the composition and diversity of plant communities. Various aspects of how abiotic and biotic factors influence species' performance, distribution patterns and forest diversity are investigated, and considered in the context of global climate change. The group has a strong focus on Tropical Forest Ecology, however, work in other terrestrial biomes is welcome. The group is part of the Bayreuth Center of Ecology and Environmental Research (BayCEER) with more than 60 senior researchers and postdocs.

The position offers the opportunity to develop an own research and teaching profile (including habilitation at the Faculty of Biology, Chemistry and Geosciences, University of Bayreuth). Development of new research proposals and publication of high-quality original scientific research are expected. The teaching load is 5 hours per week. Teaching will be in German and/or English primarily in the B.Sc. Biology and the M.Sc. Biodiversity and Ecology programs at the University Bayreuth.

Candidate's qualifications: (1) Doctoral or PhD degree in Ecology, Biology or Botany, (2) knowledge and experience in plant physiological ecology and/or plant community ecology, and in designing, conducting and analyzing field research, (3) a strong publication record, (4) good oral and written communication (English is required, German a plus), (5) skills and desire to communicate and interact with other scientists.

People with disabilities will be taken into consideration. The University aims to increase the proportion of women and therefore explicitly invites women to apply.

Applicants should send a curriculum vitae with list of publications and teaching experience, a statement of research interests, and contact addresses of 3 referees (preferably via email) to Prof. Dr. Bettina Engelbrecht, Faculty of Biology, Chemistry and Geosciences, University of Bayreuth, 95440 Bayreuth, Germany, email: bettina.engelbrecht@uni-bayreuth.de.

Deadline for applications is January 15, 2014 or until the position is filled. The earliest starting date for the position is March 1, 2014.

The Department of Plant Ecology (Working Group Functional and Tropical Plant Ecology, Prof. Dr. Engelbrecht) at the University of Bayreuth, Germany, offers a position for a

Doctoral Researcher (65% TV-L E13)

starting on March 1, 2014 for 3 years, contingent on funding of the position.

The research group examines various aspects of how abiotic and biotic factors influence species' performance, distribution patterns and community composition, and considers them in the context of global change.

The doctoral researcher will participate in a research project on drought tolerance of grassland species and it's role for community assembly along moisture and land-use gradients. The project will take place in the framework of the Biodiversity Exploratories (http://-www.biodiversity-exploratories.de/startseite). The research group is part of the Bayreuth Center of Ecology and Environmental Research (BayCEER) with more than 60 senior researchers and postdocs, and the University of Bayreuth offers a graduate program in Ecology and Environmental Research (PEER).

Candidate's qualifications: (1) M. Sc. Degree (or diploma) in Ecology, Biology or Botany, (2) methodological knowledge and experience in plant physiological ecology and experimental field research, (3) a strong statistical background, (4) good oral and written communication (English is required, German a plus), (5) skills and desire to communicate and interact with other scientists.

People with disabilities will be taken into consideration. The University aims to increase the proportion of women and therefore explicitly invites women to apply.

Applicants should send a curriculum vitae, a statement of research interests, and contact information for 3 referees (preferably via email) to Prof. Dr. Bettina Engelbrecht, Faculty of Biology, Chemistry and Geosciences, University of Bayreuth, 95440 Bayreuth, Germany, email: bettina.engelbrecht@uni-bayreuth.de.

Deadline for applications is January 15, 2014 or until the position is filled.

bettina engelbrecht <bettina.engelbrecht@gmail.com>

UCalifornia Davis PopulationGenetics

The Coop lab at UC Davis (www.gcbias.org) is seeking candidates for two postdoctoral positions. These two positions will broadly focus on: 1) The evolutionary causes and consequences of recombination variation in humans. 2) understanding polygenic selection and soft sweeps.

Successful applicants would also have considerable flexibility to develop their own research program in collaboration with the Coop lab. Strong candidates for these positions would have a PhD in population genetics, statistics, or related fields, and have good backgrounds in computational and statistical approaches. The Coop lab works at the intersection of population genomics, theoretical population genetics, and methods development. We are active members of the Department of Evolution and Ecology and Center for Population Biology.

Please send Graham Coop an email gmcoop [at] ucdavis.edu. Please include (i) your CV, (ii) a description of your previous research and future goals, (iii) contact details for three references. We will consider applications on a rolling basis starting immediately.

Best wishes, Graham

Graham Coop Associate Professor, Department of Evolution and Ecology Center for population biology. University of California, Davis gcbias.org Storer Hall, One Shields Ave., Davis, CA 95616 Ph: 530-752-1622 Fax: 530-752-1449

gcoop79@gmail.com

UHamburg PlantResistanceEvolution

Universität Hamburg, Germany, MIN Faculty, Department of Biology, Molecular Evolutionary Biology

Two-year Research Associate (Postdoc position) on the evolution of resistance to host plant toxins in insects

Earliest starting date: March 1st 2014

We are looking for a highly motivated postdoc to join our research team on the evolution of resistance against plant toxins in herbivorous insects. The postdoc will be part of an international research project involving research teams at Hamburg University (Prof. Susanne Dobler), Cornell University (Prof. Anurag Agrawal) and the University of Arizona (Prof. Noah Whiteman). The project focusses on the repeated convergent evolution of target site insensitivity against cardiac glycosides in the Na,K-ATPase gene of various insects and is funded by a grant from the Templeton Foundation.

Responsibilities

The postdoctoral fellow will test the functional importance of duplicated genes of the Na,K-ATPase with differing sensitivities by gene silencing experiments. He/she will take part in designing this avenue of the project and intellectually participate in related projects on the evolution of insect resistance to plant toxins. The postdoc is expected to help in supervising BSc and MSc students within the larger research theme. He/she will have the opportunity to participate in yearly meetings of the three research groups, travel to conferences and help lead the writing of manuscripts.

Requirements

Applicants should hold a PhD in biology or related disciplines and have extensive experience with molecular biological techniques preferentially including RNAi experiments. Excellent English language skills are required.

General Information

Hamburg is one of Germanies most popular cities featuring the sixth largest university, the biggest harbor, a rich cultural life and many historic places. The Biocenter Grindel is situated in a vibrant collegiate neighborhood where all relevant infrastructure (libraries, student cafes, shops etc.) are in walking distance.

Salary is paid according to TVL 13 (roughly 1'900 â¬$aftertaxes$).$Thepositioncallsfor39hoursperweek.Theuniversitypo$

Disabled people with identical qualifications will be favored.

To apply for the position please submit a full curriculum vitae, including a letter of motivation, publications and contact information of two referees and send all documents as a single PDF file to susanne.dobler@uni-hamburg.de. The review of applications will begin on 20th of January 2014 and will continue until the position is filled. Inquiries for additional information by email or phone (+49-(0)40-428384288) are welcome.

Susanne Dobler <susanne.dobler@uni-hamburg.de>

UIdaho EvolutionaryDiversification

POSTDOC POSITION IN EVOLUTIONARY DIVERSIFICATION

A postdoctoral position is available in the Parent lab (http://webpages.uidaho.edu/parentlab) in the Department of Biological Sciences at the University of Idaho (http://www.uidaho.edu/sci/biology). The research in the Parent Lab focuses on understanding the process of diversification in lineages exposed to novel environments. We use a combination of field observations, comparative analyses, laboratory experiments, molecular phylogenetics, and integrate them with theoretical modeling. Island systems (natural or experimental) are often the main focus of our research attention.

I am looking for a dynamic and highly motivated candidate to conduct independent research on evolutionary diversification on island systems, specific topics to be discussed. Applicants must have a PhD, or equivalent degree in evolutionary biology, genetics/genomics, community ecology, or related field.

My lab is affiliated with iBest (Institute for Bioinformatics and Evolutionary Studies - http://-www.ibest.uidaho.edu). We have a very interactive department with a number of great evolutionary biologists (http://www.uidaho.edu/sci/biology/people/-faculty). We are located in a beautiful part of the country, in a nice small friendly town in the Pacific Northwest in relatively close proximity to many national parks, Seattle, and Portland.

The position will run for a minimum of one year, with opportunity for extension. Start date is flexible.

To apply, please submit as a single PDF file a description of your research interests, CV, up to three recent and relevant publications, and contact information for three references to Christine Parent (ceparent@uidaho.edu) by January 25th, 2014.

Christine Parent, PhD

Assistant Professor

Biological Sciences

University of Idaho

Phone: 208-885-4016

E-mail: ceparent@uidaho.edu

Lab website: http://webpages.uidaho.edu/parentlab
ceparent@uidaho.edu

UKentucky GenomeRearrangements

A postdoctoral position is available in the Smith lab at the University of Kentucky as part of a 5 year NIH-funded project studying the mechanisms, evolution and developmental function of programmed genome rearrangements in the lamprey (Petromyzon marinus). The project will involve the analysis of large nucleic acid and proteomic sequence datasets and functional analysis of genes involved in programmed genome rearrangement. The postdoc will be involved in all aspects of the project, from experimental design to publication, and will be encouraged to pursue side projects that enhance their pursuit of an independent research career.

A PhD in genetics, development or fields related to genome function and evolution is required. Experience with next-generation sequencing, mass spectrometry, bioinformatics or vertebrate embryology is preferred.

The Department of Biology houses several active labs that focus on diverse aspects of evolution, with a strong emphasis on vertebrate genome evolution. The University of Kentucky provides several common use facilities (imaging, sequencing, proteomic, gene expression analysis, high performance computing) that directly facilitate the achievement of the projects research objectives.

To apply for this position, please send a CV, statement of research interests, and three letters of reference to Jeramiah Smith (jjsmit3@uky.edu). The position is available for 2 years with the possibility of renewal up to 5 years depending on research progress. Although the position is available immediately, the start date can be flexible based on the needs of the candidate. The position will remain open until filled.

The University of Kentucky is an Affirmative Action/Equal Opportunity University that values diversity and is located in an increasingly diverse geographical region. It is committed to becoming one of the top public institutions in the country. Women, persons with disabilities, and members of other underrepresented groups are encouraged to apply. The University also supports family-friendly policies.

Jeramiah Smith <jeramiahsmith@gmail.com>

ULiegeGembloux ButterflySexPheromone

Postdoc Position (f/m) for a holder of a PhD in Chemical Ecology

Research Project Development of a quantitative analysis of male sex pheromone production in alive individuals, using the butterfly Bicyclus anynana as a model.

Available position A full time 6-month postdoc position is offered jointly by : the laboratory of Analytical Chemistry at University of Liège Gembloux Agro-Bio-Tech (http://www.gembloux.ulg.ac.be/) ,Prof. G. Lognay, and the laboratory of Evolutionary Ecology and Genetics at University of Louvain-la-Neuve (Prof. C. Nieberding) in Belgium (http://www.uclouvain.be/en-bdiv.html).

Starting date As early as possible, but not later than February 2014. The position may be extended for a longer period of time based on an additional grant application requested by the applicant with the support of the supervisors.

Description of the project The study of the evolution of olfactory communication has gained wider interest in recent years, since the 2004 Nobel Prize in Physiology and Medicine obtained by Drs. Axel and Buck who identified the mechanistic and molecular bases of smell in living organisms (see http://www.nobelprize.org/nobel_prizes/-medicine/laureates/2004/press.html). Since the discovery of the first sex pheromone in the silk moth Bombyx mori in 1959 [1], Lepidoptera (moths and butterflies) have become model species for understanding the role of chemical communication in the interactions between individuals of the same, or of different species.

We are interested in identifying the importance of natural and sexual selection on the evolution of the sex pheromone, a blend of chemicals usually produced by males to attract the female and to access matings. Individuals often show large variation in traits important to mating success, such as sex pheromone production. Variation in male sex pheromone production may be due to the genetic variability of individuals, to the variability of the environment(s) in which they live (such as food access), and to interactions between these two factors. The impact of genes and environments on olfactory sexual traits has only recently drawn the attention of researchers. The species under focus is an African tropical butterfly Bicyclus anynana, a model lab-reared system for the study of sexual selection and olfactory communication [e.g. 2-3]. We have identified the chemical composition of the male sex pheromone [4] as well as some aspects of sexual selection driving the evolution of this pheromone [5-6]. This species can be reared in large numbers in the laboratory all year long.

Tasks and expertise for the postdoc researcher Both chemistry and biology teams are seeking for a Post-Doc position in chemical ecology. The major research activity will be the development and validation of volatile pheromones sampling and GC-FID analysis. Experiences in hyphenated techniques like GC-MS as well as chemical ecology will be appreciated. In this context, the project aims at developing the adequate tool for quantifying the production of male sex pheromone in alive individuals, in order to link the genetic and environmental variation in this sex pheromone and the mating success of B.anynana males producing it. Preliminary trials are already available in Prof. G. Lognay's laboratory, and the project will be integrated with ecologically-orientated studies performed by the candidate within the team of biologists in Prof. C. Nieberding's laboratory. Altogether, this will allow us to assess the role of genes and of the environment on the variation observed in sexual traits and tests whether such variation has an adaptive value in mate choice.

Work environment The postdoc will work in a highly active and integrated academic environment of chemists interested in the field of chemical ecology and of evolutionary ecologists in the research team of Prof. C Nieberding (https://www.uclouvain.be/en-274517.html). Our University is an Equal Opportunity/Affirmative Action Employer, and is in a French-speaking region, but the language for meetings and scientific interactions is English.

Salary Salary ranges between 1800 and 2200 euros netto per month and includes all social benefits such as health insurance and retirement benefits in the Belgian system. For practical information concerning salaries, benefits, insurances and conditions of eligibility please contact Mrs. N. Wittorski at UCL (Natacha.Wittorski@uclouvain.be; +32 (0) 10 47 29 22).

Application Application should be sent to Caroline Nieberding (caroline.nieberding@uclouvain.be) and Georges Lognay (georges.lognay@ulg.ac.be) include the following: (1) a cover letter

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

UMass Amherst DarwinFellow

DARWIN FELLOW

The Graduate Program in Organismic and Evolutionary Biology at University of Massachusetts Amherst announces a two-year POSTDOCTORAL FELLOWSHIP/LECTURESHIP. OEB draws together more than 80 faculty from the Five Colleges (University of Massachusetts Amherst and Smith, Hampshire, Mount Holyoke and Amherst Colleges), offering unique training and research opportunities in the fields of ecology, organismic and evolutionary biology. Our research/lecture position provides recent PhD's an opportunity for independent research with an OEB faculty sponsor as well as experience developing and teaching a one-semester undergraduate biology course. Proven teaching skills are required. Position subject to availability of funds.

To apply online, please go to < http://umass.interviewexchange.com/-jobofferdetails.jsp?JOBID=45171 > and submit a CV, statements of research and teaching interests, 3 letters of reference and arrange for a letter of support from your proposed OEB faculty sponsor. A list of OEB faculty and additional information is available at www.bio.umass.edu/oeb. Review of applications will begin on January 6, 2014, however applications will be accepted until the position has been filled. The position is expected to start in August 2014. Questions about this search may be sent to: darwin@bio.umass.edu

More information about the search can be obtained at: http://www.bio.umass.edu/oeb/darwin-fellows/search The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer. Women

and members of minority groups are encouraged to apply.

Ana Caicedo <caicedo@bio.umass.edu>

UMinnesota EvolutionaryTheory

Postdoctoral Position at the University of Minnesota, Twin Cities

Postdoctoral researchers are sought to join the group of Emma Goldberg in the Dept of Ecology, Evolution & Behavior at the University of Minnesota. Projects are expected to be primarily theoretical or computational, but there is considerable flexibility in the choice of questions. Current research in the lab centers around the evolution of geographic ranges and plant mating systems. Questions span macro- and microevolutionary scales, including how trait combinations affect speciation and extinction rates, and how local adaptation and interspecific interactions shape geographic range limits. More information about the lab is available at < http://www.umn.edu/~eeg >.

Up to two positions are available for the right candidates, with flexible start dates. Initial appointment will be for one year with competitive salary and benefits, with the possibility of extension. To apply, please prepare a short cover letter, a CV, names and contact information for three professional references, and a 1-2 page statement including your research interests, how they relate to those of the lab, and your background in theory and related skills. Materials should be submitted online at < http://www1.umn.edu/ohr/employment > under requisition number 188632. Review of completed applications will begin on January 31, but candidates will be considered as long as a position remains available. Informal inquiries are welcome, directed to Emma Goldberg <eeg@umn.edu>.

The Twin Cities campus of the Univ Minnesota is home to a diverse set of local collaborators, expertise, and resources, particularly within the departments of Ecology, Evolution & Behavior < www.cbs.umn.edu/eeb > and Plant Biology < www.cbs.umn.edu/plantbio >, the Bell Museum < www.bellmuseum.umn.edu/ResearchandTeaching >, and the Minnesota Supercomputing Institute < www.msi.umn.edu >. The campus is located in the heart of the Minneapolis-Saint Paul metropolitan area, which is rich in cultural and natural attractions. Lab-group water and ice-sport activities are encouraged.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Emma E. Goldberg Assistant Professor Dept. of Ecology, Evolution and Behavior University of Minnesota – Twin Cities email: eeg@umn.edu http://www.umn.edu/~eeg eeg@umn.edu

UMunchen Conservation PopBiology

The *Department of Ecology and Ecosystem Management, Technische Universität München, *offers a position of a

*Postdoctoral Researcher *

within the Chair for Restoration Ecology (Prof. Dr. J. Kollmann) *from 01.07.2014 for a period of three years *with potential extension.

The Dept of Ecology and Ecosystem Management consists of a number of excellent research groups with close cooperation within the Center of Life and Food Sciences Weihenstephan. The research focus of the Chair for Restoration Ecology is on mutualistic interactions, plant material used for restoration projects and invasive alien species. The research includes methods from vegetation ecology, population biology and population genetics. With currently about 30 members of staff it is one of the leading European groups in restoration ecology.

The job description of the postdoctoral position includes research and teaching in restoration ecology, project supervision and related administrative duties. The position offers ample opportunities for independent research and further qualification, incl. 'habilitation'. The position should add expertise in population genetics to the group and will include responsibility for the laboratory in ecological genetics. Applicants with corresponding experience are preferred. Applicants should have a PhD in ecology, good experience in statistical analyses, successful publications and grant applications. Salary follows Bes.-Gr. A13 BBesG.

The Technische Universität München aims at increasing the percentage of female researchers, and thus fe-

male applicants with identical experience will be preferred. Applicants with children are welcome and will be supported by the childcare facilities established at the Center of Life and Food Sciences Weihenstephan. The position is open for part-time employment. Disabled applicants with identical experience are preferred.

Applications should not include original documents, since all materials have to be destroyed after decision on the position. Costs related to applications or eventual interviews will not be covered.

*Applications *(CV, lists of publications, projects and teaching, research profile and plans for the postdoctoral position) should be submitted *until 15.02.2014 *to**the**Chair for Restoration Ecology, Emil-Ramann-Straße 6, 85354 Freising, Germany.**

*Further inquiries *should be directed to Prof. Kollmann (+49-8161-714144, jkollmann@wzw.tum.de).

Johannes Kollmann <jkollmann@wzw.tum.de>

UPennsylvania SocialEvolutionTheory

Postdoctoral fellowships are available to work with PI Erol Akcay on ecological and evolutionary theory, especially the theory of social evolution.

The Akcay lab (http://erolakcay.wordpress.com/) is based in the Department of Biology at the University of Pennsylvania in Philadelphia, PA. We study a range of questions at the interface of ecology, evolution, and social dynamics, including: the evolution of social behaviors and social systems of animals and humans, evolutionary ecology of species interactions such as mutualisms, the interplay between physiology and social behavior, dynamics of coupled natural and human systems, and others. More information about the labs research and links to recent publications can be found at: http://erolakcay.wordpress.com/research. The Biology Department and the University of Pennsylvania provide a vibrant intellectual environment for research in theoretical biology and social evolution, and ample opportunity for cross-disciplinary collaborations.

We are seeking enthusiastic and talented individuals to conduct original research on topics related to the labs interests. The specific area is flexible, and will be determined in agreement between the postdoctoral fellow and the PI. The ideal candidate will have a strong background in ecological, evolutionary, and/or economic theory (and a Ph.D. in a related field), and will have demonstrated ability to conduct original research. Start date is flexible but can be as early as January 2014. Funding is available for multiple years, contingent on satisfactory progress.

To apply, send a CV, statement of research interests (1 page), a representative paper or manuscript, and contact information for 3 references to Erol Akcay at eakcay@sas.upenn.edu. Applications will be considered as they arrive; informal inquiries are welcome.

Erol Akcay Assistant Professor Department of Biology University of Pennsylvania Philadelphia, PA 131 Lynch Labs http://akcay.bio.upenn.edu Erol Akcay <eakcay@sas.upenn.edu>

UPretoria 3 Bioinformatics

The Van de Peer lab (http://-bioinformatics.psb.ugent.be/beg/) is setting up a joint lab in Bioinformatics and Systems Biology at the University of Pretoria (http://web.up.ac.za).

Recently, the University of Pretoria founded a new Genomics Research Center, focusing on five major themes, namely Microbial and Environmental Genomics, Plant Genomics, Fungal Genomics, Animal and protozoon genomics, and Human Genomics. To support research in these respective fields, we are setting up a new Bioinformatics and Systems Biology research group at the University of Pretoria, which will be closely interconnected with the Bioinformatics group at Ghent University. In this respect, we are currently looking for 3 Postdoctoral Fellows (to be working in Pretoria).

We seek creative, skilled and highly motivated candidates with a PhD in bioinformatics or computational biology. Candidates with a PhD in (molecular) biology, genetics or computer science will also be considered, if they have proven expertise in bioinformatics. We do require strong analytical, computational skills proven by an excellent publication record. Experience with next generation sequence and whole genome sequence data is also required. Applicants should be proficient in programming (Perl, Python, C++ or Java) and knowledge in statistics and/or mathematical modeling would be an asset. Good communication skills are essential and applicants should be proficient in English, both speaking and writing. The hired postdoctoral fellows will work in a highly international environment.

Funding is secured for at least three years, and may be extended.

Contact Yves Van de Peer (yves.vandepeer@psb.ugent.be) for more information and/or to apply. To apply, please send a single PDF file that contains a cover letter describing your research interests and experience, full C.V., and contact information for three references. Review of applications will continue until the positions are filled. Start: As soon as possible.

Yves Van de Peer, PhD.

Professor in Bioinformatics and Genome Biology Group Leader Bioinformatics and Systems Biology, Department of Plant Systems Biology Ghent University Technologiepark 927 B-9052 Ghent Belgium

Phone: +32 (0)9 331 3807 Cell Phone: +32 (0)476 560 091 Fax: +32 (0)9 331 3809 email: yves.vandepeer@psb.vib-ugent.be

http://bioinformatics.psb.ugent.be/ Part time Professor at the University of Pretoria, SA

Yves Van de Peer <yves.vandepeer@psb.vib-ugent.be>

UUppsala Ageing Evolution

Postdoctoral position in evolutionary biology of ageing – Uppsala University

A 2-year postdoctoral position in evolutionary biology of ageing will soon become available in the Maklakov lab at the Animal Ecology program in the Evolutionary Biology Centre, Uppsala University in as part of the project funded by the European Research Council (ERC) and by the Swedish Research Council (VR). Position will be open until filled but the review of the applications will commence on January 15, 2014. The starting date can be discussed but ideally early in 2014.

*_Project_*: Classic life-history theory maintains that increased extrinsic mortality invariably causes evolution of faster ageing. Our published and ongoing work using experimental evolution approach suggests that increased extrinsic mortality can result, somewhat paradoxically, in increased intrinsic longevity. We are now looking into molecular pathways that underlie these evolutionary changes, with an emphasis on sexual dimorphism in longevity and ageing. The postdoctoral fellow is expected to use next-generation sequencing to conduct gene expression analyses of experimental lines of C. remanei nematode worms that evolved under differential risk of death. The project will benefit from collaboration with Prof. Björn Schumacher (http://www.schumacher-lab.cecad.uni-koeln.de/people.htm). There are of course possibilities of conducting further experimental work depending on applicant's interests.

http://www.ebc.uu.se/Research/IEG/zooeko/-People/Alexei_Maklakov/ http://scholar.google.se/-citations?user=8aCng7oAAAAJ&hl=sv&oi=ao For further inquiries about the details of the project please contact Alexei.Maklakov@ebc.uu.se

*_Location_*: The Evolutionary Biology Centre (EBC) in Uppsala University is one of the largest conglomerations of evolutionary biologists in Europe, situated in a largely 'student town' - therefore, it provides a multitude of opportunities for collaboration as well as socializing.

*_Qualifications_*: A PhD degree in evolutionary biology/genetics/genomics or any relevant and related field. The ideal candidates are highly motivated with strong interest in evolutionary biology and experience in bioinformatics. Strong track record is essential. Candidates should be able to work independently and have good social and collaborative skills.

*_How to Apply_*: The application should include an updated CV, copies of diplomas, a short letter of interest (no longer than 2 pages) and contact details of at least two references. To confirm with UU rules, the application must be submitted online via the linkthat will become available *in early January*. However, you are most welcome to send informal inquiries and copies of application directly to me as soon as you can. (Alexei.Maklakov@ebc.uu.se).

WE DECLINE OFFERS OF RECRUITMENT AND ADVERTISING HELP

Alexei A. Maklakov Associate Professor Department of Animal Ecology Evolutionary Biology Centre Uppsala University Norbyvägen 18D Uppsala, SE-752 36 Sweden

Tel: +46 18 471 2672 Fax: +46 18 471 6484

Home pages: http://www.ebc.uu.se/Research/-IEG/zooeko/People/Alexei_Maklakov/ http://scholar.google.com/citations?user=-8aCng7oAAAAJ&hl=en&oi=ao Ageing Research Group page: http://www.ebc.uu.se/forskning/-grupper/ageing/projects/ Alexei Maklakov <alexei.maklakov@ebc.uu.se>

UdeLisboa EvolutionaryBiology

One Post-doctoral Fellowship is open by the Fundacao da Faculdade de Ciencias da Universidade de Lisboa, within the project "History, chance and selection during local adaptation: a genome-wide analysis"/ Centro de Biologia Ambiental (PTDC/BIA-BIC/2165/2012), financed by national funds from the FCT under the program FCT/MEC (PIDDAC) under the following conditions:

Scientific Area: Evolutionary Biology

Requirements for admission: PhD in Genetics, Evolution or Bioinformatics, with preference for applicants with advanced expertise on genome-wide DNA and transcriptome data analysis.

Work plan: The applicant will help the team in the genome-wide data analysis, as well as in general in the labororatory tasks, involving population maintenance, experiments and DNA and RNA extraction for genome-wide analysis.

Legislation framework: A fellowship contract will be celebrated according to the regulations defined by FCT "Regulations for Advanced Training and Qualification of Human Resources", in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of 9 July. And also by the FCT, I.P. Fellowships Regulation of 2013 approved by Regulation No. 234/2012, of June 25, as amended by Regulation No 326/2013 of 27 August 2013.

Place of work: The work will be developed at the Centro de Biologia Ambiental da Faculdade de Ciencias da Universidade de Lisboa under the scientific guidance of Margarida Matos.

Fellowship duration: This position is initially opened for 6 months and will begin in February 2014. The grant contract may be renewed to more 10 months, with a total duration of 16 months, or eventually until the end date of the project.

Monthly allowance: The fellowship amounts to â¬1495, *accordingtotablevaluesofthescholarshipsawardeddirectlybytheFCT,I.P.*(http://www.fct.pt/apoios/bolsas/-valores)*.Thegrantholderwillhaveapersonalaccidentinsu*[illegible]*he/shehasther*

Selection method: Candidates will be assessed by the quality of their CV. If needed an interview will occur with pre(selected) candidates in which case the weight will be 80% for the Curriculum and 20% for the interview.

Deadlines: This call for applications is open from January 8th to January 19th 2014

Application: Applications may be sent via e-mail to mmatos@fc.ul.pt by attaching a CV, a motivation letter and two references.

Margarida Matos <mmmatos@fc.ul.pt>

VirginiaCommonwealthU PopulationGenomics

Postdoc: Virginia Commonwealth Univ - Population Genomics

Multiple postdoctoral positions in comparative population and evolutionary genomics are available immediately in the Verrelli laboratory group at Virginia Commonwealth University. These positions will work on various research questions, including a newly NIH-funded project, in collaboration with individuals within the Department of Biology (http://biology.vcu.edu), Center for the Study of Biological Complexity (http://www.vcu.edu/csbc), the Virginia Institute for Psychiatric and Behavioral Genetics (http://www.vipbg.vcu.edu), and the Medical College of Virginia (http://vmc.vcu.edu), all located within the VCU campus in downtown Richmond, VA. The successful candidate(s) will coordinate with multiple PIs, postdoctoral and graduate fellows on population genetic/genomic projects to investigate the molecular evolution of infectious and genetic disease using genomic, transcriptomic, and metabolomic datasets collected via NGS techniques, including metagenome as well as targeted exome datasets in both clinical and natural population samples. The Verrelli lab is generally interested in comparative evolutionary and population genetic questions with previous and on-going work on genetic adaptation of behavioral trade-offs, landscape and ecological genetics, and human evolutionary medicine. Thus, it should be emphasized that there is considerable opportunity and incredible flexibility for the candidates to develop research questions on model and non-model organisms independently within the broader themes of the project and funded grant ob-

jectives.

Applicants will have a Ph.D. in evolution, population genetics, genomics, bioinformatics, biostatistics, or a related field. The ideal and preferred candidates will demonstrate previous experience in handling NGS datasets, and have expertise with a programming/scripting language (e.g., Python or related) and statistical package (e.g., R), in addition to a working knowledge of molecular evolution and/or population genetics. Applicants should have a publication record in the above-related fields. Annual salary is up to $40,000/year plus benefits. One year of funding is available, with a second year conditional upon positive evaluation of progress. These individuals will be expected to lead manuscript preparation with other duties including involvement on grant proposal preparation, and mentoring of undergraduate and graduate fellows as part of a training initiative.

Applicants will submit a single PDF document that includes: 1) a 1-page cover letter introducing the candidate for the position, 2) a 2-page "research statement" describing research expertise/foci in light of previous work, 3) a full CV containing contact information for 3 references (i.e., no letters of reference are initially required), and 4) copies of no more than three relevant publications (include only articles published or "in press"). Applicants are encouraged to peruse the websites noted above as well as to contact Brian Verrelli with any further questions at bverrelli@vcu.edu. Applications should be sent to bverrelli@vcu.edu, and no incomplete documents will be accepted. Start date can be negotiable. Review of applications will start on January 10, 2014 and will remain open until a successful candidate is identified.

Virginia Commonwealth University is a major, urban public research university with national and international rankings in sponsored research. VCU enrolls nearly 31,000 students in 223 degree and certificate programs in the arts, sciences and humanities. Sixty-eight of the programs are unique in Virginia, many of them crossing the disciplines of VCU's 13 schools and one college. MCV Hospitals and the health sciences schools of Virginia Commonwealth University comprise the VCU Medical Center, one of the nation's leading academic medical centers. For more, see *http://www.vcu.edu

Brian C. Verrelli, Ph.D.

Associate Professor Department of Biology Center for the Study of Biological Complexity Virginia Commonwealth University Richmond, VA 23284-2012

bverrelli@vcu.edu

WageningenU AdaptiveEvolution

We seek a postdoc for a collaborative project between the groups of Prof. Joachim Krug (Theoretical Physics, University of Cologne) and Dr. Arjan de Visser (Genetics, Wageningen University) on fitness landscapes and the predictability of adaptive evolution. The project combines theory and experiments and is part of the Collaborative Research Center 680 "Molecular basis of evolutionary innovations" funded by Deutsche Forschungsgemeinschaft (DFG) (http://www.sfb680.uni-koeln.de) and coordinated at the University of Cologne. In the previous funding period, we analyzed fitness landscapes of the fungus Aspergillus niger (e.g. Szendro et al. 2013 Proc. Natl. Acad. Sci. USA 110: 571-576) and the bacterial antibiotic-resistance enzyme TEM-1 beta-lactamase (e.g. Schenk et al. 2013 Mol. Biol. Evol. 30: 1779-1787). The new postdoc will study the fitness landscape of TEM-1 beta-lactamase and its evolutionary consequences in more detail. Specifically, we want to better understand the relationship between antibiotic resistance and bacterial fitness, the biochemical causes of TEM-1's fitness landscape topography, the effect of recombination and population size on the rate and repeatability of adaptation, and the properties of the genome-wide fitness landscape of bacterial antibiotic resistance.

Profile: We seek a highly motivated person with a PhD in molecular evolutionary biology, microbial genetics or enzyme engineering. Experience with basic microbiological and molecular lab techniques are an absolute requirement; experience with evolutionary theory and quantitative models are an advantage. The postdoc will be appointed at the University of Cologne, and experimental work will be carried out primarily at the Laboratory of Genetics at Wageningen University. The initial appointment is for one year with the possibility for extension up to four years. Salary will be paid according to level E13 of the German public service salary scale (TV-L). The project can start as soon as we have found a suitable candidate.

Applications: Submit enquiries and applications (including CV, letter of motivation and names and contact information of two references) before December 15 to Joachim Krug or Arjan de Visser. The University of Cologne is one of the leading German institutions in Molecular and Evolutionary Genetics. Wa-

geningen University is a small but leading university in the field of the life sciences. The University of Cologne is an equal opportunity employer in compliance with the German disability laws. Women and handicapped persons are therefore strongly encouraged to apply.

Dr. Arjan de Visser Laboratory of Genetics Wageningen University, Radix building Droevendaalsesteeg 1 6708 PB Wageningen The Netherlands P: (+)31 317 483144 M: arjan.devisser@wur.nl W: http://-www.wageningenur.nl/en/Expertise-Services/Chair-groups/Plant-Sciences/Laboratory-of-Genetics/-People/Arjan-de-Visser.htm Prof. Joachim Krug Institute for Theoretical Physics Zülpicher Strasse 77 50937 Köln Germany P: (+)49 221 470 2818 M: krug@thp.uni-koeln.de W: www.thp.uni-koeln.de/-krug/ arjan.devisser@wur.nl

WorkshopsCourses

Barcelona NetworkTools Jul14-18

Dear colleagues,

Registration is open for the course "NETWORK TOOLS IN BIOSCIENCES". Webpage: http:/-/www.transmittingscience.org/courses/syst-bio/-networks/ INSTRUCTORS: Dr. Diego Rasskin-Gutman (Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Spain) and Dr. Borja Esteve-Altava (Institut Cavanilles de Biodiversitat i Biologia Evolutiva, Spain).

DATES: July, 14-18, 2014. 34 hours on-site.

PLACE: Facilities of the Centre de Restauració i Interpretació de Els Hostalets de Pierola, Els hostalets de Pierola, Barcelona (Spain).

Many features and processes of biological systems can be well represented by networks of interacting elements. In the last decades, network analysis has provided new insights into the organization and functioning of complex biological systems such as brain wiring, genetic regulation, or ecological dynamics. A basic knowledge on network modelling and network analysis will provide biologists a better understanding of cutting-edge research in their fields. This course will introduce participants into the analysis of complex biological systems using network models. Students will learn the basics of network analysis: gathering information, building network models, and interpret the outcomes of their analysis. This course combines theoretical introduction and computing practices using the free software environment R. Previous knowledge in R is not required. Participants are encouraged to bring their own data for practicing. Emphasis is placed on offering participants a wide overview of network modelling in biology and the many available software tools to do it.

Organized by: Transmitting Science, the Institut Catalá de Paleontologia Miquel Crusafont and the Council of Hostalets de Pierola.

Please feel free to distribute this information between your colleagues if you consider it appropriate.

With best regards

Soledad De Esteban Trivigno, PhD. Course Director soledad.esteban@transmittingscience.org Transmitting Science < http://www.transmittingscience.org/ >

Soledad De Esteban Trivigno <soledad.esteban@transmittingscience.org>

Bodega California AppliedPhylogenetics Mar8-15

UC Davis

WORKSHOP IN APPLIED PHYLOGENETICS at Bodega Marine Laboratory, Bodega Bay, California March 8-15, 2014

Sponsored by the University of California, Davis and Bodega Marine Laboratory http://treethinkers.org Introduction

Phylogenetic methods have revolutionized modern systematics and become indispensable tools in evolution, ecology and comparative biology, playing an increasingly important role in analyses of biological data at levels of organization ranging from molecules to ecological communities. The estimation of phylogenetic trees is now a formalized statistical problem with general agreement on the central issues and questions. A nearly standard set of topics is now taught as part of the curriculum at many colleges and universities. On the other hand, application of phylogenetic methods to novel problems outside systematics is an area of special excitement, innovation, and controversy, and perspectives vary widely.

This Spring, for the fifteenth consecutive year, we will teach a workshop for graduate students interested in applying phylogenetic methods to diverse topics in biology. The one-week course is an intensive exploration of problems to which modern phylogenetic approaches are being applied and the most current statistical tools and approaches that are used to solve those problems. We cover a range of topics in ecology, phylogenomics, functional morphology, macroevolution, speciation, and character evolution. The course starts with recent advances in phylogenetic methodology, and then focuses on methods and tools that can be brought to bear on these "applied" issues in the context of a given phylogeny.

The course will be held at the Bodega Marine Laboratory on the Northern California coast, which has on-site housing. Our newly increased bandwidth and access to computing clusters allows us to utilize computer-intensive approaches even in a one-week course. The course format will involve equal parts of lecture, discussion, and hands-on software training. One afternoon during the week will be left free for field trips to local natural areas.

Topics Covered

* Estimating, evaluating and interpreting phylogenetic trees

* Recent advances in Bayesian and Maximum-likelihood estimation of phylogeny

* Estimation of species trees, gene-tree/species-tree conflicts

* Divergence-time estimation from sequence data: relaxed clocks, fossil calibration

* Analysis of character evolution: maximum likelihood and Bayesian approaches, ancestral-state estimation, rates of trait evolution

* Analysis of morphological form, function of complex character systems

* Inference of diversification rates: detecting rate shifts, testing key innovation hypotheses

* Model specification issues: model selection, adequacy and uncertainty

* Diagnosing MCMC performance

Instructors for the 2014 workshop

* Jeremy Brown

* Jonathan Eisen

* Rich Glor

* Tracy Heath

* Mark Holder

* John Huelsenbeck

* Sarah Longo

* Luke Mahler

* Mike May

* Brian Moore

* Samantha Price

* Bruce Rannala

* Bob Thomson

* Peter Wainwright

Prerequisites

Available housing limits course enrollment to ~30 students. Preference is given to doctoral candidates who are in the early to middle stages of their thesis research, and who have completed sufficient prerequisites (through previous coursework or research experience) to provide some familiarity with phylogenetic methods. Unfortunately, because of limits on class size, postdocs and faculty are discouraged from applying.

Admission and Fees

Students will be admitted based on academic qualifications and appropriateness of research interests. The course fee is $700. This includes room and board at BML for duration of the course (arriving March 8, leaving March 15) and transportation from Davis to

Application Deadline

Applications are due by January 3, 2014. Please send a completed application form and one letter of recommendation from your major advisor. Applications should be sent via email as PDFs to mikeryanmay@gmail.com. Students will be notified via e-mail by January 10, 2014 of acceptance.

Application Forms and Information

Visit the Bodega website to for additional information and to submit an online application form.

Send all inquiries to:

Mike May

Department of Evolution and Ecology 5343 Storer Hall University of California Davis Davis, CA 95616

email: mikeryanmay@gmail.com

"Brian R. Moore" <brianmoore@ucdavis.edu>

Cameroon ConservationGenetics Jul8-14

Professional Development Workshop in Conservation Genetics, Yaoundé, Cameroon

Integrating biological data, socioeconomic data and modeling techniques for conservation planning

DATES: 8 - 14 July 2014

LOCATION: Yaoundé, Cameroon

SUMMARY: Central African rainforests represent one of the most important centers of biological diversity in the world. While efforts have been made to prioritize regions for protection, habitat loss continues at an alarming rate severely limiting the ability of species to respond to climate change. The Central African Biodiversity Alliance (www.CABAlliance.org) is an international partnership that seeks to develop an integrated framework for conserving central African biodiversity under climate change that is both evolutionarily-informed and grounded in the socioeconomic constraints of the region. This five-year project is sponsored by the U.S. National Science Foundation - Partnership for International Research and Education Program and involves a broad range of research and educational activities through partnerships between African, European and U.S. universities, non-governmental and governmental organizations.

Professional development workshops are a keystone educational project activity, which bring together early-career scientists and graduate students from Cameroon, Gabon, Equatorial Guinea, Europe and the U.S. The 2014 workshop will provide cutting-edge training in:

–Collection and analysis of genetic data –Collection of macro- and micro- socioeconomic data –Geographic Information Systems (GIS) –Statistical data analysis –Professional skills development via a COACh workshop following the main program

Computers and software will be provided for use at the workshop.

INSTRUCTORS: UCLA–Drs. Thomas B. Smith, Kevin Y. Njabo, Ren Larison, Trevon Fuller, Ryan Harrigan, Hilary Godwin, Steve Arnold Drexel University–Drs. Katy Gonder, Shaya Honarvar University of Buea–Dr. Fokam Eric University of Dschang–Dr. Bobo Kadiri Serge University of Yaoundé I–Dr. Sonke Bonaventure

ENROLLMENT: Applications are welcome from early-career scientists and graduate students interested in biodiversity conservation. Travel and subsistence will be covered for U.S. and African participants. Send your C.V., contact information for two referees, and a statement of no more than 500 words about your background to Dr. Katy Gonder at gonder@drexel.edu no later than 15 February 2014.

MORE INFORMATION: www.CABAlliance.org
katy.gonder@gmail.com

CostaRica ConservationGenetics May24-Jun3

Hello everyone,

I wanted to remind you that OTS will give a course on Conservation Genetics aimed at teaching students about: measurement of genetic diversity and genetic structure, phylogeography, application of molecular data to taxonomic questions, gene flow, application of genetic information for restoration of disturbed landscapes. For more information see:

Conservation Genetics http://bit.ly/13AeiZC

Coordinator: Jim Hamrick (Lab website) Course duration: 2 weeks (May 24 to June 8, 2014) Application Deadline: February 3, 2014 for priority consideration, followed by rolling admission until fully enrolled.

Cheers,

Andres Santana

Graduate Education Department Organization for Tropical Studies San Pedro, Costa Rica. 676-2050 (506) 2524-0607 ext. 1511

www.ots.ac.cr

andres.santana@ots.ac.cr

Debrecen Hungary EvolutionBehaviour Feb7-8

THE EVOLUTIONARY SIGNIFICANCE OF CONSISTENT BEHAVIORAL VARIATION

Workshop in Debrecen, Hungary; 7-8 February 2014

We are organising a workshop to stimulate a discussion about how the concepts of animal personality and behavioral syndromes changed the ways we think about the evolution of behaviors, and how these phenomena shed new lights on key theories of natural and sexual selection.

Invited speakers will include

- Professor Niels Dingemanse (Max Planck Institute for Ornithology) - Dr. Laszlo Garamszegi (Department of Evolutionary Ecology Estaci??n Biol??gica de Do??ana-CSIC) - Professor Jaap M. Koolhaas (Dept. of Behavioral Physiology, University of Groningen) - Professor Andy Sih (University of California at Davis)

Postgraduate students and post-docs are encouraged to give a 10 min talk followed by 5 min discussion.

For further information and to register please visit: < http://zoology.unideb.hu/evolpers/ >

Best regards

Zoltan Barta and Laszlo Garamszegi Zoltan Barta MTA-DE "Lendület" Behavioural Ecology Research Group Department of Evolutionary Zoology, University of Debrecen, Debrecen, Egyetem ter 1., 4032, Hungary Phone: +36 52 316 666 ext. 62334 | Fax: +36 52 512 941 E-mail: barta.zoltan@science.unideb.hu | http://web.unideb.hu/ ˜ zbarta/ Zoltan Barta <barta.zoltan@science.unideb.hu>

EastAfrica BioinformaticsGenomics Jan-Mar

We are excited to announce the next three workshops in a continuing series of bioinformatics and genomics workshops taking place in East Africa during the 2013-14 academic year. The workshops offer participants an introduction to DNA sequence analysis using freely available data and software. Please visit our website for more information on registering and the topics covered in the workshop (https://sites.google.com/site/-bioinfogenomicswrkshpea/).

Upcoming workshops will take place at:

-The Nelson Mandela African Institute of Science and Technology in Arusha, Tanzania, on Jan 27-31, 2014

-Makerere University in Kampala, Uganda, on Feb 10-14, 2014

-Biosciences East and Central Africa (BecA-Hub) at the International Livestock Research Institute in Nairobi, Kenya, on Feb 24-28, 2014

Workshops consist of 5 full days (9 am to 5 pm) of training in bioinformatics and genomics questions, tools, techniques, and analysis. The workshops have received financial support from The National Science Foundation, Reed College, Lewis & Clark College/Howard Hughes Medical Institute, the MJ Murdock Charitable Trust, and the Fulbright US Scholar Program. Partnerships with our host institutions and program liaisons

make the workshops possible.

Registration for the TANZANIAN and UGANDAN workshops is now Open. * To be assured full consideration for the workshop in Tanzania, you must apply by Jan 1, 2014. For the workshop in Uganda, you must apply by Jan 15, 2014.*

Participation is free, but space is limited; registration will be on a first come, first serve basis. Your application (please put TANZANIA WORKSHOP or UGANDA WORKSHOP in the subject line) should be emailed to:* bioinfo.genomics.workshop@gmail.com <bioinfo.genomics.workshop@gmail.com>* The body of the email *must* include the following information:

Your Full Name (Surname, Given Name) Your Affiliation (Including year of study, program or departmental affiliation, and University) Contact information (Home Address, Email Address, and Phone Number) Reason for wanting to attend the workshop (1 paragraph) Name and contact information for one reference (Professor or Colleague)

***At this time, there are no travel grants available for people wishing to travel to attend the workshops. **Please check the website for announcements of future workshops and opportunities.*

*****

Sarah Schaack, PhD Assistant Professor, Reed College Visiting Fulbright Scholar, East Africa Centre for Bioinformatics and Biotechnology, University of Nairobi Biosciences East & Central Africa-Hub, International Livestock Research Institute Workshop Info: https://sites.google.com/site/-bioinfogenomicswrkshpea/ schaackmobile@gmail.com

Lyon ComparativeGenomics Jan20-30

European Course "Comparative Genomics" 2014

Organizers: Jean-Nicolas Volff (ENS Lyon), Céline Brochier (University Lyon 1)

Since 2008, we organize the European course entitled "Comparative Genomics" for Master and PhD students from the Ecole Normale Superieure of Lyon and from other European universities.

This year the course will be held on 20-30 January 2014 at the Ecole Normale Superieure de Lyon (France, http://www.ens-lyon.fr). The course aims at initiating students to Comparative Genomics, a young and fast-evolving scientific field with a growing impact on science and societies.

The course covers ten major topics of comparative genomics with an emphasis on recent major discoveries and innovating concepts/approaches in the fields of biology, ecology, medicine and biotechnologies. Each topic is presented by two internationally reputed scientists with complementary views/approaches. The two lectures are followed by a round table with the students and the two speakers.

The program and registration form are available at:

http://lbbe-dmz.univ-lyon1.fr/spip_cg/ Jean-Nicolas Volff and Céline Brochier

– Pr Céline Brochier-Armanet Membre de l'Institut Universitaire de France

Université Lyon 1 Laboratoire de Biométrie et Biologie Evolutive UMR CNRS/Lyon 1 5558 43 Bd du 11 Novembre 1918 69622 Villeurbanne, France – Tel: 33 (0)4 26 23 44 76 Mail: celine.brochier-armanet@univ-lyon1.fr Web page: http://www.frangun.org Celine Brochier <celine.brochier-armanet@univ-lyon1.fr>

NESCent EvoDevo Dec11-13

Dear Colleague,

This email is to invite you to contribute your ideas to upcoming Evo-Devo community workshop supported by the National Science Foundation of the USA. The meeting will take place from 11-13 December 2013 at NESCent in Durham, North Carolina. Although over 300 members of the international Evo-Devo community have expressed interested in attending the meeting, because of funding and infrastructure limitations, unfortunately we could ask only a small number of people to attend the meeting in person.

However, due to the level of interest in this workshop, we have tried hard to find ways to get as much community input as possible, and so would like to invite you to virtually in the meeting, You can do this in a number of ways:

1. Set up an account for yourself on the meeting website at http://evodevo.ning.com. On this website, you will find an agenda for the program, list of participants who will be physically present at NESCent, be able to

view and participate in wiki-style discussions, and keep track of what is happening at the meeting. This website will be updated to document the proceedings of the meeting in real time.

2. Watch some of the presentations and discussions that will take place during the meeting via Webinar. You can also contribute to the discussions at NESCent in real time by sending in your comments and questions via the Webinar interface V these will be communicated to the participants at NESCent by a designated moderator. Instructions on how to access the Webinar can be found on the website indicated in (1) above.

3. Join conference call discussions that will be considering the same issues as those discussed by participants at NESCent during parallel breakout groups. The moderators of these calls will summarize the ideas generated during the call to the group at NESCent. Instructions on how to call in to these conference calls can be found on the website indicated in (1) above. The times and discussion topics for these conference calls are as follows:

What distinguishes the field of Evo-Devo, and what unique contributions has it made? Wednesday December 11 at 12:00 EST. Moderated by Paula Mabee.

What infrastructure is needed to ensure the continued success of Evo-Devo? Wednesday December 11 at 15:00 EST. Moderated by Jeffrey Marcus.

What is the future promise of Evo-Devo, and how can we obtain the resources necessary to realize this promise? Thursday December 12 at 11:30 EST. Moderated by Trisha Wittkopp.

What new teaching and training initiatives/materials are necessary for preparing the next generation of Evo-Devo scientists? Thursday December 12 at 15:30 EST. Moderated by Joel Smith.

We hope you will us in as many of these ways as possible. We look forward to your contributions!

Sincerely, Cassandra Extavour Allen Rodrigo

Dr. Cassandra Extavour extavour@oeb.harvard.edu

Associate Professor Department of Organismic and Evolutionary Biology Harvard University 16 Divinity Avenue, BioLabs 4103 Cambridge, MA 02138, USA

http://www.extavourlab.com Office Tel. 1 617 496 1935 Lab Tel. 1 617 496 1949/1200 Fax. 1 617 496 9507

Extavour Lab Administration: Mimi Velazquez Tel. 1 617 496 2132 nvelazquez@oeb.harvard.edu

EDEN: Evo-Devo-Eco Network http://www.edenrcn.com edenrcn@fas.harvard.edu

EDEN Administration: Barbara Perlo perlo@fas.harvard.edu

"Extavour, Cassandra" <extavour@oeb.harvard.edu>

SanAntonio TX PrimateGenomics Jan9-10

Announcing Registration for the 2014 Application of Genetics to Anthropological Research Workshop (AGAR)

Organizers: the American Association of Anthropological Genetics (AAAG) Education Committee in collaboration with the Texas Biomedical Research Institute

Dates: January 9-10, 2014

Location: Texas Biomedical Research Institute, San Antonio, TX

The third annual Application of Genomics to Anthropological Research (AGAR) Workshop is now open for registration. This year's workshop will provide advanced students and scholars with experience in the development of primate genomic projects and the analysis of primate genome datasets.

Lectures and tutorials will cover: fecal genomic sequencing in wild populations, non-human primate reference sequences, genomic reconstructions of diet, epigenetic and gene by environment studies, captive populations as model organisms for complex diseases, and pedigree analysis and gene discovery in SOLAR.

For more information: http://www.anthgen.org/AGAR_2014_info.html To register: http://www.anthgen.org/AGAR_Registration_2014.html ellen.quillen@gmail.com

SwissAlps EvolutionaryBiology 19-25Jun

Evolutionary Biology Workshop in the Alps

19-25 June 2014, Arolla, Switzerland

Target participants: PhD students, advanced Master

students

The main goals of this annual workshop, based on a concept developed by Stephen Stearns and John Maynard Smith, 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.

Faculty: Nina Wedell (University of Exeter, UK) Ulrich Mueller (University of Texas, Austin, TX) Tanja Schwander (University of Lausanne, Switzerland) John Pannell (University of Lausanne, Switzerland) Tadeusz Kawecki (University of Lausanne, Switzerland)

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 the 100-year old hotel Kurhaus http://www.hotel-kurhaus.arolla.com/, located in a small alpine village at 2000 m of altitude, which will allow you to focus on work while being able to enjoy the magnificent landscape and the Alpine flora.

3 ETSC credit points

Costs: CHF 610.- 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 Caroline Betto-Colliard <ecologie-evolution@cuso.ch>, with Cc to tadeusz.kawecki@unil.ch .

Deadline for application: 20 February 2014.

Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Le Biophore, CH 1015 Lausanne, Switzerland

tadeusz.kawecki@unil.ch

Tromso Norway DNA Metabarcoding Mar31-Apr5 2

Dear Colleagues,

I apologize for this second email concerning this school, but several persons contact me to clarify the registration procedure. Moreover technical reasons obliged us to move the registration website so please, find enclosed in this mail an updated call with I hope clearer explanations.

Best regards

Eric Coissac

==== Updated DNA metabarcoding spring school call ==DNA metabarcoding is a rapidly evolving method for assessing biodiversity from environmental DNA. It has a wide range of applications: biodiversity monitoring, animal diet assessment, reconstruction of paleo communities, among others. DNA metabarcoding relies on molecular techniques such as PCR and next generation sequencing, and requires bioinformatics and biostatistics competence to analyze sequencing results. This approach integrates several scientific areas and requires a broad range of skills, in addition to the classical ecological knowledge related to the considered research topic.

The DNA metabarcoding spring school is now in its third edition and this year it is co-organized by the metabarcoding.org team and the Research School in Biosystematics - ForBio in Tromsø, Norway. Also this year, the school is divided into two parts.

- The DNA metabarcoding spring school (31 March - 3 April 2014), that will be held during four days at the Skibotn Field Station, - A two-day workshop at the Tromsø University Museum that will follow the course (4 - 5 April 2014). Participants can register for both the school and workshop (25 places) or only for the workshop (no limit). To register for University of Tromsø ECTS (BIO-8001 registration form) or a ForBio course certificate stating the number of ECTS (no additional registration needed), participants have to attend both the school and the workshop. As part of the course program, each participant is required to (i) give a 12 minute talk about their research during the evening sessions of the school, and (ii) present a corresponding poster during the workshop.

Registration Registration deadline is 12 January 2014 This year the registration to the third DNA metabarcoding spring school is a two steps process.

- You need to be a ForBio member or associate. - Anyone can register as a ForBio associate. To register as a ForBio associate please visit the ForBio membership page - To become a ForBio member you must be registered as a PhD student or hired as a postdoctoral fellow at a Norwegian, Swedish, Danish, or Finnish university. - Now that you have a ForBio status (member or associate) you have to register to the school and/or the workshop itself by filling out the registration page.

All participants attending both the school and workshop can receive a ForBio course certificate stating the course description and number of ECTS earned (2 in this case). If you would like to receive University of Tromsø ECTS (2) instead of a ForBio course certificate, please feel out the BIO-8001 registration form and follow the submission instructions on it. If you have any questions about University of Tromsø registration, please contact Sergei Drovetski (sdrovetski@gmail.com).

For more information go to : http://-metabarcoding.org/spip.php?article66 or on the registration website : http://www.forbio.uio.no/-events/courses/2014/metabarcoding_workshop.html

Dr Eric Coissac Associate professor Laboratoire d'Ecologie Alpine UMR CNRS-UJF 5553 / UMR CNRS 5553 Université J. Fourier Domaine de Saint Martin d'Hères 2233, rue de la piscine Bât. D Biologgie BP 53, 38041 Grenoble Cedex 9 France

Eric.Coissac@inria.fr

UCalifornia LosAngeles ConservationGenetics Mar22-27

UCLA/La Kretz Workshop in Conservation Genomics, 22-27 March, 2014

Conservation biology and genetics have had a long and intimate relationship, and constitute one of the key applications of evolutionary analysis to real-world biological problems. The impacts of population genetics, phylogenetics and phylogeography have been particularly striking for conservation biology, and have helped solve some of the most pressing problems in biological conservation.

As the field of landscape-based genetics continues to grow and mature, the increasing availability of genomic-level data, analytical models and methods stand to make profound new contributions to our ability to identify and protect at-risk populations and recover those that are most endangered. However, genomic level analyses also carry a heavy burden data sets are enormous and often require diverse computational approaches for assembly, quality control and analysis.

This annual workshop provides a comfortable, informal training environment for a small group of motivated graduate students to explore how conservation problems can best be addressed with genomic-level data. Our goal is to provide hands-on experience on the efficient collection, troubleshooting, and analysis of large, genome-level data sets for conservation-relevant problems. One of the highlights of our workshop is active participation from members of several US government agencies who are at the forefront of endangered species protection and management, providing a forum for exploring the most relevant aspects of conservation genomics to managers.

The UCLA/La Kretz workshop is held at the La Kretz Field Station and the Stunt Ranch Reserve, both located a few miles apart in the heart of the Santa Monica Mountains. Only 30 miles from UCLA (and LAX airport), but nestled in the relatively undeveloped 160,000 acre Santa Monica Mountains National Recreation Area, these two venues provide an ideal location to bring exciting new developments in genomic science and pressing needs in conservation and management together in a single workshop.

Our current instructor list, drawn from UCLA, UC Davis, and UC Berkeley includes:

Mike Alfaro Gideon Bradburd Brant Faircloth Evan McCartney-Melstad Kirk Lohmueller Mark Phuong Brad Shaffer Victoria Sork Phil Spinks Ian Wang Bob Wayne

Participants from USGS, USFWS, and the US National Park Service

Topics covered include:

Traditional conservation genetics Next generation platforms: the best tool for the job Data management pipelines: Quality Control Data storage Data organization Data analysis: SNPs Sequences Exploring very large data sets Functional genomic data Genomic data and GIS Conservation phylogenomics

Prerequisites Available housing limits course enrollment to ~15 students. Preference is given to doctoral candidates who are in the early to middle stages of their thesis research, and who have completed suffi-

cient prerequisites (through previous coursework or research experience) to have some familiarity with using a command line interface or programming languages (i.e. Perl, python etc.). Postdocs and faculty are welcome to apply, but our first priority is to graduate student applicants.

Admission and Fees Students will be admitted based on academic qualifications and appropriateness of research interests. The course fee is $400. This includes food and lodging at the La Kretz Field Station, transportation to and from UCLA to the venue, and any incidental fees for the duration of the course (arriving March 22, departing March 27).

Application Forms and Information Visit the La Kretz Center for California Conservation Science website for additional information and to download an application form: http://www.environment.ucla.edu/media/files/-2014-La-Kretz- Conservation-Genomics-Application-0h-etl.docx

Application Deadline Applications are due by January 17, 2014. Please send a completed application form and one letter of recommendation from your major advisor. Students will be notified via e-mail by January 24, 2014 of acceptance.

Applications should be sent as PDFs, with your name in the title, via email to:

Phil Spinks email: pqspinks@ucla.edu

ULeipzig ProgrammingForEvolutionaryBiology

Third Course on Programming for Evolutionary Biology

When: March 21st - April 6th 2014

Location: Leipzig, Germany

Application deadline: January 15th 2014

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>

Uppsala ConGenOmics Mar18-20

Uppsala, Sweden: 18-20 March, 2014

European Science Foundation Workshop in Conservation Genomics: "Academic exercise or transition with real-world implications"

Among the tenets of conservation biology is the preservation of genetic diversity. Numerous tools and methods have been developed in this regard, and the field of conservation genetics is actively engaged in using genetic marker data to inform decision makers. For this workshop, we will explore the transition of the field to genome-scale data with an eye on the impact to conservation practice.

We will have presentations from 12 of the leading experts in conservation and genomics (http://-www.ebc.uu.se/Research/IEG/evbiol/congenomics/-speakers/).

Discussion groups form an integral part of the workshop such that we have restricted the number of delegates to a manageable unit (<50). We ask that all interested partipants submit a short abstract (<500 words) detailing their research interests and motivation for attending the workshop. Please include your name, position and affiliation. Submit via email to Aaron Shafer (aaron.shafer@ebc.uu.se). Note that the selected students will have their workshop fees waived.

Please visit http://www.ebc.uu.se/Research/IEG/-evbiol/congenomics/ for additional workshop information.

Organizers,

Aaron Shafer Jochen Wolf

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Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notifcation of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LaTeX files, Excel files, etc. ...plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by LaTeX do not try to embed LaTeX or TeX in your message (or other formats) since my program will strip these from the message.