E v o l D i r

August 1, 2015

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.

—— / ——

Conferences

Chicago GeneConservationTrees EarlyAlert May16-19

EARLY ALERT *** EARLY ALERT ***EARLY ALERT

Gene Conservation of Tree Species May 16 - 19, 2016 Chicago, Illinois

The USDA Forest Service is a main sponsor of this event.ÂÂ We have a great venue, domestic and international partners, and a field trip planned and sponsored by The Morton Arboretum.

This workshop will bring together a mix of land managers, conservation and restoration practitioners, researchers, and non-governmental organizations who share the goal of conserving tree species.Â In addition, to foster collaboration and networking, time has been built into the agenda and space will be available for affiliated groups/chapters to hold meetings and/or promote their work.

More information is available at:

http://www.fs.fed.us/about-agency/gene-conservation-workshop Please forward this notice to your colleagues who have an active interest in the genetic conservation of trees!

Many thanks,

Jennifer DeWoody, PhD Geneticist Forest Service National Forest Genetics Lab p: 530-295-3026 jadewoody@fs.fed.us 2480 Carson Road Placerville, CA 95667 www.fs.fed.us/NFGEL/

Caring for the land and serving people

jadewoody@fs.fed.us

LeibnizInst Berlin WildlifeGenetics Sep28-Oct1

Dear Colleagues,

On behalf of the Leibniz Institute for Zoo and Wildlife Research (IZW) and the European Association of Zoos and Aquaria (EAZA) we wish to extend a cordial invitation to you to participate in the 10th International Conference on Behaviour, Physiology and Genetics of

Wildlife to be held from September 28th to October 01st, 2015 in Berlin, Germany.

The aim of this meeting is to foster an exchange of ideas between wildlife scientists from different disciplines with an interest in both wild and captive animals, with a focus on mammalian species. We have secured an impressive list of plenary speakers and workshop/parallel session organisers for detailed discussions.

Main topics: - Behavioural ecology - Conservation biology - Stress & disturbance - Reproduction biology - Conservation genetics

We are looking forward to welcoming you at the 10th International Conference on Behaviour, Physiology and Genetics of Wildlife in September 2015 in Berlin!

Conference website: http://www.izw-berlin.de/-welcome-234.html E-mail: symposium@izw-berlin.de

Please circulate information about the 10th International Conference on Behaviour, Physiology and Genetics of Wildlife 2015 to your colleagues. Thank you very much.

Best regards

Anke Schumann Conference Organisation Leibniz Institute for Zoo and Wildlife Research (IZW) in the Forschungsverbund Berlin e.V. Alfred-Kowalke-Straße 17 10315 Berlin GERMANY

P.O.Box 70 04 30, 10324 Berlin

Fon. + 49 - 30 - 51 68 - 127 FaxÂ + 49 - 30 - 51 26 - 104 http://www.izw-berlin.de

:: Evolutionary wildlife research for conservation ::

SYMPOSIUM <SYMPOSIUM@izw-berlin.de>

Madison Wisconsin QuantitativeGenetics Jun12-17

Dear All:

This is a first announcement of the 5th International Conference on Quantitative Genetics (ICQG5), which will be held on June 12-17, 2016, in Madison, Wisconsin, USA.

More information about the ICQG5 can be found at: www.icqg5.org Please mark in your calendars and don't miss this exiting meeting!

Sincerely, Natalia de Leon and Guilherme Rosa (ICQG5 co-chairs)

Guilherme J. M. Rosa University of Wisconsin-Madison 436 Animal Science Building 1675 Observatory Dr. Madison, WI 53706 USA Phone: + 1 (608) 265-8617 Fax: + 1 (608) 263-9412 E-mail: grosa@wisc.edu Webpage: http://www.ansci.wisc.edu/Facultypages/-rosa.html GUILHERME J M ROSA <grosa@wisc.edu>

Manhattan KS EcologicalGenomics Nov6-8

Thirteenth Ecological Genomics Symposium in Manhattan, Kansas

Outstanding speakers and expanded speaking opportunities!

Mark your calendars – The Ecological Genomics Institute at Kansas State University is bringing the 13th annual symposium to Manhattan, Kansas on November 6-8 at the Hilton Garden Inn. As in previous years, the 13th symposium will feature a diverse array of established and emerging leaders in the field of ecological and evolutionary genomics. In addition to the invited speakers, this year's symposium will expand the number of speakers to be chosen from among submitted abstracts.

Featured speakers include:

* Scott Edwards, Harvard

* Michael Lynch, Indiana University

* Melissa Pespeni, University of Vermont

* Stacey Smith, University of Colorado Boulder

* Joan Strassmann, Washington University, St. Louis

* Michi Tobler, Kansas State University

Early registration fee is $235 ($135 for graduate and undergraduate students). All meals are included in registration fee this year. Early registration deadline is Friday, September 18.

Abstract submission deadline is also Friday, September 18.

Visit http://ecogen.k-state.edu/ for more details. We hope to see you in Manhattan!

Jennifer Rhodes <jenniferrhodes@ksu.edu>

Marseilles 19thEvolBiology Sep15-18 PostersOnly

Dear all the "19th evolutionary biology meeting at Marseilles" program has been updated

only spots for poster presentations are available

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

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

Marseilles 19thEvolBiology Sep15-18 Program 3

Dear all the "19th evolutionary biology meeting at Marseilles" program will be available july 6 at the following site http://sites.univ-provence.fr/evol-cgr/ we have still few spots for poster presentations and 2 spots for oral presentations

best regards Pierre

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

Marseilles 19thEvolBiol Sep15-18 Deadline 2

Dear all

The dead line for the registration at the "19th evolutionary biology meeting at Marseilles" is June 30 we will then shift to the late registration stage.

more info http://sites.univ-provence.fr/evol-cgr/ or contact marie-helene.rome@univ-amu.fr

best regards Pierre

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

NMNH Smithsonian Coevolution Sep15

The Frontiers in Phylogenetics program (Smithsonian Institution, the George Washington University, and the University of Maryland) is pleased to announce the 2015 Frontiers in Phylogenetics Fall Symposium.

When: Tuesday, September 15th, 2015

Where: Baird Auditorium at the National Museum of Natural History, Smithsonian Institution in Washington, DC.

Theme: Methods and analysis of coevolution across scales: from within genomes to disease and environments

Confirmed speakers: Dr. Holly Bik (University of Birmingham) Dr. Marin Talbot Brewer (University of Georgia) Dr. Maria Hoffman (FDA) Dr. Daniel Janies (University of North Carolina Charlotte) Dr. Corrie Moreau (The Field Museum) Dr. Spencer Nyholm (University of Connecticut) Dr. C. Miguel Pinto (Smithsonian Institution National Museum of Natural History) Dr. Anna Savage (University of Central Florida) Dr. Michael Sorensen (Boston University) Dr. Pamela Wiesenhorn (Argonne National Lab)

Registration is free but required and will close on August 15, 2015.

Please visit the following link to register: http://-go.si.edu/site/Calendar?id=100841&view=Detail The symposium will also be webcast.

Rebecca Dikow

dikowr@si.edu

"Dikow, Rebecca" <DikowR@si.edu>

RoyalSociety London DatingSpeciesDivergence Nov9-10

Two-Day Discussion Meeting in the Royal Society of London on Dating species divergence using rocks and clocks 9:00 am on Monday 09 November 2015 Â' 5:00

pm on Tuesday 10 November 2015 at The Royal Society, 6-9 Carlton House Terrace, London Organised by Professor Ziheng Yang FRS and Professor Philip Donoghue FRS https://royalsociety.org/events/2015/-11/dating-species-divergences/ Dear All,

This meeting is free, but registration is required and places are limited. Please register early to avoid disappointments.

There is also a call for posters, with the deadline to be 1 October 2015. Because we have only limited spaces, we will have a selection so please submit a title and abstract if you would like to present a poster.

Please visit the web site for detailed information about the meeting, the scientific programme, and to register.

best wishes,

ziheng yang

"z.yang@ucl.ac.uk" <z.yang@ucl.ac.uk>

StAndrews DarwinianModels DataScience Jul6

The audience is intended to be general, not specific, but includes evolutionary biologists. For Evoldir, the talk "Veracity: how Darwinian ideas can help calibrate complex models" is relevant - an application of evolutionary biology.

SUMMER OF V'S - Monday 6th July 2015 - LAST CHANCE TO REGISTER!

The Summer of V's meetings at the University of St Andrews (http://www.idir.st-andrews.ac.uk/vs) cover the Four V's of Data Science - Veracity, Variety, Velocity and Volume - and are explicitly aimed at all Faculties of the University. Everyone is welcome to attend one, all or any number of meetings, whether you are based at St Andrews or elsewhere. Attendance is free.

Meetings begin with a free buffet lunch, then a talk from a prestigious invited speaker, followed by contributions from local researchers.

The next meeting is on Monday 6th July, 12:15-4 PM, Gateway Lecture Room 4. The programme includes:

o Professor PETER CHRISTEN, Australian National University (https://researchers.anu.edu.au/researchers/-christen-pj): "Advanced record linkage methods: scalability, classification, and privacy"

o Dr AILEEN FYFE, School of History (http://www.st-andrews.ac.uk/history/staff/aileenfyfe.html): "How good are my statistics? Investigating the history of peer-review"

o Dr LEN THOMAS, Centre for Research into Ecological and Environmental Modeling and School of Mathematics and Statistics (http://www.creem.st-and.ac.uk/len): "Veracity: how Darwinian ideas can help calibrate complex models"

For registration and further details, please see:

http://www.idir.st-andrews.ac.uk/vs We look forward to seeing you on 6th July.

Thank you,

Dr Daniel Barker (db60@st-andrews.ac.uk), Professor Aaron Quigley, Professor Simon Dobson Summer of V's Organising Committee

http://www.idir.st-andrews.ac.uk/vs

–

http://biology.st-andrews.ac.uk/staff/db60

Daniel Barker <db60@st-andrews.ac.uk>

Swansea BacteriaNotMolecol 22-23Oct

Please submit an abstract for our bacterial evolution super-brainstorm http://www.sheppardlab.com/-notmolepi2015 Thank you!

Daniel

Daniel Falush <danielfalush@googlemail.com>

Turkey EcolEvolutionaryBiol Aug6-7 RegistrationDeadline

Dear Colleagues,

This is a final reminder of the registration deadline for the Ecology and Evolutionary Biology Symposium Turkey 2015 (August 6-7, Ankara).

Registration will be closing by July 15th.

You can find the symposium program at: http://-eebst2015.bio.metu.edu.tr/Program.html Looking forward to seeing you in Ankara!

On behalf of the Organizing Committee Aysegul Birand and Mehmet Somel

contact: wwweebst@metu.edu.tr

"wwweebst@metu.edu.tr" < www.ebst@metu.edu.tr >

UColorado MechanismsProteinEvolution Nov8-10

Conference: Mechanisms of Protein Evolution III, Denver, 8-10 November 2015

Registration is now open for the conference, 'Mechanisms of Protein Evolution III, to take place 8-10 November at the University of Colorado Denver School of Medicine, Anschutz Medical Campus, Denver.

See www.proteinevolution.org The subtopic of this year's meeting is 'origins', which will include theory on de novo gene birth, exaptation of novel function from transposable elements, neo-functionalization from existing genes, adaptive modification of functions, and synthetic biology. We are particularly interested in exploring how our understanding of the mechanisms of protein evolution will influence how we analyse data, how the immense wealth of incoming data will influence our models, and how structural, biophysical and systems biology principles influence our understanding of protein evolution.

Topics include adaptation, coevolution, convergence, neutral processes, prediction of folding, prediction of mutational effects, the influence of protein-protein interactions on protein evolution, and the interaction of next-gen sequencing and model development. As in past years, we broadly interpret our topic to include exciting interactions with diverse fields such as phylogenetics, human population genetics, and RNA structure.

For more information see http://-www.proteinevolution.org/ The conference is limited to 50 participants and registration will be closed when the conference is full. Register early to avoid missing out.

"Pollock, David" <David.Pollock@ucdenver.edu>

ULyon MustelidConservation Oct14-17

Dear all,

THIS IS THE SECOND ANNOUNCEMENT OF the 32th European Mustelid Colloquium !!

Registration is open until September 15th 2015 and abstract submission until 1st september !!! Please register as soon as possible if you plan to come !!

It is our pleasure to announce that the 32th European Mustelid Colloquium will be held at the University of Lyon, France, from October 14-17, 2015. The colloquium is organized jointly by the French Hunting and Wildlife Agency and the Biometry and Evolutionary Biology Laboratory of the University of Lyon.

You can find all the information at the Colloquium website

http://32mustelidscol.sciencesconf.org/ The 32th European Mustelid Colloquium wants to specifically promote exchanges and discussions among European ecologists (academic, student and non-academic) working on all aspect of the Mustelids Ecology (Evolutionary Biology, Conservation and management âetc).

The Colloquium is organized into 2 days of plenary and poster sessions and a field excursion on the Saturday.

Non European people are of course welcome !

We hope to see you in all in Lyon

Feel free to contact us at 32mustelid-scol@sciencesconf.org

The Organizing Committee of the32th European Mustelids Colloquium

Thanks for your help Sincerely yours

–

Sébastien Devillard, PhD, Associate Professor

UMR 5558 "Biometry and Evolutionary Biology" 43 bd du 11 novembre 1918, 69622 Villeurbanne cedex France

NEW PHONE !!! :+33 (0)4 72 44 81 11 Fax : +33 (0)4 72 43 13 88

sebastien.devillard@univ-lyon1.fr

http://lbbe.univ-lyon1.fr/-Devillard-Sebastien-.html
http://sebastien.devillard.perso.sfr.fr Sebastien

Devillard <sebastien.devillard@univ-lyon1.fr>

Vairao Portugal Morphometrics Oct5-9 reminder

International Workshop "An Introduction to Geometric Morphometrics using R"

October 5-9, 2015 @ CIBIO-InBIO, Vairao, Portugal

The analysis of organismal shape is central to many questions in ecology and evolution. This workshop aims at providing an introduction to the theory and methods of geometric morphometrics for analyzing variation in shape and its covariation with other variables. It will provide an overview of the theory underlying the quantification of shape using landmark methods, and a practical guide to data acquisition, standardization for obtaining shape variables, statistical treatment of shape variation, and visualization of the results in the R language for statistical programming.

R knowledge is a requirement for the course and it will be assumed that all participants are fluent for data manipulation and basic operations in the R environment.

Click here http://cibio.up.pt/workshops–courses/-details/introduction-to-geometric-morphometrics-using-r to see the PROGRAMME for this course.

COURSE INSTRUCTORS

Prof. Dean C. Adams [http://www.public.iastate.edu/-˜ dcadams/homepage.html] Dr. Michael Collyer [https://www.wku.edu/biology/staff/michael_collyer] Dr. Antigoni Kaliontzopoulou [http://cibio.up.pt/-people/details/akaliont] REGISTRATION DEADLINE

Deadline for registration is July 31, 2015.

To know more about this course, please visit CIBIO-InBIO's website http://cibio.up.pt/workshops–courses/-details/introduction-to-geometric-morphometrics-using-r or contact us at GM2015@cibio.up.pt.

CIBIO Divulgação

WoodsHole MA MobileDNA Sep3-5

This is a final reminder that the August 1 deadline to submit abstracts for talk consideration and to apply for financial support at the meeting "Mobile Genetic Elements: in silico, in vitro, in vivo" (September 3-5, 2015, Woods Hole, MA) is only ten days away. Poster abstracts can be submitted until the registration closing date (August 15). Special emphasis will be placed on the evolutionary history of transposable elements in different systems, and the impact of mobile DNA on genome evolution.

To register, please go to: http://www.mbl.edu/-conferences/events/mobile-genetic-elements

or copy and paste the following link into the browser (doesn't always work as hyperlink): https:/-/ws3.mbl.edu/iebms/wri/wri_p1_display.aspx?oc=-10&cc=MOBILEDNA We look forward to seeing you in Woods Hole in September!

Organizers: Phoebe Rice (University of Chicago) Irina Arkhipova (Marine Biological Laboratory):

"iarkhipova@mbl.edu" <iarkhipova@mbl.edu>

GradStudentPositions

AarhusU EvolutionaryAdaptation

Applications are invited for a PhD fellowship/scholarship at Graduate School of Science and Technology, Aarhus University, Denmark, within the Bioscience programme. The position is available from 1 November 2015 or later.

Title:

Nutritional stress and thermal adaptation

Research area and project description:

Evolutionary genetics, ecophysiology and molecular biology

The PhD student should study effects of variable nutritional regimes and interactions between nutrition, temperature and genotype on stress resistance and life history traits using Drosophila as a model organism. It is intended to use rearing and test conditions that are ecological relevant making the studies of strong interest from ecological and evolutionary perspectives. Relevant molecular work should complement organismal phenotypic analyses, possibly followed up by the application of relevant omics techniques.

The work will be done under the supervision of Prof. Volker Loeschcke (AU) in collaboration with Prof. MSO Torsten N. Kristensen from Aalborg University and in interaction with PhD students/post-docs Mads F. Schou and Tommaso Manenti and supported by grants from the Danish Natural Research Council (the project will be funded by grants of Natural Science Research Council to Volker Loeschcke (2/3) and Torsten Nygaard Kristensen (1/3)).

Qualifications and specific competences:

A Master's degree in Bioscience, Biotechnology or similar or a bachelor's degree in a relevant subject are possible backgrounds. A strong interest in experimental as well as analytical work is required, and experience with the model organism Drosophila is a clear advantage.

Place of Employment and Place of Work:

The place of employment is Department of Bioscience, Aarhus University, Denmark, and the place of work is the section for Genetics, Ecology and Evolution, Ny Munkegade 114-116, 8000 Aarhus C, or for part of the time at Department of Biotechnology, Chemistry and Environmental Engineering, Section of Biology and Environmental Science, Aalborg University, Fredrik Bajers Vej 7H, DK-9220 Aalborg East, Denmark

Contacts:

Applicants seeking further information are invited to contact:

Volker Loeschcke, phone: +45 2899 2368, e-mail: volker@bios.au.dk, or Torsten Nygaard Kristensen, phone: +45 61463375, email: tnk@bio.aau.dk, for further information about the position.

Application procedures:

Before you apply:

- Information and attachments:

Please be aware that you must have all relevant appendices, attachments, addresses for referees, etc. ready when you apply, as the entire application must be uploaded to the system in one go.

- Documentation of language skills:

If English is a secondary language it is required that your English qualifications are documented. The English language requirement at Graduates School of Science and Technology is comparable to an English B level in the Danish upper secondary school (gymnasium).

English language qualifications comparable to an English B level is documented by one of the following tests:

- TOEFL test, minimum score: 560 (paper-based test) or 83 (internet-based test)

- IELTS (academic) test, minimum average score: 6.5 points

- Cambridge ESOL Examinations: Cambridge Certificate of Proficiency (CPE) Cambridge Certificate in Advanced English (CAE)

When to take the test and how to upload the documentation:

The test result must not be more than two years old at the time of application.

The English language test should be taken before applying for admission and uploaded under language skills documentation in the online application form.

It is possible to apply for admission before you have taken the test. In this case documentation stating that you have signed up for a test (please state expected submission date) must be uploaded. If the test result is not part of the original application the test result is to be sent to sphd@psys.au.dk no later than one month after the application deadline.

The following applicants are exempted from documenting their English qualifications/taking a test:

- Applicants with citizenship from the following countries Australia, Canada, Ireland, New Zealand, United Kingdom, United States, or one of the Nordic countries (Denmark, Finland, Iceland, Norway or Sweden).

- Applicants with a Bachelor'sâs or Master's programme completed in Australia, Canada, Ireland, New Zealand, United Kingdom, or United States.

- Applicants able to document that English was the language of instruction during their Bachelor's and/or Master's programme. This must be documented by uploading an official document from the institution stating this under language skills documentation.

The programme committee may request further information or invite the applicant to attend an interview.

How to apply:

1) Find the application form:

Go to http://talent.au.dk/phd/scienceandtechnology/-opencalls/

— / —

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

AMickiewiczU Poland lncRNAEvolution

PhD studies available at Adam Mickiewicz University in Poznan, Poland

A PhD position is available within a grant from National Science Centre entitled "The regulatory roles of long non-coding RNAs in the context of RNA:RNA interactions" (2014/15/D/NZ2/00525). The project is centered around long non-coding RNAs (lncRNAs), including prediction of novel lncRNAs, deciphering their functions, expression estimation using next-generation sequencing data, evolutionary analyses and developing biological databases. Moreover, laboratory tests will be performed to provide experimental evidence for selected predictions. As a result, it is required that the candidate possesses basic knowledge in the area o molecular biology, while experience in bioinformatics and/or programming skills will enhance the application greatly.

A short description of the project is available at: http:/-/rhesus.amu.edu.pl/fg/Project_short_version.pdf Requirements:

- Masters degree in biological sciences

- Knowledge of basics of molecular biology

- Fluency in English

- Writing and editing scientific texts

- Optionally: programming skills, experience in bioinformatics

Conditions:

- A scholarship from National Science Centre of 3000 PLN/month

- Term of scholarship: 36 months

Candidates are asked to submit their applications at miszcz@amu.edu.pl, including:

- Motivation letter

- Curriculum Vitae

- At least one reference letter

- Any additional documents that might enhance candidate's application

Deadline: September 1st, 2015.

Best regards,

MichaÅ SzczeÅniak, PhD

Adam Mickiewicz University in Poznan, Poland

Michal Szczesniak <szczesniak.pl@gmail.com>

BielefeldU MammalNatHist

PhD studentship: the natural history of inbreeding in a cooperative mammal

Supervisors: Dr. Joe Hoffman (Bielefeld University, Germany) and Dr Hazel Nichols (Liverpool John Moores University, UK)

This PhD studentship will investigate the causes and consequences of inbreeding in the banded mongoose Mungos mungo; a cooperatively breeding African mammal. Recent studies (Nichols et al 2012, Nichols et al 2014) have shown that inbreeding occurs regularly in this species, with around 9% of pups being the product of father-daughter or brother-sister matings. This frequency of inbreeding is highly unusual in a wild population, so this species presents us with a rare opportunity to investigate the causes and consequences of inbreeding.

The studentship will address the following questions:

1. What are the drivers of inbreeding? In particular, what are the social factors that shape inbreeding behaviour, and whether the propensity to inbreed is heritable?

1. Is inbreeding avoided, and if so, how? Here, you will investigate whether banded mongooses may be able to recognise relatives on the basis of dispersal, familiarity or phenotype matching (e.g. scent).

1. What are consequences of inbreeding in a cooperative mammal? Here, you will explore the tension between inbreeding depression and kin- selected helping behaviour. At its most basic level, inbreeding increases relatedness between group members, which may in turn increase the benefits of cooperation. Consequently, inbreeding could have important impacts on the distribution of helping behaviour within social groups.

During your PhD, you will use multigenerational data from a long-term study of the banded mongoose. We will exploit a large existing molecular dataset of around 2000 individuals genotyped at 40 microsatellite loci together with a large multigenerational pedigree. This will be used to establish levels of inbreeding and relatedness, which in turn will be linked to detailed individual-based behavioural and phenotypic data collected continuously over almost two decades. There will also be the opportunity for fieldwork at the study site in Uganda.

We seek a bright and highly motivated student who holds a good first degree and an M.Sc. or equivalent in a relevant topic (e.g. animal behaviour, evolutionary, conservation or quantitative genetics). The ideal candidate will have strong quantitative skills (including proficiency in R) and ideally some experience of working with pedigree data. The candidate should 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 jointly registered at the Department of Animal Behaviour at Bielefeld University, Germany (www.uni-bielefeld.de/biologie/vhf/index.html) and the School of Natural Sciences and Psychology, Liverpool John Moore's University (LJMU), UK (https://www.ljmu.ac.uk/about-us/faculties/faculty-of-science/school-of-natural-sciences-and-psychology). The department of Animal Behaviour in Bielefeld 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 School of Natural Sciences at Liverpool John Moores University is a diverse, interdisciplinary School with almost 100 academic staff. We have excellent facilities, with a large suite of newly refurbished molecular labs, and a wide range of expertise crossing the fields of behaviour, genetics, biochemistry and neurobiology. Both Universities offer a supportive environment with regular seminars, research group meetings and academic events. You will also have the opportunity to interact with cooperation partner Prof Mike Cant (University of Exeter), and to attend regular conflict and cooperation group-meetings at the University of Cambridge.

Bielefeld is a small city 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. Liverpool is a large, dynamic and cul-

tured city with a UNESCO world heritage water-front. It is an affordable and pleasant city to live in and is also close to the attractive beaches and nature reserves of the Wirral and Sefton Coast.

You will spend approximately half of your time in Bielefeld and half in Liverpool (although you will have some flexibility here). A joint PhD will provide you with an excellent opportunity for international travel

— / —

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

DeakinU ParrotDiseaseEvol

We are seeking two outstanding, highly motivated PhD candidates to work on the Australian Research Council (ARC) Linkage funded research project "Threats of avian pathogens to endangered parrots and human health: developing and utilizing tools for risk reduction". This project commencing in 2015, is a partnership between Deakin University's Centre for Integrative Ecology, Deakin University's Medical School, Zoos Victoria, the Victorian State Government's Department of Environment and Primary Industries, Charles Sturt University and the Geelong Centre for Emerging Infectious Diseases.

Emerging infectious diseases are among the most significant threats to conservation, agriculture and public health worldwide. Among these are two globally significant avian pathogens, Chlamydia psittaci and Beak and Feather Disease Virus. Both pathogens infect primarily parrots, which are also amongst the most highly threatened bird groups in the world. We will study these pathogens in a range of Australian parrot species, focussing in particular on the crimson rosella as a model species, and the critically endangered orange bellied parrot. The aims of this research program are to determine transmission dynamics and the role of environmental reservoirs of infection, quantify the fitness costs of infection, and test the roles of genetic diversity of both hosts and pathogens in infection and disease emergence. We also aim to determine the extent to which zoonotic transmission of C. psittaci to free-range poultry or humans is related to infection in wild birds.

PhD Project 1: This PhD project will be primarily field based and will involve the collection of samples from wild birds and their environments (e.g. nest sites) and measure breeding success and survival. This project may involve work on several Australia parrot species but with a focus on crimson rosellas (Platycercus elegans).

PhD Project 2: This PhD project will focus on genetic analysis of parrot DNA samples to identify infected individuals using PCR-based assays and to sequence pathogens and their host birds to elucidate transmission pathways and the roles of genetic diversity in infection and disease progression. The samples will be derived from wild parrot populations, including the critically endangered orange-bellied parrot and other species implicated in possible zoonotic transmission to humans or free-range poultry. There will also be some scope for field work in this project.

Both projects will be working with Professor Andy Bennett, Dr Matt Berg, Dr Ken Walder, and where appropriate, other members of the research grant team. For further information on the research group, see: http://www.deakin.edu.au/profiles/andy-bennett http://cie-deakin.com/ http://www.deakin.edu.au/research/mmr/facilities/metabolic-research-unit Some recent publications by other PhD students in our group are: * Eastwood et al. (2014) Phylogenetic analysis of beak and feather disease virus across a host ring-species complex. Proceedings of the National Academy of Sciences USA 111 (39): 14153-14158 doi 10.1073/pnas.1403255111 * Mihailova et al. (2014) Odour-based discrimination of subspecies, species and sexes in an avian species complex, the crimson rosella. Animal Behaviour 95: 155-164 * Ribot et al. (2012) Learned vocal variation is associated with abrupt cryptic genetic change in a parrot species complex. Plos One e50484 * Pedler et al (2014) Extreme Nomadism in desert waterbirds: flights of the banded stilt Biology Letters 10: 20140547 http://dx.doi.org/10.1098/rsbl.2014.0547 The Research Environment: We offer exciting field work and lab work opportunities relevant to conserving species at risk of extinction, and with implications for human health. We offer connections with industry, government and community organizations in the growing fields of disease ecology and One Health. You would be based in the Centre for Integrative Ecology at Deakin University's Geelong campus (Victoria), working with vibrant research teams including multiple weekly seminars, weekly paper discussion groups, and fortnightly lab group meetings. Deakin hosts one of the largest ornithological research groups in the southern hemisphere, and consistently receives high rating in the Excellence in Research for Australia evaluations. Excellent facilities are available for these projects, including a 300m2 new aviary, modern lab and offices, well equipped 4WDs

for fieldwork, and excellent statistical support. We encourage student to attend conferences, and students receive at least $3,000 for conference attendance.

— / —

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

JamesCookU Chytriiomycosis

2 PhD opportunities to study virulence of chytridiomycosis at James Cook University, Townsville, Queensland, Australia

Chytridiomycosis has caused amphibian declines and extinctions globally as it has spread through naïve populations. It is now endemic in much of its suitable range in Australia where it still causes high mortality rates and threatens amphibian biodiversity. We have funds to investigate mechanisms of virulence and how virulence of Batrachochytrium dendrobatidis (Bd) is evolving as it adapts to new habitats. One project is focussed on how Bd causes disease and will involve bioassays, toxin identification and possibly gene knockouts. The second project involves comparing Australian Bd strains to assess growth characteristics and virulence. Both projects may involve frog transmission experiments. The students will be able to pursue areas of interest within this framework.

The candidates will be part of the enthusiastic and supportive One Health Research Group at JCU, see http://www.jcu.edu.au/cphmvs/public-health-tropical-medicine/JCU_10 7907.html and Facebook:https://www.facebook.com/onehealthresearchgroup/ .The projects are multidisciplinary and involve collaborators such as Qld Institute of Medical Research in Brisbane. The outcomes of the projects are likely to lead to the improved conservation of amphibian biodiversity and may contribute to theories on host/pathogen dynamics.

The selected applicants would need to apply for an APA or international PhD scholarship (due 31 Aug). Please see http://www.jcu.edu.au/grs/scholarships/index.htm Ideal PhD candidates will have: 1^ st class honours or equivalent research credentials in a relevant discipline such as biology or veterinary science majoring in microbiology, biochemistry, molecular biology or pathology. 2. Demonstrated publication record in high impact journals 4. Demonstrated interpersonal and communication skills.

Please send CV, cover letter and 2 reference letters to Lee.Berger@jcu.edu.au and Alex.Roberts@jcu.edu.au. Assessments of submissions begin 15 July.

Thank you, Tiffany

Tiffany A. Kosch Postdoctoral Research Fellow College of Public Health, Medical, and Veterinary Sciences James Cook University Townsville, QLD 4811 AUS Tel: +61 89 360 6600 Email: tiffany.kosch@gmail.com

Tiffany Kosch <tiffany.kosch@gmail.com>

LeibnizInst EvolutionaryDiseaseEcol

The Leibniz Institute for Zoo and Wildlife Research (IZW) in the Forschungsverbund Berlin e. V. (www.izw-berlin.de) together with the Research Institute of Wildlife Ecology (FIWI) at the University of Veterinary Medicine, Vienna (www.vetmeduni.ac.at/fiwi), the Weierstraß Institute for Applied Analysis and Stochastics (WIAS, www.wias-berlin.de), the Institut for Virology of the Freie Universität Berlin (FU, www.vetmed.fu-berlin.de) and the Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB, www.igb-berlin.de) have formed a consortium to implement the AQUAVIR project funded by the Leibniz Association.

Water is required for life. We have accumulated evidence suggesting it may be an overlooked viral vector. In climatic zones with seasonally limited precipitation such as east Africa and central Asia, animals congregate at high densities at scarce water sources. We hypothesize that viruses shed in water in this ecological setting would gain a fitness advantage if they evolved traits permitting the retention of their infectivity in water and a reduction in host specificity. The AQUAVIR project will determine whether water is a significant viral vector and how viruses behave mechanistically in such settings, and develop mathematical models to understand the epidemiology and evolution of this phenomenon. We therefore seek to fill the following position: doctoral student in evolutionary disease ecology: African waterholes

Specific tasks: Determine the distribution, persistence and species usage of transient water sources; determine the effect of water source characteristics on virus presence; non-invasively determine if physiological stress, reproduction or lactation are correlated with virus excre-

tion in zebras; analyse environmental DNA of water samples to compare genetic diversity of potential viral host sequence diversity obtained directly from animals compared to their drinking sources. This is a team project consisting of 2 doctoral students and 2 postdoctoral researchers with the overall goal of understanding the potential role of water as a viral vector. However, each position represents an independent project. Though independent, the successful candidate will be expected to collaborate intensively with all members of the team.

Requirements: A completed master's/diploma degree in biological sciences; clean driver's licence; competence in statistical methods; ability to work independently in challenging environments and to interact with scientists from a wide variety of fields; strong interest in wildlife, conservation and evolutionary biology; a background in ecology. Those candidates with previous experience with wildlife, experience in field research and off-road driving experience will have an advantage.

The position will be supervised by Prof Alex Greenwood (IZW Dept of Wildlife Diseases) and Dr Marion L East (IZW Dept of Evolutionary Ecology).

Applications and working environment

In our consortium we offer state-of-the-art methodology and a stimulating international research environment within an interdisciplinary, collaborative context. The doctoral positions are initially limited to two years, with the possibility for extension to a maximum of three years. The position will start on September 1, 2015. Salary is according to TVöD (65%). As a member of the Leibniz Association, and lead institution of the AQUAVIR consortium, the IZW is an equal opportunity employer, determined to increase the proportion of women in successful scientific careers, and particularly encourages women to apply. Preference will be given to disabled applicants with the same qualifications.

Enquiries or questions should be directed to Prof. Alex Greenwood, email: greenwood@izw-berlin.de or Dr. Marion East, email: east@izw-berlin.de.

Please email complete application documents as a single pdf-file including a letter of motivation, CV, copies of relevant degrees, and names and contact details of two referees as soon as possible but no later than August 17, 2015 via the IZW's online-job-market (button "Apply online").

Stephanie Vollberg

Personalsachbearbeiterin Abteilung Verwaltung/Technische Dienste/Bibliothek

Leibniz-Institut für Zoo- und Wildtierforschung (IZW) im Forschungsverbund Berlin e.V. Alfred-Kowalke-Str. 17 10315 Berlin DEUTSCHLAND

Postfach 70 04 30, 10324 Berlin

Tel.: + 49 - 30 - 5168107 Fax.: + 49 - 30 - 5126104 http://www.izw-berlin.de :: Forschung für den Artenschutz ::

"Vollberg, Stephanie" <vollberg@izw-berlin.de>

MNHN Paris GiraffaEvolution

You will find below a text describing an open PhD position available at the Museum National d'Histoire Naturelle (Paris, France).

A 3-year Phd position on Comparative genomics of extant and past populations of giraffes is available at the Department of Systematic and Evolution of the National Museum of Natural History in Paris, France (UMR CNRS 7205). The project will integrate genomic data on museum specimens for studying taxonomic delimitation. Several historical specimens will be studied, including the famous Zarafa, the first living giraffe imported in France in 1826. The analyses will allow us to test the existence of recent or ancient gene flow between populations and to better understand the phylogeography of giraffes. Our results will have important consequences for conservation of subsisting wild populations and on the management of populations maintained in captivity.

We are looking for a student who is highly motivated and interested in evolutionary biology, genomics, and ancient DNA. Experience in molecular laboratory techniques, working with NGS data and phylogenetic analyses are all potentially relevant. Applicants must have a Master's degree or equivalent in a relevant field of biology. The working language in the laboratory is English. French skills, although helpful, are not essential.

Complete application, including a CV, copies of educational certificates, a statement of research interests (not exceeding two pages), letters of recommendation, and contact details of two referees (name, e-mail and telephone number) should be sent to Alexandre Hassanin (hassanin@mnhn.fr) and Michel Saint Jalme (mst-jalme@mnhn.fr) before the 15th of september 2015. Interviews with selected candidates will be arranged. The start date is 1st of November 2015.

Best regards,

Alexandre

Alexandre Hassanin Museum national d'Histoire naturelle Institut de Systematique, Evolution, Biodiversité (ISYEB) UMR 7205 MNHN CNRS UPMC 55, rue Buffon - CP NÂ 51 75005 Paris - France Tel: 33 (0)1 40 79 56 93 Fax: 33 (0)1 40 79 30 63 hassanin@mnhn.fr http://isyeb.mnhn.fr/HASSANIN-Alexandre Hassanin <hassanin@mnhn.fr>

MNHNParis GiraffaEvolution

An open PhD position is available at the Muséum National d'Histoire Naturelle (Paris, France).

Best regards, Alexandre

Alexandre Hassanin Muséum national d'Histoire naturelle Institut de Systématique, Evolution, Biodiversité (ISYEB) UMR 7205 MNHN CNRS UPMC 55, rue Buffon - CP NÂ 51 75005 Paris - France

Tel: 33 (0)1 40 79 56 93 Fax: 33 (0)1 40 79 30 63 hassanin@mnhn.fr

http://isyeb.mnhn.fr/HASSANIN-Alexandre "hassanin@mnhn.fr" <hassanin@mnhn.fr>

MonashU 2 EvolutionaryChange

Two PhD projects will be offered from 2016 in the Evolutionary Ecology of Environmental Change research group at Monash University, Australia (https://-sites.google.com/site/chapplelab/). The research group uses field studies, field- and lab-based experiments, comparative analyses, morphological analyses and molecular approaches to examine the impact of past, current, and future environmental change on phenotype, life-history and distribution. We use squamate reptiles as model systems.

The successful students will be able to develop a project in one of three research areas:

Egernia Group lizards. The Egernia Group (Egernia, Liopholis, Lissolepis, Bellatorias, Tiliqua, Corucia) is an endemic Australasian lineage of large-sized skinks that exhibit stable social aggregations and long-term social and genetic monogamy. We are examining the evolution of sociality and mating systems within the group, along with studies on the evolution and maintenance of dietary preferences and colour pattern polymorphism. This project will be supported by an ARC Discovery Grant, and involve collaboration with Geoff While (University of Tasmania) and Mike Gardner (Flinders University). Macroecology and comparative analyses. We use comparative methods to investigate the ecology and evolution of squamate reptiles. Our research is focused in areas including i) conservation and extinction risk, ii) the interplay between morphology, ecology, ecophysiology, life-history and the environment, and iii) invasion biology and biosecurity. This project will involve collaboration with Shai Meiri (Tel Aviv University, Israel; http://shaimeirilab.weebly.com/). Delicate skink (Lampropholis delicata). The delicate skink is one of the most abundant and widespread vertebrates in eastern Australia, occurring from North Queensland to Tasmania. It is also the only Australian lizard that has successfully established overseas, with invasive populations in the Hawaiian Islands, New Zealand, and Lord Howe Island. We are examining the role of behaviour in the introduction process, intraspecific hybridisation in the invasive range, thermal biology, learning and cognition, colour pattern polymorphism, and its impact on native species. In addition, we are completing a range of comparative analyses on other widespread and range-restricted members of the genus.

Interested students should email their CV (including details of two academic referees), academic record, and research interests to Dr David Chapple (David.Chapple@monash.edu, Ph: 03 9905 3015) by Monday 28ˆth September 2015. For each project, one applicant will be selected to complete and submit an online PhD scholarship application by the 31ˆst October deadline (a mid-year scholarship round [31ˆst May] may be available for highly-qualified students who are unable to make the October deadline).

Students will need to successfully obtain a PhD scholarship. Australian and New Zealand citizens can apply for an Australian Postgraduate Award (APA) or Monash Graduate Scholarship (MGS). International students can apply for an Monash International Postgraduate Research Scholarship (MIPRS) or Monash Graduate Scholarship. For further information regarding PhD entry requirements see: http://www.monash.edu/migr/-future-students/support/scholarships David Chapple Senior Lecturer in Evolutionary Ecology

School of Biological Sciences (25 Rainforest Walk)

Monash University

Clayton VIC 3800, Australia

Ph: +61-3-9905 3015

Email: david.chapple@monash.edu

Website: https://sites.google.com/site/chapplelab
David Chapple <david.chapple@monash.edu>

NHM UOslo EvolutionaryGenomics

Natural History Museum Doctoral Research Fellowship in Evolutionary Genomics and Zoology

A 4-year PhD position (SKO 1017) is available at the Natural History Museum (NHM), University of Oslo.

The Natural History Museum, University of Oslo, is the largest of its kind in Norway with approximately 150 employees engaged in research, teaching, curating collections and popularizing the sciences of botany, mycology, zoology, paleontology and geology.

Job description

The subject of the PhD project will address the genomic foundations of cryptic speciation in marine interstitial invertebrates. The detection of cryptic species is exponentially increasing in the past two decades. This includes many interstitial species living in the space between the sand grains, for which the "Meiofauna paradox" is long known. That is, morphological identical species with very limited dispersal capacities exhibit a global distribution. The paradox is related to cryptic speciation, but several aspects are unknown. 1) What is driving speciation? 2) How strongly is gene flow limited between populations? 3) Does sympatry of cryptic species occur? 4) Why are the species morphologically static? These questions shall be addressed using European populations from the interstitial polychaete Stygocapitella subterranea as a model system. Population and evolutionary genomic approaches will be explored to assess gene flow, signatures of different selection regimes and phylogeography.

The project will be based on morphological and molecular methods. NHM have access to modern DNA-laboratory facilities. The PhD will be associated with the professor of evolutionary genomics at NHM, Torsten Struck.

Requirements * We seek a person with strong motivation for evolutionary genomics. * The candidate must be skilled in laboratory practices relating to DNA extraction, next-generation sequencing of genomes including RAD sequencing and preferably working with small amounts of tissue material (i.e., whole genome amplification). * Very good computing skills and background in bioinformatics are required for handling and analyzing large data sets emerging from next-generation sequencing approaches. * General knowledge about annelid morphology and identification of interstitial species will be advantageous. * Collaboration and communication skills (including written and spoken English) * Applicants must hold a Master's degree or equivalent in biology or related disciplines like bioinformatics.

We offer * Salary based on salary level 50-55 (NOK 430 500 - 467 700 per year) * A challenging and friendly working environment * Membership in the Norwegian Public Service Pension Fund * Attractive welfare benefits

The purpose of the fellowship is research training leading to the successful completion of a PhD degree. The fellowship requires admission to the PhD program at the Faculty of Mathematics and Natural Sciences. Appointment to a research fellowship is conditional upon admission to the Faculty's research training program. A plan for the research training must be submitted no later than two months after taking up the position, and the admission approved within three months.

Compulsory service, duty work, shall represent 25% of the total hours of work.

Evaluation of the application

In assessing applications, particular emphasis will be placed upon the academic and personal ability of the candidate to complete the project within the given timeframe and write a PhD thesis under supervision. Interviews with selected candidates will be arranged. Please also refer to the English translation of regulations pertaining to the conditions of employment for research fellowship positions:

http://www.uio.no/english/research/doctoral-degree-and-career/phd/appli cation/

http://www.mn.uio.no/english/research/doctoral-degree-and-career/phd-pr ogramme/index.html

A good command of English is required.

http://www.mn.uio.no/english/research/doctoral-degree-and-career/regula tions/proficiency-requirements.html

The application must include: * Application letter * CV (summarizing education, positions and academic work, scientific publications and other relevant activities) * Copies of educational certificates and letters of recommendation * List of publications and academic work that the applicant wishes to be considered by the evaluating committee * A one page explanation of how a PhD in evolutionary genomics will fit into the applicant's career

plan * Names and contact details of 2-3 referees (name, relation to candidate, e-mail and telephone number)

— / —

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

SwanseaU EvolMicrobialGenomics

PhD studentship in Evolutionary Microbial Genomics and Immunology (Swansea University, UK)

General description: Research will be conducted under the direct supervision of Professor Samuel K. Sheppard and Dr. Thomas Wilkinson and based in the Department of Medical Microbiology and Infectious Diseases at the Swansea University School of Medicine (United Kingdom). The successful student will join a team of multi-disciplinary scientists working in the MRC Cloud Infrastructure for Microbial Bioinformatics (CLIMB) Centre and the BBSRC-funded medical mass spectrometry team. More information on the research group can be found on http://www.sheppardlab.com/ . Project details: The project will focus and link two major areas of host pathogen interactions: i) the cellular response of the organism and host; ii) the population genomics of microbes so that host responses specific to a species or evolutionary conserved lineages of pathogens can be identified.

Early and rapid detection of infection is a major goal of Clinical Microbiology. In particular an ability to differentiate between sepsis and other non-infectious causes of systemic inflammation such as Systemic Inflammatory Response Syndrome (SIRS) is particularly pertinent as it will determine antibiotic administration. Recently, we and others have identified 25-hydroxycholesterol as an important inflammatory mediator regulating the production of pro-inflammatory IL-1 driven responses. To date these studies have linked inflammation with the antiviral interferon response. In this context less is known about 25-hydroxycholesterol and bacterial infection. This project will investigate whether major bacterial pathogens, including Staphylococcus aureus, Campylobacter and Escherichia coli generate unique metabolic signatures of 25-hydroxycholesterol and its degradation products. We will use the whole genome data of over 5,000 bacterial isolates organised in our online databases to select the major disease causing clones for host / pathogen whole blood modelling prior to Mass Spectrometry analysis of isolated sera.

Requirements: Enthusiasm and practical experience in evolutionary biology, immunology, microbiology, molecular techniques and computer-based genetic analysis is necessary but training and support will be provided to strengthen these areas. The successful candidate will be highly motivated, creative, independent and have a good degree in immunology, molecular biology, microbiology, bioinformatics, genetics or ecology (BSc or MSc, 2:1 or 1st only). Previous experience in a molecular biology/immunology laboratory or in bioinformatics research is also strongly desirable. Good English writing and oral skills are essential.

Details: - The duration of the studentship is 3 years (2016-2019). - The position is open until filled, but a preferred deadline for application is 30th September 2015 to allow for registration to start in the Winter semester. - The position is fully open for UK and EU students only. - Salary will be commensurate with regular UK postgraduate stipends, i.e. ?13,863/year (~?18,425/year), tax-free. - Tuition fees are fully covered by the studentship. - Students will also have opportunities to attend national and international conferences during their candidature and a chance to compete for internal Medical School travel bursaries.

Application: Please contact us (sheppardlab@gmail.com) for applications (please attach CV and describe motivation). More details about the laboratory: http://www.sheppardlab.com/ Dr. Guillaume Méric NISCHR Health Research Fellow Medical Microbiology and Infectious Diseases Swansea University Medical School ILS1 Building Room 140 (Floor 1; MRC CLIMB Centre) Singleton Park, Swansea SA2 8PP United Kingdom ~ E-mail: g.meric@swan.ac.uk Phone: +44(0)1792-60-6058 ~ Sheppard Laboratory: http://www.sheppardlab.com/ MRC CLIMB Consortium: http://www.climb.ac.uk/ Guillaume Méric <g.meric@swansea.ac.uk>

TGAC UK GenotypeMonitoring

http://www.tgac.ac.uk/studentships/towards-genotype-based-monitoring-for-fungicide-resistance-management/ Project Details

Title: Towards genotype-based monitoring for fungicide resistance management

Supervisor: Dr Diane Saunders

Department: The Genome Analysis Centre Contact email: diane.saunders@tgac.ac.uk Co-supervisor: Reference: SAUNDERS_G15ICASE Application deadline: 2 August 2015 Start date: October 2015 Project type: PhD - 4 year Project Funding: BBSRC ICASE

Project Summary

Evolved resistance to fungicides is a major threat to global food security. Fungicide resistance increases disease losses and imposes higher costs on growers and the fungicide industry. The implementation of validated resistance management strategies for the maximisation of the effective life of existing and new fungicides is of the upmost importance. These strategies involve the use of mixtures and alternation so that selection and rate of resistance evolution is reduced.

A key aspect of these strategies is the monitoring of pathogen populations and epidemics so as to measure the prevalence and impact of resistance. To date, monitoring strongly relates to phenotypic data; i.e. field trials are carried out and pathogen isolates are tested for decreased sensitivity. Whilst there will always be a need for phenotyping, the cost in time and money limits the effectiveness of such methods.

Recent advances in gene and genome sequencing methods have brought us to the point where genotypic monitoring might be considered as a first line of investigation. The Saunders group at The Genome Analysis Centre in partnership with the John Innes Centre have recently developed an effective method based on next-generation sequencing techniques to genotype pathogen populations at high resolution. The PhD student will use these existing techniques to develop an effective, rapid genotyping platform specifically focused on monitoring genes targeted by fungicides for mutations that have been shown to induce resistance. Furthermore, the implications of any novel mutations will be investigated using lab-based assays established in the Oliver group at Curtin University, Perth, Western Australia.

This project provides a unique opportunity for the student to undertake multidisciplinary research, embedded within The Genome Analysis Centre that is a hub for innovative bioinformatics to support all computational aspects of the project and within the John Innes Centre that is an international centre of excellence in plant science to support laboratory-based experiments. The student will also work closely with the Oliver group at Curtin University who are renowned experts in the field of fungicide resistance. In addition, as an ICP CASE student they will also work closely with Syngenta a world leader in fungal disease control, at their Stein Laboratory in Switzerland. The student will spend a minimum of 3 months at Syngenta during the course of their PhD.

Further Information

This 4-year BBSRC funded CASE studentship is available to successful candidates who meet the UK Research Council eligibility criteria including the 3-year UK residency requirements. These requirements are detailed in the BBSRC eligibility guide which can be found below. In most cases UK and EU nationals who have been ordinarily resident in the UK for 3 years prior to the start of the course are eligible for a full-award. Other EU nationals may qualify for a fees only award. Below is the link to the BBSRC PhD studentship eligibility guidelines which all candidates should check to confirm their eligibility for funding. The current stipend for 2015/6 is Â£14,057 per annum.

For full details on eligibility (qualifications and residence criteria) see the BBSRC Guide to Studentship Eligibility: http://www.bbsrc.ac.uk/documents/studentship-eligibility-pdf/ This studentship is open for application. For further information and an application form, please visit the How to Apply page on our website: http://www.tgac.ac.uk/dtp-studentships/ For further information please contact graduates.nrp@nbi.ac.uk

Hester van Schalkwyk <hestervs@gmail.com>

TrentU AdaptiveGenomics

Graduate Students in Adaptive Genomics

A collaborative research program on characterizing genes important for adaptation to climate change is seeking MSc and PhD students with strong quantitative skills. This project is a partnership between academic and

provincial government agencies and builds on a multi-year dataset. Students with interest or experience in conservation genetics, molecular ecology, landscape ecology/genetics, molecular biology and/or bioinformatics will be considered. Specific projects students will be involved in range from assessing the adaptive differences and hybridization between northern and southern evolved species, such as the northern and southern flying squirrels and deer and white-footed mice, to characterizing the spatial genetic structure and environmental variables influencing populations within these species. Projects will build on neutral genetic markers and expand into genome-wide surveys to identify single nucleotide polymorphisms (SNP) analyses, functional genes and mitogenomics for larger-scale population genomic profiling. Applicants should submit a CV, a statement of research interests, and the names and contact information for three references.

Please submit applications to:

Dr. Paul J. Wilson Canada Research Chair in DNA Profiling, Forensics & Functional Genomics Trent University, 1600 West Bank Drive, Peterborough, ON, K9J7B8 Phone 705.748.1011 ext. 7259 Website: www.wilsoncrcresearch.ca pawilson@trentu.ca

or

Dr. Jeff Bowman Research Scientist Wildlife Research & Monitoring Section Ontario Ministry of Natural Resources Trent University DNA Building 2140 East Bank Drive Peterborough, ON, K9J 7B8 Phone 705-755-1555 jeff.bowman@ontario.ca http://people.trentu.ca/jebowman "jillianlalor@trentu.ca" <jillianlalor@trentu.ca>

UAntwerp EvolutionParentalCare

The Faculty of Sciences, Department Biology-Ethology of the University of Antwerp seeks to fill the following vacancy (m/f): Ph.D. student in Behavioural Ecology

Job description: Parental care increases offspring survival, but entails fitness costs for the parents too. The resulting trade-off between investing in current offspring or in self-maintenance is a central tenet of life-history theory. But these costs and benefits vary with multiple environmental factors. When adjusting their level of investment, parents therefore have to respond to multiple cues from their ecological and social environment. Phenotypic plasticity, the ability of an individual to alter trait expression in function of the environment, plays therefore a central role. However, flexibility in parenting may sometimes be constrained, e.g. because of consistent individual differences in behavior, such as any form of foraging specialization. Moreover, parental decisions will also depend on the contribution to care by the partner. Parental responsiveness is likely to affect the efficiency of cooperation within pairs, and therewith ultimately reproductive success. In the proposed project we will apply sophisticated cross-fostering experiments in a wild population of individually marked Lesser black-backed gulls, a long-lived migratory species breeding in a heterogeneous environment. We will make use novel GPS tracking devices to investigate parental care in great detail, which we aim to combine with large scale behavioral observations and state-of-the-art physiological measures. We will apply recently developed behavioral reaction norm concepts in order to capture the multidimensional complexity of parental care.

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 doctoral scholarship for a period of two years, with the possibility of renewal for a further two-year period after positive evaluation, the starting date is between 1 October 2015 and 1 January 2016. . 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 plasticity, parent-offspring conflict & co-adaptation) (see https://www.uantwerpen.be/en/staff/wendt-mueller/) . During fieldwork, you will form part of a small research team (2-4 PhD students, 2 field assistants) studying different aspects of gull ecology. . The project is part of an ongoing collaboration with Ghent University (Prof. Luc Lens, Dr. Liesbeth de Neve, http://www.ecology.ugent.be/terec/).

Interested? . Applications may only be submitted online https://www.uantwerpen.be/en/jobs/vacancies/ap/2015bapdocproex206/ , until the closing date August 9th 2015. The interviews will take place from August 17th until September 11th 2015 . For more information, contact Prof. Wendt Müller (Wendt.Mueller@uantwerpen.be)

Kind regards, Josie

Meaney-Ward Josie <josie.meaney@uantwerpen.be>

UCanberra 2 FishEvolution

A PhD project is available at the University of Canberra studying the drivers of fine scale genetic spatial structuring in aquatic organisms in eastern Australia with a focus on the Murray-Darling Basin, Lake Eyre Basin and Clarence River system. Our central aim is to determine the spatial scale at which species are genetically structured in riverine ecosystems. The spatial scale of population substructuring provides indirect estimates of the degree of mixing between populations and the speed at which recolonisation occurs in stream reaches following extirpation events, and so is a crucial component of the management of aquatic ecosystems and of restoration efforts. Despite its importance, genetic research across varying spatial scales is lacking for most aquatic species and river basins. Specifically, this project will address three questions: 1) How does genetic structure within aquatic species vary across the riverine landscape at the spatial scales of river reaches, tributaries, major rivers and drainage basins? 2) Do more complex dendritic riverine networks show greater intra-specific genetic structure than linear systems at the same scale, and if so, why? 3) How has variation in fluvial geomorphic characteristics and current and long-term climatic variation influenced connectivity and the spatial scale in structuring riverine fauna over the last ˜100,000 years?

We are collecting SNP (single nucleotide polymorphism) data for thousands of loci via next-generation sequencing for multiple species including fishes, turtles and shrimps from several focal catchments that have a range of dendritic structures across an aridity gradient with a variety of fluvial geomorphic characteristics and histories.

The options for the specific PhD research questions are somewhat open, but projects would be expected to focus on developing and extending connectivity models that compare different network structures and incorporating and analysis our SNP datasets with these models. A strong background in modelling (knowledge in computer programming, statistical and spatial analysis using R) is important, while knowledge of genetic data, while helpful is not crucial. The PhD project is part of a recently successfully granted ARC Linkage project; the detailed project description is available on request. Students would be supervised by some combination of Bernd Gruber, Peter Unmack, Duanne White or Arthur Georges and others, depending on the final project details.

IMPORTANT POINTS: 1. This project and the PhD candidature will be administered through the University of Canberra. 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 be eligible to be considered for an APA Stipend Scholarship, and would be eligible for exemption from tuition fee payments under the Australian Government's Research Training Scheme (RTS). An APA stipend scholarship is currently valued at $28,549pa. A small number of top-up Scholarships valued at $5,000 pa are also available. 4. If you are not an Australian or New Zealand citizen or Australian permanent resident, unless you are the recipient of a competitive merit based scholarship, you will be liable for upfront fees, at a rate of approximately $AUS 20k p.a.

If you are interested in applying, please send an email to Peter Unmack (peter.unmack@canberra.edu.au) and provide the following information:- (i) an expression of interest, and some general background of your past experience, qualifications, and expertise relevant to this project (ii) a copy of your CV (iii) preferably, copies of all your academic transcripts (BSc and subsequent degrees) to demonstrate which specific subjects you have undertaken.

Peter Unmack Research Fellow Institute for Applied Ecology University of Canberra Australia

peter.mail2@unmack.net

A PhD project is available at the University of Canberra studying the evolutionary origins of sexually-parasitic 'unisexual' lineages in carp gudgeons (Eleotridae: genus Hypseleotris).

Evolution of 'sexual parasitism' in a widespread species complex of Australian freshwater fishes

Vertebrate groups that harbour both sexual and unisexual taxa have been highly prized as testing grounds for a range of big-picture questions in evolutionary biology. However, such groups are extremely rare, and none thus far has provided the optimal mix of biological features required to fully explore these questions. Our project has three general aims for newly-discovered instances of unisexuality in carp gudgeons: (a) establish this group as a powerful vertebrate model for the study of unisex-

uality and of the evolutionary significance of sex, (b) test six 'standard' hypotheses about the evolutionary attributes of vertebrate unisexuals, and

— / —

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

UCollegeCork FishEvolutionaryEcol

PhD STUDENT POSITION IN FISH EVOLUTIONARY ECOLOGY

Alternative life histories: evolutionary ecology and ecophysiology of facultative anadromy in Brown Trout

Understanding how and why individuals develop strikingly different phenotypes and life histories in variable environments is a major goal in evolutionary ecology. It is also a prerequisite for conserving important biodiversity within species and predicting the impacts of environmental change and management interventions on natural populations. This PhD will form part of a larger ERC-funded research program to understand the causes and consequences of âfacultative anadromyâ in brown trout (Salmo trutta), the phenomenon whereby some individuals in a population migrate to the sea for part of their lives, while others remain resident in freshwater and never go to sea.

The aim of this 4-year PhD will be to relate variation in trout life histories to variation in energy acquisition and allocation (i.e. energy budgets). For example, the balance between metabolic requirements during growth and available extrinsic resources has been hypothesised to act as the major physiological driver of migration decisions in species that exhibit partial migration. The work will involve large-scale experiments where trout from different populations are exposed to different environments, in order to understand how genes and environment interactively determine alternative life histories. The project will involve both lab work and field work in Ireland and will apply modern physiological and genetic techniques within an evolutionary ecology conceptual framework.

The student will be supervised by Dr Thomas Reed (School of BEES) and will work in a growing team of salmonid researchers, with a broad network of collaborators across academic and governmental institutions in Ireland and abroad. The student will be based at the School of Biological, Earth and Environmental Sciences (BEES) at University College Cork (UCC) in the south of Ireland, which offers a vibrant and diverse research environment. Cork is a dynamic, cosmopolitan and culturally-diverse coastal city with beautiful landscapes and diverse options for outdoors pursuits on its doorstep.

Candidates should possess at minimum a 2.1 BSc (Hons) degree in a relevant discipline (e.g. Ecology, Zoology, Physiology). Applicants must be self?\motivated with good numerical, communication, organisational and writing skills. Experience working with fish would be advantageous but not essential. The studentship is open to non EU students, though only EU fee rates will be covered.

Informal Enquiries: Please contact Dr Tom Reed (Email: treed@ucc.ie)

Remuneration: This position covers an amount equivalent to EU fee rates (non-EU members may apply but would need to cover extra fees themselves) plus a tax-free stipend of ?18,000 p.a.

To Apply:

To apply please send by email a CV, details of 2 referees, and an accompanying letter of application outlining your relevant experience and why you want to do this studentship to Dr T. Reed, School of Biological, Earth & Environmental Sciences, University College Cork, Enterprise Centre, Distillery Fields, North Mall, Cork, Ireland. E?\mail treed@ucc.ie.

Dates: Application deadline is 31 July 2015. Interviews will be held approximately one week later. Start date early September 2015.

Webpage of PI: http://research.ucc.ie/profiles/D026/-treed General info on fish evolutionary ecology research in Ireland: http://evoecoirishfish.weebly.com/ Dr Thomas E. Reed

Lecturer in Zoology School of Biological, Earth and Environmental Sciences University College Cork, Ireland

Phone: + 353 83 155 3170 http://research.ucc.ie/-profiles/D026/treed "Reed, Thomas" <treed@ucc.ie>

UFirenze Florence PlantBiodiversity

A PHD fellowship will be available in Florence in Plant Biology, project "EXTREME: Biodiversity effect on the functioning of extreme environments." The 3 years position is for a PHD student working by the Laboratories of Plant Biology by the Department of Biology of the University of Florence in a general PHD framework Evolutionary Biology and Ecology organized by the Universities of Ferrare, Firenze and Parma. The selection of candidates will be held in Ferrara. Information about the selection of candidates at the site http://www.unife.it/studenti/dottorato/-modulistica/concorsi/31-ciclo/biologia.pdf The deadline is the 25th August 2015. Starting November 2015. For further info Alessio Papini, Dept Biology Univ. of Florence, e-mail alpapini AT unifi.it

Dr Alessio Papini PhD Department of Biology UniversitÃ di Firenze Via La Pira, 4 Firenze, Italy Managing Director of Caryologia International Journal of Cytology, Cytosystematics and Cytogenetics www.unifi.it/-caryologia Alessio Papini <alessio.papini@unifi.it>

UGreifswald SpeciesRecognitionCommunication

PhD position - Vibrational Communication inMantophasmatodea Applicationdeadline: 26.07.2015

A PhDposition (65% TV-L E13, 3 year contract) is available at the Ernst-Moritz-ArndtUniversität Greifswald, in the group of Dr. Monika Eberhard / Prof. GabrieleUhl, Zoological Institute and Museum, General and Systematic Zoology. Thesuccessful candidate will join the DFG-funded research projectVibrational Communication Signals inMantophasmatodea: Species Recognition, Sexual Selection, and Population Differentiation.

We willinvestigate the vibrational signals of species that occur in severalpopulations at different localities in the Western Cape Region, South Africa, abiodiversity hotspot. Behavioural experiments will be conducted to assess thedecisive cues within vibrational communication calls, which are used forspecies recognition. We will explore if character displacement occurs at siteswhere two or more species occur in sympatry, and investigate the influence ofsexual selection on vibrational signal evolution. Field studies (in cooperationwith University of Cape Town) will allow for optimized seminatural laboratorysetups. Finally, variability of vibrational calls and morphological characters,as well as genetic diversity using microsatellite markers will be investigatedin populations of the same species to reveal the present state of populationdifferentiation of Mantophasmatodea in the Western Cape. This will provideinsight into the role vibrational communication might play for populationdifferentiation and speciation in Mantophasmatodea.Â The highlymotivated candidate will use genetic analyses (microsatellites, sequencing),morphological methods (light microscopy, SEM, microCT), and behavioural trials(video, laser-doppler-vibrometry). Strong background in at least one of theseskills would be advantageous.

Requirements: - ÂM.Sc.degree (or equivalent) in Zoology, Ecology, Behavioural or Evolutionary Biology - Strongbackground in Evolutionary Biology - Practicalexperience in at least two of the following areas: DNA- analysis(microsatellites, sequencing), behavioural studies (field and laboratory; preferablywith invertebrates), Ecology (population dynamics), morphology (SEM, micro-CT) - Verygood English skills (written and spoken) - ÂWillingnessto stay in South Africa for longer time periods (ca. 6 weeks per year) - Experiencein analysis programs for the required data-sets and statistics are an advantage

Theposition is available from October 2015.

For more informationplease contact Monika Eberhard and send your application (letter of motivation,CV, and summary of last final thesis; preferably in one PDF) with the referencenumber 15/Ma13 via email to

Ernst-Moritz-Arndt-Universität Greifswald Zoologisches Institut und Museum Dr. Monika Eberhard J.-S.-Bachstraße 11-1217489 Greifswald E-mail: monika.eberhard@uni-greifswald.de

Monika Eberhard <moni.eberhard@yahoo.com>

UInnsbruck Austria WolbachiaTransinfection

Graduate position_UInnsbruck_Austria.WolbachiaTransinfection

MOLECULAR ECOLOGY, INSTITUTE OF ECOLOGY, UNIVERSITY OF INNSBRUCK PhD student position in Wolbachia transinfection

We seek to hire a PhD student with training in ecological and especially molecular-biological methods; some research experience with arthropods and/or Wolbachia or other bacterial endosymbionts would be an asset but is not required. The position is a 48-months position at the Molecular Ecology group of the Institute of Ecology, starting from 1 October 2015; for details, see below.

Focusing on the Alpine Space, the group's mission is interdisciplinary research, embedded in international collaboration networks. A list of research topics can be found at: http://www.uibk.ac.at/ecology/-forschung/molecular_ecology.html.en . ***Responsibilities*** 1. transinfecting the climate-change study system Drosophila nigrosparsa with Wolbachia 2. characterising endosymbiont phenotype(s), e.g. cytoplasmic incompatibility, sex ratio distortion 3. characterising endosymbiont tropism(s) 4. evaluating endosymbiont influence on host life history traits 5. evaluating endosymbiont influence on host gene expression using Illumina sequencing (RNA-seq) 6. manuscript writing 7. contact and collaboration with scientists at other Austrian and international research facilities 8. teaching 1 hour/week

Selection criteria A. MSc degree or equivalent graduation B. published research experience in biology C. proven lab skills in molecular biology and/or microscopy; skills in handling small and delicate samples D. basic knowledge in bioinformatics, e.g. sequence assembly, GenBank search algorithms, NGS analysis pipelines, scripting E. ability to work as part of a multidisciplinary team F. ability to work independently G. very good knowledge of English

Salary The annual gross salary is Euro 18,634. The contract includes full social (health, unemployment, annuity) insurance and 5 weeks of holidays annually.

Project details In an ongoing project, we have developed the alpine fly Drosophila nigrospasa towards a model system for evolution of heat tolerance in mountain arthropods and have thoroughly characterised its life history traits. We published an annotated transcriptome of the species, and the genome will become available in due course. Maternally inherited bacterial endosymbionts like Wolbachia and Spiroplasma are widespread in insects and able to alter their host's reproduction and fitness. Our lab has key experience in the study of Wolbachia in various hosts and was the organiser of the 8th International Wolbachia Conference in 2014. As far as known today, Drosophila nigrosparsa is free of endosymbionts but likely to come in close contact with other, endosymbiont-infected dipterans due to increasing temperatures in the alpine environment. Thus, natural horizontal transfer of Wolbachia into D. nigrosparsa might occur in the future. The successful candidate will perform an in-depth assay of the bacterial fauna of D. nigrosparsa and transfer Wolbachia (and maybe other endosymbionts) into laboratory strains of D. nigrosparsa using egg cytoplasma microinjection. After successful transinfection, the fly lines will be used to study tropism, phenotypes, and life history trait alterations of the novel endosymbiont/host interaction in the laboratory.

How to apply To apply, please submit via the job portal of the university at http://orawww.uibk.ac.at/-public/karriereportal.details?asg_id_in=8484 : a cover letter, systematic point-by-point replies as to your readiness for the responsibilities and how you meet the selection criteria, curriculum vitae, and complete list of publications. Arrange for at least one letter of recommendation to be sent to <birgit.schlick-steiner@uibk.ac.at>.

Applications must be written in English. The deadline for receipt of all applications is 27 July 2015.

The research institution and its environment Detailed information about the Molecular Ecology group can be found at http://www.uibk.ac.at/ecology/-forschung/molecular_ecology.html.en. The University of Innsbruck has a long-standing and internationally renowned tradition in life sciences and offers a vibrant research atmosphere. It has 28,000 students and 4,500 staff members. Innsbruck is situated in the Alps and very close to Switzerland, Germany, and Italy; scenery and outdoor recreation are fantastic.

More information needed? For more information, please contact: Birgit C. Schlick-Steiner < birgit.schlick-steiner@uibk.ac.at>

Birgit C. Schlick-Steiner Professor of Molecular Ecology Institute of Ecology, University of Innsbruck

— / —

ULausanne Life-history

PhD: Lausanne. Life-history. Theoretical social evolution.

A 5-year Phd position is available in Human Evolution/Cooperation/Life-history/Economics at Department of Ecology and Evolution of the University of Lausanne.

Human life history compared to other primate is marked by an exceptional long lifespan and capacity for individual and social learning. This raises a number of questions pertaining to the co-evolution of life-history, cognition, and cultural transmission. How should individuals trade off allocation of resources to learning, growth, and reproduction? What is the role of ecological and social pressure for investment into increased cognition? How does adaptive cultural knowledge accumulate over lifespan? Do intergenerational transfer and longevity affect this and how?

The aim of the Phd is to study such questions from a theoretical point of view. Applicants should have a master degree in a relevant area (e.g. evolutionary biology, population genetics, economics, game theory, physics, or mathematics), with strong mathematical and computing skills, and a vivid interest in fundamental research.

Inquiries and applications should be sent to Prof. Laurent Lehmann: laurent.lehmann@unil.ch by August 1st, and should include a CV, a one-page statement of research interests, and names of 2-3 referees. Only applications with all these information will be considered. For further information please contact laurent.lehmann@unil.ch

The Department of Ecology and Evolution is a well-funded and vibrant international research institution, with excellent facilities: http://www.unil.ch/dee/ . Laurent Lehmann <Laurent.Lehmann@unil.ch>

UmeaU UngulateEvolution

I am advertising a PhD position in animal community ecology, partly using molecular methods. I think this position could be of interest for the readers of evoldir.

Joris

The department of Wildlife, Fish & Environmental studies (SLU, Umea, Sweden) offers a fully funded PhD project in Animal Community Ecology.

Beyond Moose: community ecology of Sweden's novel diverse ungulate communities

Project description

Sweden's ungulate communities have changed dramatically, resulting from introductions of non-native (e.g., fallow deer) and native ungulates (e.g., wild boar) and expansion of ranges northwards beyond historic distributions due to milder winters. We lack a comprehensive understanding of the functioning of these novel diverse ungulate communities in landscapes modified by humans. The Swedish EPA has funded our program Beyond Moose to increase this understanding and to move from single- to multispecies wildlife management. This also feeds into the international discussion on how to manage increasing ungulate communities throughout Europe and North America. The PhD will study trophic interactions among species, and effects on individual and population performance, for varying ungulate community compositions and along gradients of land use practices. The project combines field methods with state of the art DNA tools. Results will be crucial for finding trade-offs among competing ecosystem services such as game meat and recreation from hunting vs. fiber from forests and food from crops. The PhD student will closely collaborate with an advertised PhD position in the Governance project that focuses on social dimensions of multi-species wildlife management.

Qualifications

The applicant should have an MSc degree in Ecology or similar discipline. We are looking for a candidate that is prepared to combine extended field work periods with work in the lab (DNA analyses) as well as complex data analyses, such as bioinformatics. Documented skills in one or more of these three aspects are highly valued. The candidate should be fluent in spoken and written English. The candidate should be able to work independently as well as in a team. Experience in writing and publishing scientific papers is a plus.

How to apply:

Deadline for applications is 26^th July 2015. Preferred start date is 1^st of September 2015. Please use below link for more information on how to apply:

http://www.slu.se/en/education/postgraduate-studies/-new-phd-student/Rea d-more/?sprak=e&Uid02

Further information:

Joris Cromsigt, joris.cromsigt@slu.se; Navinder Singh, navinder.singh@slu.se.

Read about being a PhD at the department at http:/-/phdatvfm.weebly.com/ and about the PhD education at SLU at www.slu.se/en/education/postgraduate-studies/ . Joris Cromsigt <joris.cromsigt@slu.se>

UMelbourne AdaptationGenomics

PhD Project Available (Commencing 2016)

School of BioSciences, The University of Melbourne, VIC, Australia, 3010

Adaptation genomics: the genetic architecture of colour polymorphism and speciation

We are seeking a PhD student to work on an ARC-funded project investigating the genetics underpinning discrete colour morphs in a species of lizard.

To understand the speciation process, we need to understand how selection acts on traits involved in reproductive isolation (e.g. colour variation), and how this relates to the underlying genetic architecture. The project will utilise a well-characterised system with two genetically and phenotypically discrete lineages, the tawny dragon lizard. The species is polymorphic and lineages differ most notably in throat coloration (see figure below). The main aims are to determine the nature of reproductive isolation between lineages, identify genes associated with colour morphs and investigate whether these gene regions are also involved in the process of speciation. The PhD project may involve fieldwork in semi-arid South Australia as well as captive maintenance of tawny dragons, laboratory work and/or bioinformatics depending on the student's main interests.

The student will need to obtain an Australian Postgraduate Award (APA; $25,849 per annum, or an IPRS for international students) through The University of Melbourne; therefore a first class Honours or Masters Degree and/or evidence of publishing in international peer-reviewed scientific journals are essential. Experience in bioinformatics and/or working with lizards would be a bonus.

Interested applicants please submit: 1) a brief cover letter outlining your research interests, 2) a comprehensive CV, 3) academic transcript and 4) contact details of two referees (including a previous research supervisor).

Closing date for applications is 1ˆST October 2015

For further information and to submit an application, please contact:

Dr Devi Stuart-Fox

d.stuart-fox@unimelb.edu.au

website: devistuartfox.com

Dr Claire McLean

mcleanca@unimelb.edu.au

Claire Mclean <mcleanca@unimelb.edu.au>

UNaples EvolutionaryBiology

I would like to highlight PhD positions offered at the Department of Biology, University of Naples Federico II on website http://life.biology.mcmaster.ca/evoldir.html, with this text:

PhD position (University of Naples, Italy)

PhD Positions in Biology are being offered at the Department of Biology, University of Naples Federico II, Italy (PhD programs of the 31th cycle, 2015-2017). The positions offer a 3-year salary funded directly through the University under the new collaborative PhD educational program. The Department of Biology in Naples is searching for highly motivated graduate students interested in different topics of biology, including biodiversity and evolution, molecular biology, human health and ecology. For more information about the Department of Biology and related PhD program, please visit our homepage: < http://biologia.dip.unina.it/it/didattica/dottorato/ >http:// biologia.dip.unina.it/it/didattica/dottorato/. The Admission to the PhD Programs will be on a competitive basis. The selection of the candidates will be based on the evaluation of their CVs and Skype interviews. The application form must be filled in exclusively on-line, by and no later than 12.00 a.m. (Italian time) of September 8th, 2015.

For more information go to:

http://www.unina.it/didattica/post-laurea/dottorati-di-ricerca/bandi-di-ammissione#p_p_id_101_INSTANCE_csqL5CNMNDEB_ http://www.concorsi.unina.it/dottric/ Should you require further information, please do not hesitate to contact Prof. Salvatore Cozzolino (PhD program coordinator) at cozzolin@unina.it

Thank you Valeria Maselli, PhD Postdoctoral Researcher Department of Biology University of Naples Federico II Campus Monte S.Angelo 80126 Napoli, Italy Phone: + 39-081-679128 Fax: +39-081-679130 valeria.maselli@unina.it www.fulgionegroup.com Valeria Maselli <vale.maselli@gmail.com>

UNSW Australia 2 PlatypuseGenetics

Two PhD Positions in Conservation Genetics: Platypuses and Theory Prof W Sherwin et al. Evolution and Ecology Research Centre, University of NSW Australia

Project 1: Genetic assessment of threats to platypus due to river modification. The iconic platypus is classed as ?near-threatened? despite its wide distribution in Eastern Australia. The genetic work forms part of a larger ARC-funded project to assess and model threats and then to implement decision analyses that focus effective conservation actions. We will use genetic methods to assess population structure and movements, in platypus upstream and downstream, in pairs of rivers with different levels of artificial fragmentation. Experience with next-generation genotyping-by-sequencing, microsatellites, and mitochondrial DNA is desirable. Experience in field work would be an advantage. A full driver?s licence is desirable.

Project 2: Forecasting and managing biodiversity. We have produced new biodiversity theory, based on information theory (eg, Molecular Ecology 15:2857). The PhD student would apply this theory to a wide range of existing datasets in genetic and community biodiversity, using data from koalas, dolphins, flies, trees and various other species. The student would also be encouraged to further develop this theory in response to findings from the data analysis. A range of skills and interests can be accommodated. Biologists who are comfortable with first-year undergraduate mathematics would find this work rewarding. Also, applicants from a maths/physics background are encouraged, particularly if they have an interest in analytical approaches to stochastic systems including information theory.

PROCEDURE: (1) DISCUSS: Email letter with CV, academic record, and details of two academic referees, to Prof Bill Sherwin (W.Sherwin@unsw.edu.au) +61-2-9385-2119. Your letter should explain how your results are sufficient to allow application for a SCHOLARSHIP at UNSW (see below). We cannot consider other applications.

(2) PhD CANDIDACY APPLICATION: Requirements for PhD are BSc (Hons 1), MSc, or equivalent. Specific areas essential and desirable are shown for each project above. Solid research and communication skills. For application timing and details, see https://-research.unsw.edu.au/how-apply-enrol-research-degree (3a) PhD SCHOLARSHIP APPLICATION - LOCAL: Citizens or permanent residents of Australia/NZ, apply for APA and UPA at UNSW. You will need to have completed a research degree (eg MSc or BSc Honours research year), with results which are equivalent to 85% or higher, in order to be competitive for these scholarships. Publications in ISI-listed international journals will help also. For application timing and details see https://research.unsw.edu.au/postgraduate-research-scholarships (3b) PhD SCHOLARSHIP APPLICATION ? INTERNATIONAL: Applicants who are NOTcitizens or permanent residents of Australia/NZ, can apply for IPRS and UIPA at UNSW. In order to be competitive for these scholarships, you will need to have completed a research degree (eg a full year of research in either MSc or BSc-Honours), with results which are equivalent to 95% or higher for the research component of the degree. Note that a coursework MSc is NOT acceptable. Publications in ISI-listed international journals will help also. For application timing and details see https://research.unsw.edu.au/postgraduate-research-scholarships Professor WB Sherwin

Evolution & Ecology Research Centre

Deputy Head, School of Biological Earth and Environmental Science, UNSW AUSTRALIA, Sydney NSW 2052 AUSTRALIA

W.Sherwin@unsw.edu.au

PH:61-2-9385-2119 FX: 61-2-9385-1558

http://www.bees.unsw.edu.au/staff/william-b-sherwin
CRICOS provider code 00098G

William Sherwin <w.sherwin@unsw.edu.au>

UPolitecnicaDelleMarche PhaseolusPopGenomics

PhD: Population Genomics in Phaseolus vulgaris A PhD position is available at Università Politecnica delle Marche (UNIVPM), academic year 2015-2016.

The Scholarship is co-founded by UNIVPM and FORSCHUNGSZENTRUM JÃLICH IBG-2 (IBG-2) for the research project: “The impact of adaptation on the Phaseolus genome and its phenotypic consequences”. The PhD activities will be conducted in both Institutions, will focus on bioinformatics and population

genomics data analysis and will be co-supervised by Prof. Roberto Papa (UNIVPM) and Prof. Björn Usadel (IBG-2)

For further details please contact: Prof. Roberto Papa (r.papa@univpm.it) and/or Prof. Björn Usadel (b.usadel@fz-juelich.de)

Call for applications at the UNIVPM web site: http://-www.univpm.it/English/Engine/RAServePG.php/P/-35381ENG0400/M/34171ENG0412 Prof. Roberto Papa Università Politecnica delle Marche D3A-Dipartimento di Scienze Agrarie, Alimentari e Ambientali, Via Brecce Bianche, 60131 ANCONA ITALY phone +39-0712204984/280 mobile +39-3393921616 email: r.papa@univpm.it http://publicationslist.org/r.papa www.univpm.it/roberto.papa http://orcid.org/0000-0001-9598-3131 Roberto Papa <rpapa@univpm.it>

USaskatchewan RedSquirrelLifeHistory

Funded Ph.D. position on life history ecology of red squirrels.

I am currently advertising one Ph.D. student opening in my lab (www.lanelab.ca) in the Department of Biology at the University of Saskatchewan, ideally to begin September, 2015 (January or April, 2016 start dates may also be feasible). Full funding ($20k CAD/yr for 4 years) is guaranteed, but the successful student will be expected to apply for any funding for which they may be eligible (e.g., NSERC post-graduate scholarships for Canadian citizens).

The Project: Life history ecology of North American red squirrels (Ph.D.)

The Kluane Red Squirrel Project (KRSP; http://-redsquirrel.biology.ualberta.ca/) was established in the late 1980's and now represents one of the longest running and most-comprehensive studies of a wild mammal in the world. Researchers from multiple universities are involved and exciting collaborations have produced many important, interdisciplinary findings. A clear strength of this project stems from our ability to link the biology of the population with a key environmental driver (availability of their primary food source - white spruce seed, cached as cones). The advertised project will investigate the causes and consequences of phenological variation (i.e., annual timing of key life cycle events) and how this variation fits within the broader life history phenotypes of individual squirrels. Phenological shifts are now the most often cited ecological responses to climate change and can have substantial consequences for individual fitness and population viability. The proje ct will combine analyses of our long-term data set (comprising data on >10,000 individuals, collected over 10 generations and 25 years) with new field data collection. Quantitative genetics analyses will be used to estimate heritabilities and genetic correlations (i.e., evolutionary potential) in phenological traits and opportunities are available to collaborate with other researchers in energetic physiology, population ecology, endocrinology and animal behaviour. All fieldwork will occur in the spectacular southwest Yukon Territory at KRSP's field camp.

Relevant literature:

Lane, J.E., L.E.B. Kruuk, A. Charmantier, J.O. Murie and F.S. Dobson. 2012. Delayed phenology and reduced fitness associated with climate change in a wild hibernator. Nature 489: 554-557.

Williams, C.T., J.E. Lane, M.M. Humphries, A.G. McAdam and S. Boutin. 2013. Reproductive phenology of a food-hoarding mast-seed consumer: resource- and density dependent benefits of early breeding in red squirrels. Oecologia 174: 777-788.

Boutin, S. and J.E. Lane. 2014. Climate change and mammals: evolutionary versus plastic responses. Evolutionary Applications 7: 29-41.

The successful applicant will have a GPA >80% (converted to the UofS' 1-100 scale) over the past two years of schooling and a degree in a relevant discipline (i.e., Ecology, Evolutionary Biology, Physiology, Environmental Biology). Of note, while I certainly appreciate the hard work that is put into obtaining a degree in Biotechnology, I do not view this as relevant experience for these positions. In addition, a passion for fieldwork (in a beautiful, but remote, place), strong scientific communication skills (both written and oral) and statistical proficiency (or a willingness to gain it) is necessary. Evidence of scientific productivity (manuscripts published or in preparation, conference attendance and presentation) is also expected. This position is open to both Canadian and international students.

If you are interested in applying, please submit a cv (including names and contact details of references), a short (1 pg) description of research interests and an unofficial copy of your transcripts to jeffrey.lane@usask.ca. Applications will be evaluated as they're received. To ensure full consideration of your application, therefore, please submit asap. Any questions can be directed to Jeff Lane.

Thank you in advance for your interest in this position,

however, only those selected for an interview will be contacted.

"jeffrey.lane@usask.ca" <jeffrey.lane@usask.ca>

Vienna GenomeArchitecture

PhD Project Available (Commencing 2016)

Gregor Mendel Institute, Vienna, Austria

Evolution of genome architecture

We are seeking a PhD student to work on the factors that have resulted in higher order genome architecture

Genomes of ancestral plants show little differentiation in their spatial organization in contrast to flowering plants. The main aims are to determine the origin of this change in genome architecture during plant evolution and investigate the advantages conferred. We will use Marchantia and other related land plant ancestors as models.

The PhD project may involve a combination of genomics, molecular evolution, biochemistry, molecular biology, genetics and state of the art microscopy depending of the student main interest.

Our laboratory will provide funding but the student will need to be qualified at the Vienna Biocenter PHD program and should follow the application at http://www.vbcphdprogramme.at/prospective-students/how-to-apply/ Experience in bioinformatics and/or molecular evolution would be a bonus.

Interested applicants please submit: 1) a brief cover letter outlining your research interests, 2) a comprehensive CV, 3) academic transcript and 4) contact details of two referees (previous research supervisor).

Closing date for applications is 01 October 2015

For further information and to submit an application, please contact:

Dr. Frederic Berger Frederic.Berger@gmi.oeaw.ac.at

website: https://www.gmi.oeaw.ac.at/research-groups/frederic-berger/ "Berger, Frederic" <frederic.berger@gmi.oeaw.ac.at>

Vienna QuinoaGenomics

The Department of Biotechnology, group "Genome Bioinformatics" (head Dr. Heinz Himmelbauer) is currently seeking a Graduate student (Bioinformatics/Computational Biology)

Extent of employment: 30 Hours per Week Duration of employment: 01st of October 2015 to 30th of September 2019 Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1, 1.997,20

Responsibilities The successful candidate (f/m) will pursue a Ph.D. project related to the interpretation of plant genome and transcriptome sequencing data from next-generation sequencing (NGS) platforms. In particular, the candidate will characterize the unexplored genome of quinoa, a crop plant of long-standing tradition in Latin America. We collaborate with research partners in Austria and abroad, and the candidateÂÂs project will be of central importance in the context of this research network.

Required skills and qualifications We are looking for a graduate student (f/m) with a Master's degree in bioinformatics or in a related field, solid programming skills (e.g. developing sequence analysis tools), experience with the analysis of NGS data sets, understanding of lab methods and knowledge of genomics/transcriptomics. The group has successfully performed several projects using NGS technology. We have recently published the reference genome sequence of sugar beet (Dohm et al., Nature, 2014), a crop plant closely related to quinoa (same family, but different genus). Not yet published is a quinoa genome assembly that we have generated, and which will serve as the starting point of the candidate's project. We are a multidisciplinary team and offer work in a lively and friendly atmosphere, and state-of-the-art computing infrastructure. We are looking forward to expanding our team by a dedicated and strongly motivated person with a distinct interest in the challenges of plant genomics. Applications can be submitted until: 16th of August 2015 University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour. Please send

your job application (incl. letter of motivation, CV, summary of Master's thesis and contact details for two referees) to Personnel department, University of Natural Resources and Life Sciences, 1190 Vienna, Peter-Jordan-StraÂ©Â70; E-Mail: kerstin.buchmueller@boku.ac.at. (Reference code: 59)

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process. Informal enquiries should be directed to Prof. Heinz Himmelbauer (Heinz.himmelbauer@boku.ac.at)

Heinz Himmelbauer <heinz.himmelbauer@gmail.com>

Vienna TreeGeneticVariation

PhD-Position: Dept. of Forest Genetics, BFW, Vienna, Austria Genetic variation of disease resistance of the Common Ash against the pathogen Hymenoscyphus pseudoalbidus

The Department of Forest Genetics at the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) in Vienna (Austria) is inviting applications for a PhD Position to study the genetic variation of disease resistance of common ash against the cause of the European-wide ash dieback, the pathogen Hymenoscyphus pseudoalbidus. The PhD candidate will use quantitative- and molecular-genetic approaches to identify disease resistant genotypes, to understand the geographical pattern of resistance, and to select genotypes for breeding programmes. The PhD will work in a joint project between the BFW and the University of Natural Resources and Life Sciences (Department of Forest Entomology, Forest Pathology and Forest Protection).

We look for a highly enthusiastic PhD student with interest in molecular and quantitative genetics, forest pathology and tree breeding, preferably with previous experience in any of these research areas. A high level of self-organization skill is expected. All our projects are highly integrative and require willingness to embrace multiple disciplines within the domain of forest genetics.

Requirements:

- Master in Forestry, Forest or Plant Pathology, Biology, Nature conservation or related sciences

- Fluent spoken and written English

- Basic knowledge of German

- Driving licence

- Ability and willingness for field and nursery work

The PhD contract is for 4 years (30 h/week) and enables the attendance of PhD courses at the University of Natural Resources and Life Sciences.

We offer an inspiring research environment, including state-of-the art research facilities, extensive supervision and an exciting project with high relevance for nature conservation and forest management.

The Department of Forest Genetics is located in the heart of Vienna, close to Schoenbrunn castle. We are concerned with the analysis of genetic information about forest trees and other organisms living in the forest and the dynamics of genetic processes in forest stands. Environmental stress and forest management issues are also considered. Activities are based on genome research, population genetics and provenance research (gene ecology). The aim is to translate genetic knowledge into measures for biodiversity enhancement, genetically sustainable management of forests, protection and management of genetic resources and promotion of the adaptability and survival of complex forest ecosystems. In addition, the Department deals with breeding possibilities to increase the productivity and yield of tree species from plantations. Research projects are often conducted in close cooperation with other departments, universities, and forest enterprises in Austria and abroad.

How to apply: Send a single pdf including a letter of motivation, a CV with University grades, the names and addresses of two referees, a short page research vision and, if available, copies of research papers or the Master thesis.

Univ.Prof Dr. Dr. Thomas GEBUREK (institut2@bfw.gv.at)

Department of Forest Genetics

Federal Research and Training Centre for Forest, Natural Hazards and Landscape

A-1140 Vienna, Hauptstr. 7

The position is available from August 2015 and open until filled.

konrad <heino.konrad@bfw.gv.at>

WageningenU GenomicSelectionNaturalEnemies

A PhD student position within the EU-funded Marie Skodowska-Curie Innovative Training Network BINGO (Breeding Invertebrates for Next Generation Biocontrol) is available at the Laboratory of Genetics and the Animal Breeding and Genomics Centre of Wageningen University in the Netherlands.

About the position: The candidate will work on the development of genome-based selection for the improvement of natural enemies in biocontrol. Intraspecific genetic variation in arthropods is often studied in the context of evolution and ecology. Such knowledge can also be very usefully applied for selection of genotypes with optimal trait values to develop more effective biocontrol agents. For complex life-history or behavioural traits that lack easily recordable morphological phenotypes (i.e. longevity, development time, fecundity), the selection process can be laborious. Knowledge of the genomic regions underlying the traits can facilitate the screening and selection process. Genome-based selection (GS) methods use information from genome-wide DNA-markers to efficiently select for such complex traits. While they have been shown to hold great potential for plant and animal breeding, GS methods have not yet been applied for the improvement of natural enemies. This project seeks proof-of-principle for the use of genome-based selection for key life history and natural enemy traits in the model parasitoid wasp Nasonia vitripennis. The aim is to develop selection protocols for insect natural enemies and apply these for the genome-based selection of Nasonia lines for complex life-history traits. The project will involve: (1) A quantitative genetics approach, known as (genomic selection,) to accommodate the haplodiploid nature of parasitoids and other natural enemies; (2) Genomic data generation and analysis using next-generation sequencing technologies; (3) Large-scale phenotyping of complex traits in Nasonia. For more details on this position, see http://-bit.ly/1D3tcLT Qualifications: We seek a bright, highly motivated, and enthusiastic researcher with a skill set suitable to the project and who is able to work both as part of a team and independently. Our ideal candidate has a strong quantitative or statistical genetic background, experience with bioinformatic analysis, and life-history or behavioural work in insects. You have a master degree in quantitative genetics, statistical genetics, animal or plant breeding, or evolutionary biology, with a good background in population genetics, bioinformatics, genomics or computational biology. Candidates from other programs, with a strong interest in the application of quantitative methods in genetics are also invited to apply. Experience with NGS technologies and genomic data analysis is a plus, but training will be provided. Insect experimental work will be part of the project. The language in the lab is English. Therefore, a high standard of spoken and written English is required.

Eligiblity: Candidates must be, at the time of recruitment by the host organisation, in the first four years (full-time equivalent) of their research careers and have not yet been awarded a doctoral degree. This is measured from the date when they obtained the degree, which would formally entitle them to embark on a doctorate (e.g. Master degree). Eligible candidates may be of any nationality but must not, at the time of recruitment have resided or carried out their main activity (work, studies, et cetera) in The Netherlands for more than 12 months in the 3 last years immediately prior to the recruitment date.

BINGO-ITN: The BINGO-ITN is funded by the EU Horizon2020 programme and involves 12 partners from academia, non-profit organizations, and biocontrol industry located in the Netherlands, Germany, France, Spain, Czech Republic, Austria, Switzerland, Greece and Portugal. BINGO's approach is multidisciplinary, encompassing a broad range of scientific disciplines, including the application of state-of-the-art population genomics. The BINGO programme combines integrated training workshops and internship opportunities across the network, with career opportunities in academia, public or the private sectors. You will work in close cooperation with PhD students and researchers involved in related BINGO research projects. Secondments are planned to other BINGO participants. For more information about the BINGO project and other PhD projects see www.bingo-itn.eu How to apply: To apply, please provide a letter of motivation and a detailed CV by e-mail to: 1. Dr. Bart Pannebakker, bart.pannebakker@wur.nl & Dr. Piter Bijma, piter.bijma@wur.nl 2. CC to: info@bingo-itn.eu 3. Add subject: BINGO-Application RP13

We will be considering applications until 1st of August 2015, the ideal starting date is 1 September 2015

"bart.pannebakker@wur.nl"
<bart.pannebakker@wur.nl>

WrightStateU InsectEvolutionSystematics

Ph.D. student opportunity at Wright State University: Insect ecology, evolution, and systematics (Tachinid Flies)

I am seeking a Ph.D. student to join my laboratory studying the evolution and ecology of parasitoid flies (see http://stiremanlab.org/). While the specific focus of the dissertation research is negotiable, the research assistantship will require contributing to a collaborative, NSF/Brazil(FAPESP) funded Dimensions of Biodiversity project focused on "Chemically mediated multi-trophic interaction diversity across tropical gradients." My laboratory's role in this international collaborative project is primarily focused on tachinid parasitoids. This includes identifying and documenting species, studying how they influence and are influenced by hosts and their host-plants, analyzing population- and phylo-genetic/genomic patterns and processes, and revisionary taxonomy and species description. Students will also have the opportunity to contribute to other aspects of this large and multi-disciplinary project (See the NSF project summary below for a brief overview of our broad goals). The successful applicant will develop a thesis research project on tachinid ecology, evolution and/or systematics employing ecological, phylogenomic, taxonomic, and comparative methods. The student will also have the opportunity to visit and participate in field research in Brazil as well as other Latin American Countries. Latin American students are particularly encouraged to apply.

Five years of support are available through a combination of graduate research and teaching assistantships, and the student may start as early as January 2016.Â The student will be enrolled in Wright State's Interdisciplinary Environmental Sciences Ph.D. Program. Application requirements include: Bachelors degree in Biology, Entomology, or related field; GRE scores within the last 5 y; minimum IBT TOEFL score of 100 and ability to pass a verbal English test (foreign students only). Preferred qualifications include: Masters degree or equivalent experience; a strong background in Entomology, with interest and/or experience in insect systematics and evolution; good communication skills.Â The current stipend is approx. $23,000 on a 12 month basis. See http://www.wright.edu/-academics/envsci/ for further information on the Environmental Sciences Ph.D. program at Wright State University, including program requirements, application procedures and stipends.Â Please contact John Stireman (john.stireman@wright.edu) for more information about research in the lab and the program prior to submitting an application. Â

John O. Stireman III Department of Biological Sciences Wright State University 3640 Colonel Glenn Highway Dayton, OH 45435

Phone: 937-775-3192 email: john.stireman@wright.edu Websites: http://stiremanlab.org/, https://science-math.wright.edu/people/john-stireman COLLABORATIVE RESEARCH: DIMENSIONS US-BIOTA SAO PAULO: CHEMICALLY MEDIATED MULTITROPHIC INTERACTION DIVERSITY ACROSS TROPICAL GRADIENTS:

PROJECT SUMMARY

Overview:

Most known species are involved in chemically mediated plant-insect-parasitoid interactions, and recent syntheses point to a substantial gap in our understanding of trophic interaction diversity. This gap will be filled by our proposed research to examine relationships between metabolomic, genomic, taxonomic, and interaction diversity of trophic interactions via quantifying and comparing these dimensions of biodiversity along a latitudinal gradient and elevational gradients in Brazil and Argentina. Our focus will be on plants in the genus Piper (Piperaceae), associated herbivores, and parasitic wasps and flies. This plant genus is characterized by extremely high phytochemical and taxonomic diversity, as are the associated arthropods. The proposed work with these plants and arthropods will utilize transformative and innovative approaches to biodiversity research that allow us to link measures of trophic interaction diversity at an ecologically relevant scale to genetic diversity, genetic structure, and phytochemical diversity. Uniform application of quantitative sampling along elevational gradients, newly developed metabolomics methods, the latest population genomics tools, and a large scale experiment will make possible tests of emerging hypotheses about relationships between plant chemistry, specialization, climate, and different dimensions of diversity, and will represent the first large scale, among-site plant-herbivore-parasitoid food web comparison in the tropics.

Intellectual Merit :

The proposal involves a broad synthesis of molecular and ecological approaches to the study of species interactions and how they shape and are shaped by multiple dimensions of diversity. Among the approaches

— / —

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

Jobs

BangorU 3 EvolutionaryBiol

3 Lectureships in School of Biological Sciences, Bangor, UK

The School of Biological Sciences is currently hiring for 3 permanent faculty positions at the Lecturer level. In particular, the Molecular Ecology and Fisheries Genetics Laboratory (http://mefgl.bangor.ac.uk/) will be seeking new team members and collaborators to join existing faculty and strengthen research capability. Current Principal Investigators comprise Gary Carvalho, George Turner, Si Creer, Wolfgang WÃÂ¼ster and Anita Malhotra with interests spanning fisheries genetics, speciation, venom/genome evolution, pollinators, phylogeny, systematics and a diverse array of environmental genomics applications. The MEFGL is housed in the bespoke, recently constructed Environment Centre Wales Building (ECW), linking the MEFGL to the Schools of Ocean Sciences, Environment, Natural Resources and Geography and the NERC Centre for Ecology and Hydrology (CEH), facilitating a host of collaborative opportunities. The MEFGL benefits from

fully equipped molecular labs, second and third generation sequencing capability at the Liverpool Centre for Genome Research (http://www.liv.ac.uk/genomic-research/) and access/bioinformatic development capability on the HPC Wales supercomputing genomics gateway.

The University hiring remit is very broad to enable the selection of the strongest candidates. Applications from candidates in the fields of molecular ecology, evolutionary biology and genomics in its broadest sense are welcomed and most likely competitive, in light of the Research Excellence Framework (REF) process. The lectureships are branded as Ãâ¬ÅZoologyÃâ¬ï?‘1$_{\overline{2}}$ reflecting the composition of our degree portfolios, but we would encourage you to think and apply strategically with the research focused hires.

Where is Bangor? Bangor is located in North West Wales, UK, situated in an area of outstanding natural beauty between Snowdonia National Park and the sea (http://www.bangor.ac.uk/bangortv/-bangorandthearea.php), providing an opportunity for a very high standard of living amongst a spectacular natural environment. International links are facilitated easily via both Liverpool and Manchester airports and London is just over 3 hours away via high speed trains.

The closing date for applications is 10th August 2015 and the application process can be found at https://-jobs.bangor.ac.uk/, job reference: BU00844.

Any questions, please pay a visit to the MEFGL website http://mefgl.bangor.ac.uk/ and liaise with your chosen investigator.

Cheers and best wishes Si Creer Simon Creer

Senior Lecturer Molecular Ecology and Fisheries Genetics Laboratory School of Biological Sciences Environment Centre Wales Bangor University Gwynedd LL57 2UW

Tel: +44(0)1248 382302

Fax: +44(0)1248 382569

web: http://mefgl.bangor.ac.uk/si.php Skype: spideycreer Twitter: @spideycreer

Rhif Elusen Gofrestredig 1141565 - Registered Charity No. 1141565

Simon Creer <s.creer@bangor.ac.uk>

BayerCropSci WestSacramento Bioinformatics

The primary responsibilities of this role, as a Grad Scholar, are to:

- Participating in a multi-disciplinary team of scientists at the Biologics Bayer CropScience West Sacramento, CA R&D Facility to offer bioinformatics, genomics, transcriptomics and metagenomics for controlling pests and diseases in plant and promoting plant health using microbes;

- Proactively identifying and incorporating new algorithms and technology to automate the analysis of microbial genomes and to extend the features of existing analysis pipelines;

- Understanding the dynamics of plant, microbe and pest/pathogen interaction using various omics technologies;

- Managing next-generation sequencing (NGS) data and analyses;

- Training scientific staff on the use of relevant bioinformatics software and tools;

- Working with other non-bioinformatics team member in the CLS group to understand their roles and to serve as backups as needed;

- Communicating effectively through listening, documentations and presentations, especially using compelling visualization tools to share analysis and interpretation of data.

More specifically related to this position, Bayer seeks an incumbent who possesses the following:

- PhD in Computational Biology, Ecology and Evolution, Plant Biology,Bioinformatics, Genomics or related field with 0-1 year of post-graduate experience or a Master's with 4+ years, or BSc. with 6+ years of post-graduate experience and currently enrolled in a graduate program.

- Proven ability to handle large data sets efficiently using scripts, databases, and other tools;

- Familiar with state-of-the-art open source and commercial bioinformatics tools;

- In depth familiarity with various public genomic databases, statistical software tools and packages such as R and bioinformatics algorithms, particularly for the

analysis of NGS data (Illumina and PacBio);

- Should be comfortable enough with some basic statistical concepts and able to converse with other scientists about how to interpret basic statistical analyses such as ANOVA, linear regression, and power analyses.

- Experiences in three or more of the following areas: Comparative genomics; Transcriptome sequencing analysis; Phylogenetic analysis; Pathway modeling and analysis; and/or Metagenomics analysis;

Preferred Skills/Qualifications:

- Familiarity with SQL and relational database, particularly PostgreSQL;

- Fluent in Python, Perl, or other scripting languages;

- Previous laboratory experience;

- Knowledge of fungal, bacterial, insect, or plant genetics;

- Working with high performance computing clusters and/or cloud services.

Interested applicants should please send a resume and a cover letter to

Dilara Ally (Sr Bioinformatics Scientist) : email: dilara.ally@bayer.com

BristolU TeachAssist EvolBiol

BristolUniversity.TeachingAssistantEvolutionaryBiology

The School of Biological Sciences of the University of Bristol (UK) is seeking to appoint a full time Teaching Assistant on a fixed term basis for 12 months. This is an exciting and challenging opportunity for an individual with an interest in teaching undergraduate students in a state-of-the-art Life Sciences building. You will need to demonstrate you have a sound knowledge and understanding of evolutionary biology, ecology and the biology of mammals. Duties include the teaching of Evolutionary Biology, Ecology and Mammal diversity. It is essential that you have a sound knowledge and understanding of evolutionary biology, ecology and the biology of mammals. To have research experience in evolutionary biology, zoology or ecology, on which to base suitable practical projects for undergraduates.

Closing date for applications: 30-Jul-2015. Salary Â£31,342 - Â£35,256 per annum. Job number ACAD101564. http://www.bristol.ac.uk/jobs/ For informal enquires please contact Professor Wendy Gibson (W.Gibson@bristol.ac.uk).

Dr Martin Genner School of Biological Sciences University of Bristol Bristol Life Sciences Building 24 Tyndall Avenue Bristol BS8 1TQ Tel: +44 (0) 117 39 41182

M Genner <M.Genner@bristol.ac.uk>

CalAcademy 6 Biodiversity

CalAcademy.6.Biodiversity

The California Academy of Sciences seeks to fill several endowed positions with Ph.D.-level scientists who do outstanding biodiversity / ecological science, focus on broader science communication & engagement, care about increasing diversity in science, connect their work to real-world sustainability outcomes, and want to change the world.

Under new leadership, the Academy is aggressively investing in groundbreaking scientific research & discovery, and hiring new scientists who will help us pursue our mission to Explore, Explain and Sustain Life on Earth. We are eagerly seeking up-and-coming scientific leaders with expertise in biodiversity, ecology & evolution, and global environmental change. At the Academy, scientists and curators are appointed in hard-money, endowed positions within our Institute for Biodiversity Science and Sustainability (IBSS), and are expected to embrace scientific exploration, science communication & engagement, increasing diversity, and making a real difference in environmental sustainability.

Founded in 1853, the Academy offers a unique and powerful setting to conduct scientific research and engagement. Housed in its Double LEED Platinum building in San Francisco's Golden Gate Park, the Academy combines a world-class museum, research institute, and educational center all under one roof. Facilities include outstanding research collections (with over 47 million specimens); a world-leading digital planetarium / visualization studio; premiere aquarium facilities with over 40,000 living animals and unique culturing facilities; indoor rainforest, coral reef, and California coast habitats; numerous exhibits and educational facilities; and advanced research laboratories for work in genomics, specimen preparation, digitization, computer modeling, scientific visualization, etc. The Academy also recently acquired iNaturalist, a platform that engages global observers in high-quality data collection for citizen sci-

ence. Furthermore, the Academy includes outstanding research and education staff who integrate science with cutting-edge virtual and in-person educational programming.

The new scientist -Â©≪cluster hires - will join nearly 100 other staff and students in IBSS, and help us address some of the world's most pressing problems related to biodiversity conservation, ecosystem health, global environmental change, and sustainability and communicate it to stakeholders and a diverse public. The open positions are broad, and we are searching in many areas of biodiversity science and related fields. The Academy especially seeks experts in coral reef biology, tropical rain forests, the ecology of California, and the impacts of global change on biodiversity, as well as candidates with interests in marine mammals and amphibian decline. We seek candidates with skills in big data, modeling, GIS, visualization, genomics, evolutionary biology and innovative methods for field- and collections-based research. Candidates who connect their work to larger sustainability challenges are of special interest. Candidates must also show leadership in science communication and engagement, as well as an interest in increasing diversity in science. Candidates will be reviewed until all positions are filled; for full consideration, send applications by November 1, 2015. Interviews will be held early in 2016; starting dates are negotiable. Suitable candidates must have a doctorate in a relevant field; postdoctoral experience or equivalent training; enthusiasm for communicating science to broad audiences; commitment to expanding diversity in science; and a passion to pursue research with sustainability outcomes. A complete application consists of: 1. Cover letter; 2. Curriculum vitae; 3. Three, two-page vision statements (one outlines your scientific goals, another your education & engagement goals, and lastly the sustainability outcomes of your research); 4. Four publications (two technical and two examples of public/media outreach); 5. Two letters of reference plus a list of 3-5 additional contacts. Apply at: http://calacademy.snaphire.com/jobdetails?ajid=-vNXB8 Additional questions? Contact the Chief of IBSS, Dr. Meg Lowman (mlowman@calacademy.org).

The California Academy of Sciences is an Equal Opportunity Employer and committed to ensuring that all employees and applicants receive equal consideration and treatment, regardless of race, color, creed, gender (including gender identity or gender expression), religion, marital or domestic partner status, age, national origin or ancestry, physical, mental or medical disability, sex, sexual orientation, citizenship, military service status, veteran status, or any other characteristic protected by state or federal law or local ordinance.

Luiz A. Rocha, PhD Associate Curator and Follett Chair of Ichthyology California Academy of Sciences

— / —

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

CambridgeU InsectCurator

LECTURER/ CURATOR IN INSECT BIOLOGY

Department and Museum of Zoology

(Tenure-Track Faculty Position)

We seek to recruit an outstanding scientist to join the staff of the Department and Museum of Zoology at Cambridge. The successful candidate will combine excellence in research, in some area of insect evolutionary biology, ecology or conservation science, with a commitment to teaching at both undergraduate and graduate levels. In addition s/he will have the ability to engage with the work of the Museum in collections development, outreach and public engagement. We seek a candidate with the ambition and ability to fund and lead a world-class research group.

The post is available from 1st October 2016.

The Department would particularly welcome applications from women as we have an historical imbalance in the number of women holding academic staff positions.

To apply, and for Further Information, please see: http:/-/www.jobs.cam.ac.uk/job/7403/ Potential applicants are encouraged to make informal enquiries through the Director of the Museum, Professor Paul Brakefield, pb499@cam.ac.uk, or the Head of Department, Professor Michael Akam, hod@zoo.cam.ac.uk. Please quote this reference PF06451 on your application and in any correspondence about this vacancy.

Closing date: 31 July 2015

Interviews/seminars are planned to take place in either the week beginning in either the week beginning 21st September or in the week beginning 28th September 2015.

The University values diversity and is committed to equality of opportunity.

The University has a responsibility to ensure that all employees are eligible to live and work in the UK.

Rebecca Kilner <rmk1002@hermes.cam.ac.uk>

DartmouthC EvolutionaryEcol

The Department of Biological Sciences at Dartmouth College seeks applicants for an open-rank Professorship in Ecology. We seek highly qualified candidates working in any area of ecology, but especially welcome applicants whose research would include field studies in local ecosystems to address broadly relevant conceptual issues in ecology. The successful candidate will be expected to supervise an independent research program that will attract extramural funding, provide research training for graduate and undergraduate students, and teach biology courses at the undergraduate and graduate levels. The new hire will contribute to our newly expanded graduate program in Ecology, Evolution, Ecosystems and Society and offer exceptional courses in one or more of the following areas: population biology, species interactions, disease ecology, community ecology, ecosystem science, field ecology, and biostatistics. Application materials should include a cover letter, curriculum vitae, three representative publications, statements of research and teaching interests, and the names and contact information for at least three letters of reference. Please submit materials electronically to: apply.interfolio.com/30338

Application review will begin on 15 September 2015 and continue until the position is filled. For further information about the department and graduate programs, see http://biology.dartmouth.edu Dartmouth is an Equal Opportunity and Affirmative Action Employer. We welcome applications from & will extend equal opportunity to all individuals without regard for gender, race, religion, color, national origin, sexual orientation, age, disability, or veteran status.

“Kevin J. Peterson” <Kevin.J.Peterson@dartmouth.edu>

EarlhamC Parttime MuseumEngagement

Position: Community Engagement Specialist

Department: Joseph Moore Museum

Status: Part-time (28 hours/week)

The Joseph Moore Museum of Science and Nature at Earlham College seeks a part-time (28 hours/week, 12 months) qualified and dynamic Community Engagement Specialist for immediate hire.

The JMM is a thriving place focused on forging connections among science, nature, and society. We strive to combine the strengths of our natural history collections, the scholarly research of Earlham College faculty, and the passions of our museum faculty and ˜20 undergraduate student staff into engaging community programs and exhibits. First publicly opened in 1887, the JMM has been long-known as the regional natural history museum and is located in Richmond, Indiana on the campus of Earlham College.

Responsibilities

§*Plan and implement community programs* for the Joseph Moore Museum in line with the museumÂs mission and vision, including designing, scheduling, staffing/leading, publicizing and promoting educational tours that meet state standards throughout the school year and in summer.

§*Plan and implement special events* to connect Earlham community members with each other and the broader Wayne County community around topics of importance to science and society.

§*Supervise and train Earlham College student staff* in outreach (i.e. interacting with the public through tours, events, and museum hosting).

§*Assist with exhibits*, including maintenance, refurbishment and design.

§*Assist with fundraising* for community engagement.

§*Assist with developing and implementing a Community Engagement Plan* for JMM.

§*Prepare an annual report* documenting and critiquing community engagement at JMM.

Minimum Qualifications

§BachelorÂs degree

§Previous experience in leading educational programming for children pre-k-12th grade.

§Either have current Interpretive Guide Certification through NAI, or be available August 25th-28th to complete training < http://www.interpnet.com/nai/nai/-_certification/CIG_Workshops/CIG-2015-08-OH.aspx > and have personal transportation during that time period.

Key Attributes

§Either a degree in a *scientific* field or substantial experience in *science* or *nature *programs for children

§Ability to connect with people of diverse ages and backgrounds

§Excellent written and verbal communication skills

§Excellent attention to detail, logistics and daily planning

§Dedication to working enthusiastically as part of a team of faculty and students

§Ability to work independently

§Ability to supervise and organize college students

§Strong commitment to community engagement

§Passion for communicating science

More information

Potential applicants are encouraged to contact JMM Director, Heather Lerner, at 765-983-1402 or lernehe@earlham.edu

Review of applications will begin immediately and continue until the position is filled. Position will begin as early as August 15th and prior to August 30th, 2015 Announcement posted July 17, 2015.

Application

Please send a cover letter detailing qualifications for the position, CV, a list of references and a detailed sample plan for a science or nature-based elementary school tour as a single electronic file to: leama@earlham.edu.

Earlham College continues to build a community that reflects the gender and racial diversity of the society at large, and, therefore, we are particularly interested in inviting and encouraging applications from African Americans, other ethnic minorities, and women. Earlham also is eager to solicit applications from members of the Religious Society of Friends (Quakers).

Earlham is an Equal Opportunity Employer.

–

Heather

Heather R. L. Lerner, Ph.D., M.S. Joseph Moore Museum < http://earlham.edu/jmm > Director Assistant Professor of Biology Earlham College 801 National Road West Richmond IN 47374

Google Voice: 949-GENOMES Email: hlerner@gmail.com http://heatherlerner.com/ Heather Lerner <hlerner@gmail.com>

Edinburgh Lecturer Bioinformatics

The University of Edinburgh School of Biological Sciences

Lectureship in Bioinformatics

The School of Biological Sciences seeks a lecturer to enhance our research and teaching programmes in bioinformatics. You will be responsible for the design, planning and delivery of a personal research programme reaching standards of international excellence, for supervising research staff and students, and for contributing to a high-quality student experience including leadership of selected taught programmes. Working in a large and multidisciplinary group of biologists, you will have an outstanding opportunity to develop your research and teaching career in a well-supported environment. You will have a PhD in a relevant area of biology or bioinformatics and previous teaching experience.

The School of Biological Sciences is one of the UK's largest and most highly-rated life sciences departments, providing an innovative environment for research and teaching with a strong emphasis on interdisciplinary research and world-leading strengths across multiple fields. As part of The University of Edinburgh we offer an exciting, vibrant, research-led academic community providing opportunities to work with leading academics whose visions are shaping tomorrow's world. The School of Biological Sciences aims to ensure equality of opportunity and holds an Athena Swan Silver award.

see http://tinyurl.com/uoebioinformaticslecturer for further details

"mark.blaxter@ed.ac.uk" <mark.blaxter@ed.ac.uk>

GulbenkianInst Portugal Programmer

The newly founded Evolutionary Dynamics lab, led by Claudia Bank, at the Gulbenkian Institute (IGC, http://-/www.igc.gulbenkian.pt/) in Oeiras, Portugal (20km from Lisbon) is looking for two postdocs and a programmer.

Individuals with any scientific background (i.e., including biology, chemistry, computer science, mathematics, physics, statistics, and its hybrids) with a genuine interest in evolutionary questions are welcome to apply. Research in the lab revolves around the population genetics of adaptation and speciation, with a particular interest in the prevalence and importance of epistasis and other interaction effects on both the molecular and the population level. We study evolution by means of mathematical modeling, computer simulations, and statistical data analysis (primarily from experimental-evolution approaches). While we are a theoretical and computational group by nature, a lab component could be integrated in collaboration with Isabel Gordo or other principal investigators at the IGC. More detailed information can be found on the lab website: www.evoldynamics.org/-positions/ Applications should be sent by email and include a letter of motivation, a CV, and names and contact information of three referees. The earliest starting date is 1 January 2016, and the duration of each position is up to three years (based on renewable 12-month fellowships). Applications are accepted from now on until all positions are filled. Informal inquiries are welcome, and I will be available for meetings at the upcoming 'Forecasting evolution?', SMBE, and ESEB conferences.

Claudia Bank cbank@igc.gulbenkian.pt

Claudia Bank <cba@evoldynamics.org>

HarvardU DNASequenceTech

Harvard University Instrumentation Specialist (DNA Sequencing)

Auto req ID

36627BR

Business Title

Instrumentation Specialist

School/Unit

Faculty of Arts and Sciences

Location

USA - MA - Cambridge

Time Status

Full-time

Schedule

35 hours per week

Department

FAS Science Operations

Salary Grade

057

Union

00 - Non Union

Duties & Responsibilities

We are seeking an Instrument Specialist to support sequencing technologies in the Bauer Core Facility (Harvard University Division of Science). Duties include: preparing and assessing the quality and quantity of libraries for Illumina sequencing from various sample sources; training and supporting researchers who prepare their own samples for sequencing; operating Illumina HiSeq, NextSeq, and ABI3730xl instruments. The Instrument Specialist must work closely with other members of the sequencing team to hand-off samples and information to keep the sequencing pipeline working smoothly. He or she may be asked to help support users on other center instruments and techniques

Basic Qualifications

A BS degree in Biology, Chemistry, Molecular & Cellular Biology, or Engineering and at least three years of laboratory experience is required.

Additional Qualifications

DNA sequencing experience is required. Illumina library preparation experience is preferred. Strong communication and collaboration skills are essential.

Additional Information

All formal written offers will be made by FAS Human Resources.

Pre-Employment Screening

Identity

EEO Statement

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation or any other characteristic protected by law.

Please apply at http://hr.harvard.edu/jobs . "Reardon, Claire" <Creardon@CGR.Harvard.edu>

ImperialC London GenomicLabManager

Imperial College London

Department of Life Sciences

Faculty of Natural Sciences

Genomic Analyst and Laboratory Manager

Salary: ÃÂ£34,270 - ÃÂ£42,380 per annum

The Department of Life Sciences is seeking to recruit a Genomic Analyst and Laboratory Manager to support the work of the Department and enhance its research at Silwood Park Campus. The Campus is host to the newly refurbished Wolfson Laboratory for Ecological Genomics, as well as a Microbial Ecology laboratory, long-term field experiments on the campus grounds (100ha of natural habitats), and extensive controlled environment rooms and plant growth facilities.

The main duties of the post will comprise taking responsibility for research support in genomics, including data management and archiving, development and implementation of standard workflows and bioinformatics pipelines, analysis of high throughput genomic data, and managing the Wolfson Laboratory for Ecological Genomics and associated laboratories. Other duties will include training facility users in the safe use of the various instruments and genomic techniques.

You must have a PhD (or equivalent) in Genomics or a related subject, as well as extensive experience and a proven track record in bioinformatics/genomics and a proven ability and achievements in a broad range of genomic techniques. You must also have an in-depth knowledge of genomics data collection, analysis and instrumentation, and an in-depth understanding of DNA and genomic expression data. Experience and fluency with file manipulation in a UNIX environment, and experience in designing and troubleshooting analysis pipelines using published sequence analysis tools are essential. In addition, experience and knowledge in programming, such as Python and Perl, and familiarity with statistical methods relevant to genomic data, and knowledge of molecular biology and genomic protocols (including DNA/RNA extractions, genomic libraries) are also must haves. Experience of managing a multi-user facility, together with experience in the use and maintenance of Illumina MISeq Genome Sequencer instruments, would be an advantage, but is not essential.

You will be expected to be highly organised, with a strong ability to work to deadlines, and be innovative and proactive with excellent problem-solving abilities.

For an informal discussion about the post please contact Professor Vincent Savolainen (Deputy Head of the Department of Life Sciences) by email: v.savolainen@imperial.ac.uk or telephone +44 (0)207 594 2374.

Our preferred method of application is online via our website http://www3.imperial.ac.uk/employment (please select Job Search then enter the job title or vacancy reference number including spaces NS 2015 122 JT into Keywords). Please complete and upload an application form as directed.

Alternatively, if you are unable to apply online, please contact Ibi Wallbank (Departmental Manager Silwood Park) by email i.wallbank@imperial.ac.uk to request an application form.

Closing date: 3 August 2015 (midnight BST)

Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer and are working in partnership with GIRES to promote respect for trans people.

“Thomas, Jenny” <j.thomas@imperial.ac.uk>

ImperialCollege London ConservationScience

Imperial College London

Faculty of Natural Sciences

Department of Life Sciences

Lecturer/Senior Lecturer in Conservation Science

Lecturer salary in the range Â£45,950 - Â£51,200 per annum

Senior Lecturer minimum starting salary: Â£56,450 per annum

Imperial College's Department of Life Sciences is looking to make one academic appointment in the area of Conservation Science. The post will be based at the Silwood Park Campus (http://www3.imperial.ac.uk/-silwoodparkcampus).

The Lecturer/Senior Lecturer in Conservation Science will contribute to the mission of the Department of Life Sciences at Imperial College London, and further develop and promote the College's work in conservation science. The goal is to improve scientific understanding of biodiversity conservation. In addition, the post holder will be required to contribute to undergraduate and postgraduate teaching within the Department.

The successful candidate will have a good honours degree and a doctorate (or equivalent) in a relevant subject area. You will also have a strong reputation for research and innovation in conservation science commensurate with the current stage of your career, underpinned by a record of first-class journal publication. Current active engagement in interdisciplinary research will be favourably considered. You must also be able to demonstrate the potential to raise significant research funding from UK and EU sources to maintain and enhance the College's leading research activities. Previous experience of teaching at Undergraduate and Masters levels is essential. Experience working for, and/or with, government agencies, non-government organisations and/or donors in the biodiversity conservation sector will be favourably considered. While not essential, quantitative skills (statistics) and/or experience with geographic information systems (GIS) would be an advantage.

The successful candidate will have excellent interpersonal, verbal and written communication skills, with an ability to convey ideas and concepts clearly and effectively to a range of audiences through a variety of methods and media. You will also demonstrate a willingness and ability to build long-term relationships with biodiversity conservation agencies, both locally surrounding the Silwood Park Campus, and more broadly. You must have the ability to lead a research team and manage its finances and staff. You must also have the ability to communicate with, and inspire, students, as you will be expected to contribute to our undergraduate and postgraduate teaching programmes.

For appointment to Senior Lecturer, in addition to the above, candidates must also have an exceptionally strong research record in conservation science, and a proven track record of securing research funding. You will also be expected to have extensive experience in postgraduate and undergraduate teaching across a range of subjects within Conservation Science, together with a track record of successful postgraduate student supervision and postdoctoral mentoring.

The potential for productive research collaboration with current staff within Imperial's Department of Life Sciences, and the College more broadly will also be carefully assessed.

Fellows and previous applicants are welcome to apply.

Please contact Professor Vincent Savolainen, Deputy Head of Life Sciences at Imperial College London, v.savolainen@imperial.ac.uk) for informal queries about the post.

Applications should be made by submitting the completed Lecturer and Senior Lecturer (Clinical and Non-Clinical) application form and Recruitment monitoring form, along with any other relevant supporting documents such as your full CV to Ms Angela Kehoe, Senior HR Manager, Telephone: 00 44 (0) 20 7594 5653, e-mail: a.kehoe@imperial.ac.uk, quoting reference number NS 2015 139 JT.

Closing date: 24 August 2015 (midnight BST)

Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer and are working in partnership with GIRES to promote respect for trans people.

"Thomas, Jenny" <j.thomas@imperial.ac.uk>

InstitutPasteur Bioinformatics

The Institut Pasteur is hiring group leaders for its new Center of Bioinformatics, Biostatistics and Integrative Biology (C3BI)

Application web site: https://c3bi.pasteur.fr/research-teams-apply/ The Institut Pasteur is a non-profit private foundation dedicated to fundamental, interdisciplinary research and to translating scientific knowledge to medicine and public health. Topics of interest include microbiology (bacteria, viruses, parasites and fungi) and infectious diseases, cell biology, immunology, developmental biology and stem cells, neuroscience, genomics, genetics and cancer. The Paris campus houses 130 research units belonging to 11 research departments, employing about 2,600 people. It is recognized worldwide as a leader in infectious disease research and is ranked as a top level institution for publication impact in the field of microbiology.

** A strategic priority The new direction of the Institut Pasteur has defined Bioinformatics, Biostatistics and Integrative Biology as strategic priorities. A new center (C3BI) to foster research in these domains was set up in 2014. Substantial resources were allocated for the creation and development of the C3BI, with the recruitment of 40 research engineers in bioinformatics and biostatistics between 2014 and 2017. A building will be renovated on the Paris campus to house the C3BI. The aim is to facilitate collaborations in bioinformatics and biostatistics, to support and develop training in these fields, to encourage interactions between all the Institut Pasteur teams, and to stimulate the development of new computational and statistical approaches for biological data analysis and modeling. Currently, the C3BI comprises 8 research units, 2 of which were recently created, and a bioinformatics platform with 30 engineers providing services to the campus.

In this context, the Institut Pasteur is looking for several new senior and/or junior* group leaders in bioinformatics, biostatistics and integrative biology, with a strong methodological component. The main focus is on computational and statistical analysis of biological big data, typically produced by new generation sequencing and -omics technologies, but all modeling and computational approaches of biological questions closely connected with Institut Pasteur research areas are eligible. Highly attractive packages to match the experience of the candidate will be provided, including institutional salaries (principal investigator, permanent scientists, secretary and postdoctoral fellows), a substantial contribution to running costs and equipment, as well as support for relocation expenses and administrative issues.

Candidate's profile Successful candidates will possess the following qualifications: - PhD with a minimum of 6 years of research experience - Recognized scientific leadership in bioinformatics/biostatistics - Broad experience in methodological development and analysis of various types of data - Consistent publishing record of cutting edge research as senior/first author - Significant experience in mentoring scientists and managing an innovative research program - Demonstrated ability to collaborate with experimental and computational biologists

Application documents (deadline September 20, 2015 midnight CEST) 1. A web form to be filled on application web site (see above) to summarize your application. 2. In a single file (pdf, 1.5 spacing) to be uploaded on application web site: - Description of past and present research activities (4 pages) - Proposed research project (6 pages) - Detailed CV and full publication list - Three scientists from whom letters of recommendation can be sought - The names of scientists with a potential conflict of interest

Further information on the institute and C3BI can be found at http://www.pasteur.fr and https://c3bi.pasteur.fr/ Short-listed candidates will be invited for interview in October 2015, and results will be announced by mid-December. The new research groups will start by early 2016 (the precise date is negotiable). Informal inquiries can be addressed to Olivier Gascuel (Head of C3BI Ãâ¬"$C3BICall2015@pasteur.fr$)

* Institut Pasteur is an equal opportunity employer. Junior group leaders should be less than 8 years after PhD at the time of their submission. Women are eligible up to 11 years after their PhD if they have one child, and up to 14 years after their PhD if they have two or more children.

Olivier Gascuel <olivier.gascuel@pasteur.fr>

KAUST SaudiArabia PaidIntern KilliFishPopGen

We are seeking a research intern (graduate or postgraduate student) for a 3-6 months stay in our lab to work

on the following project:

Rad-seq population genetics on Arabian killifish from the Arabian Desert

This project is aimed at understanding how natural populations of fish are adapted to extreme environments. In the Saudi Arabian desert close to KAUST we can find ponds of water (wadis) in which we find fish such as the Arabian killifish, *Aphanius dispar*, surviving harsh conditions. Our aim to start this project is to collect DNA of fish from a collection of different ponds and analyze the population structure of these desert fish. Also, we will be looking at the water conditions and local adaptations in these fish. This will allow observing the presence or absence of gene flow between these ponds through underground freshwater connections. Furthermore, it will be the first step to find pond/condition specific variants that might reveal local adaptation to certain harsh conditions.

The student will be involved in the field work, but also will learn about lab techniques, from DNA extractions to Rad-seq library preparation for high-throughput sequencing. Water chemistry analyses will furthermore be a part of the project as will the population genetic analysis and bioinformatics analysis of the high-throughput sequencing data.

The student will receive flights, housing, visa and a salary of 800$ per month.

The internship conditions and requirements can be found on this webpage: http://www.kaust.edu.sa/internship/ Here you can find out more about the lab: http://-systemsbiology.kaust.edu.sa If you are interested or have any question please contact timothy.ravasi@kaust.edu.sa and celiaschunter@gmail.com

Celia Schunter, PhD Postdoctoral Fellow Integrative Systems Biology Lab < http://systemsbiology.kaust.edu.sa > King Abdullah University of Science and Technology (KAUST) Personal webpage < http://sites.google.com/-site/celiaschunter > tel: (+966)546258894

Celia Schunter <celiaschunter@gmail.com>

KyushuU PopBiolgyTeaching

We are looking for a successful population biologist who can teach international students at undergraduate and graduate levels in English.

This is a non tenure track position and can be extended to 10 years at maximum.

The deadline for application is July 31.

Please see

https://chroniclevitae.com/jobs/0000887181-01 for details.

Midori Tuda

Midori TUDA, Dr. Institute of Biological Control Faculty of Agriculture Kyushu University Fukuoka, 812-8581 Japan E-mail: tuda@grt.kyushu-u.ac.jp URL: http://www.agr.kyushu-u.ac.jp/~tuda/mamezo.html "midorituda2@aol.com" <midorituda2@aol.com>

LawrenceU Wisconsin EvolutionaryBiol

Assistant Professor, Department of Biology

Lawrence University, a selective undergraduate liberal arts college, seeks applicants for a full-time tenure-track position to begin September 1, 2016. We seek an evolutionary biologist, ecologist, or systems biologist with experience using large data sets, computational biology, or bioinformatics approaches. Significant expertise in organismal or ecosystems biology is preferred. Competitive candidates will broaden the current research expertise of our faculty in areas other than molecular cell biology. Responsibilities will include teaching introductory biology and an upper level laboratory or field course not currently in our curriculum, contributing to our Freshman Studies program on a regular basis, and interacting with other departments or programs. Passion for teaching in a liberal arts setting is expected of all Lawrence faculty members. Establishment of a research program appropriate for undergraduate participation is required and a competitive start-up package will be provided. Interested applicants should apply online by submitting a letter of application, curriculum vitae, statements of teaching philosophy and research interests, and undergraduate and graduate transcripts at https://lawrencecareers.silkroad.com. Applicants should also have three letters of reference sent to search_biology@lawrence.edu. Review of applications to begin immediately; for full consideration, all materials should be submitted by Sept. 20, 2015. Lawrence is committed to enhancing the diversity of its faculty and the diversity of viewpoints and approaches that the faculty represents. Candidates are encouraged to read more about

Lawrence at https://lawrencecareers.silkroad.com/-lawrenceuniversity/About_Us.html and to address in their letters of application the ways in which they could contribute to Lawrence's institutional mission and goals. This website also includes informational resources about the University and the surrounding community. For further information contact Jodi Sedlock (jodi.sedlock@lawrence.edu), search committee co-chair (http://www.lawrence.edu/academics/study/biology).

Jodi Sedlock <jodi.sedlock@lawrence.edu>

MaxPlanckInst Seewiesen BlueTitFieldAssistant

MaxPlanckInst_Seewiesen.BlueTitFieldAssistant

The Department of Behavioural Ecology and Evolutionary Genetics at the Max Planck Institute for Ornithology in Seewiesen, Bayern, Germany (see http://-/www.orn.mpg.de/2622/Department_Kempenaers), is seeking three to four field assistants to work from 1st November 2015 to 30th April 2016.

These assistants will work as part of a long-term study on the reproductive biology of a blue tit Cyanistes caeruleus population in a protected forest site in Southern Germany. Work will include: - catching birds at feeders and nest-boxes using traps and/or mist nets - measuring and banding birds - maintenance of electronic nest-box and feeder hardware and equipment - setting up experimental equipment - data collection, entry, and management

Successful candidates must have experience in catching and handling birds, including extensive experience in mist netting. Applicants should also be highly motivated and well organised, with capabilities of working both in a group and independently. Field work hours can be long and tiring, thus applicants must be prepared to work in all types of weather conditions, at any time (including weekends and holidays), with typically only one day off per week.

The working language at the Institute is English, so good knowledge of the language is required. A full, clean driver's licence is essential, with driving experience of at least one year. Experience in driving vehicles with manual transmission is also a necessity. Applicants from outside the EU must ensure they are eligible to remain in Europe for the duration of their contract.

Successful candidates should be vaccinated against Tick Borne Encephalitis (TBE or FSME) before commencing the field work. In addition, applicants should be aware that Lyme disease spread by ticks is common in the area, and should inform themselves about the disease in advance.

The Max Planck Institute for Ornithology employs a dynamic, dedicated, and international group of researchers who are focused on exploring the fields of evolution, ecology, genetics, and neurobiology. In an effort to employ more people with disabilities, the Max-Planck-Society specifically encourages people with disabilities to apply for the position. To increase the employment of women in areas where they are under-represented, the Max-Planck-Society also encourages women to apply for this position.

Review of applications and calls for interviews will begin in early September 2015. If you are interested in applying for one of the field assistant positions as described above, please apply (including your CV) by latest 31st August 2015 via email to cgilsenan@orn.mpg.de

Carol Gilsenan Department of Behavioural Ecology and Evolutionary Genetics Max-Planck-Institute for Ornithology Eberhard-Gwinner-StraÃe, House 7 82319 Seewiesen Germany

Carol Gilsenan <cgilsenan@orn.mpg.de>

MPI EvolBio Ploen Germany Director

The Max Planck Institute for Evolutionary Biology in Plön, Germany

invites applications and nominations for a

Department Director

in the general area of experimental evolution. The Max Planck Institute for Evolutionary Biology has three departments, evolutionary ecology, evolutionary genetics, and evolutionary theory. An ideal area to complement existing research in the institute would be experimental evolution on organisms with short generation times, but candidates with research topics in ecological/organismic evolutionary biology will also be considered. The new department is expected to establish an innovative and broad research program, where the direction of research remains up to the candidate.

Plön is located in northern Germany between Kiel and Lübeck in the center of a lake district. The institute has more than a hundred years of tradition in limnological

research, but now shifted its focus to basic research in evolutionary biology. It is well connected to the neighbouring universities in Kiel and Lübeck and has a joint international Master program and graduate school in evolutionary biology with the University of Kiel.

The Max Planck Society is an independent, non-profit research organization that primarily promotes and supports basic research. The society currently operates 83 institutes and research facilities, hosting more than 11,500 scientists.

The Max Planck Society, an equal opportunity employer, is committed to diversity and inclusion in all aspects of recruiting and employment. The Max Planck Society is aiming at increasing the percentage of women among its scientific leadership, particularly at the director level. Therefore, we strongly encourage expressions of interest from and nominations of qualified female scientists.

The working language at the institute is English. Applications, letters of interest, and nomination of candidates should be sent to the Managing Director, Arne Traulsen, Max Planck Institute for Evolutionary Biology, August-Thienemann-Str. 2, 24306 Plön, Germany (traulsen@evolbio.mpg.de).

"traulsen@evolbio.mpg.de" <traulsen@evolbio.mpg.de>

ReedCollege Oregon EvolutionaryEcol

Dear colleagues*,*

Please find the advertisement below for a tenure track position in Ecology at Reed, *but the search is broad in that evolutionary ecologists would be very encouraged to apply*. Reed is a uniquely research-oriented small liberal arts college– please let me know if you have questions that I might be able to answer (or feel free to write to the search chair). The deadline is October 16, 2015. Thanks, Sarah Schaack schaack(at)reed.edu

ECOLOGIST The Biology Department at Reed College invites applications for a tenure-track faculty position (preferably at the rank of assistant professor) in ecology. We seek candidates with demonstrated excellence in field based and animal-focused ecology, with a preference for research at the population level. Qualifications include a PhD and postdoctoral or professional experience.

Reed is a distinguished liberal arts college located in Portland, OR, that enrolls approximately 1400 students and offers a demanding academic program to bright and dedicated undergraduates (http://www.reed.edu/-about_reed). Candidates should articulate their plan to establish and maintain a rigorous and competitive research program that incorporates research opportunities for Reed undergraduates. A competitive start-up package and research space will be provided based on the successful applicants needs, with salary determined according to the applicant's experience. In addition to advising senior theses, teaching duties will include the development of a new upper-level, lecture/laboratory/field course in the candidates area of ecological expertise. Additional teaching opportunities include an advanced seminar course and involvement in the team taught introductory biology course. Formal teaching experience at the college level will be viewed favorably but is not required. The Reed community believes that cultural diversity is essential to the excellence of our academic program. All applicants, therefore, should address how their teaching, scholarship, mentoring, community service, or other activities will support Reed's commitment to diversity and inclusion (see http://www.reed.edu/-diversity/).

Application materials include a cover letter, curriculum vitae, two page research plan, and representative publications. In addition, applicants should arrange for the submission of three letters of recommendation. The cover letter should address how the applicant's research program and teaching plans are suited to Reed College. All materials should be submitted electronically through Interfolio at http://apply.interfolio.com/29763 by 16 October 2015 for full consideration. An equal opportunity employer, Reed College encourages applications from members of underrepresented groups. Specific inquiries should be directed to Dr. Keith Karoly (kkaroly@reed.edu), the chair of the search committee.

Sarah Schaack, PhD Assistant Professor Reed College schaackmobile@gmail.com https://-sites.google.com/site/schaackwork/ Sarah Schaack <schaackmobile@gmail.com>

TrinityC Dublin ClimateAdapatation

Post Title: Assistant Professorship in Spatial Ecology/Spatial Environmental Biology, Full Time

Post Status: Permanent

Department/Faculty: Discipline of Zoology, School of Natural Sciences, Faculty of Engineering, Mathematics & Science, Trinity College Dublin, the University of Dublin

Location: Zoology Building, School of Natural Sciences,Trinity College Dublin, the University of Dublin College Green, Dublin 2, Ireland

Salary: Appointment will be made on the Lecturer Salary Scale at a point in line with Government Pay Policy

Closing Date: 12 Noon on Friday 18th September 2015

The successful candidate is expected to be in position by early 2016 or as soon as possible thereafter.

Interviews for this post are likely to be held in early to mid-November

Post Summary The School of Natural Sciences seeks to appoint an Assistant Professor in spatial ecology/spatial environmental biology. The study of how organisms respond to environmental variability in terrestrial and aquatic habitats is critical to several fields including: predicting and managing species responses to climate change, ecological and environmental determinants of species ranges and conservation decision making.

It is envisaged that the candidate's research be relevant to current national and international research priorities in spatial ecology/environmental biology. A strong track record in publication is expected and the appointee will be required to compete for national and International research funding (e.g. SFI; EPA; EU Horizon 2020; ERC; DAFM) and to build a dynamic research group with international recognition. The appointee's research will provide opportunities for cross-disciplinary research among Schools and within the Trinity Centre for Biodiversity Research (TCBR) and The Trinity Centre for the Environment. The appointee will support the University's Strategic Plan by strengthening the biological aspects of one or more of the University's research themes and in particular the Smart & Sustainable Planet research theme (formerly Sustainable Environment & Smart & Sustainable cities theme). The post will support the proposed new agenda and mission of the E3 initiative, the Engineering, Energy and Environment Institute (http://www.tcd.ie/E3/).

The Assistant Professor will contribute to teaching in the School at undergraduate level, chiefly to the Science (TR071) Course in the Freshman years (years 1 & 2) and to relevant modules in Environmental Science, Functional Biology, Plant Sciences and Zoology degree programmes in Sophister years (years 3 & 4). S/he will also contribute to the School's taught MSc programmes and will attract students through the development of new teaching modules, notably in the areas of spatial environmental biology/ecology.

Background to the post The School has supported, over the past couple of decades, a large and active research group in the areas of ecology and evolution. This Assistant Professorship post strategically targets an important and vibrant research area that is core to activities of the School of Natural Sciences, the E3 initiative and the associated research centres (Trinity Centre for Biodiversity Research and The Centre for the Environment).

Trinity has a high international standing in the area of ecology and evolution which stems from the high calibre staff in Zoology and Botany and from the network of links extending from them to the wider School through multidisciplinary research. Our academic and research staff cover an impressive range of scholarship and expertise. We attract high quality PhD students from both national and international backgrounds.

The appointee will become part of a lively and diverse School, comprising the Disciplines of Botany, Geography, Geology and Zoology and the associated Centre for the Environment and Centre for Biodiversity Research. The staff of the School of Natural Sciences work under the single overarching theme 'Biodiversity and the Environment' underpinned by four subthemes: Ecology and Evolution, Earth and Environmental Science, Society, Space and Environment and Molecular and Comparative Physiology. The appointee will contribute to and ideally promote synergy among some of these sub-themes. S/he will be expected to enhance research-led teaching in the School, increasing opportunities for graduate research.

Person Specification

Qualifications * Candidates must hold a PhD in a relevant research area and be able to demonstrate a proven track record in the field of spatial ecology/environmental biology.

Knowledge & Experience Essential: * Experience of teaching at undergraduate level. * Evidence of research potential and achievements, including publications, in a cognate area. * Ability to attract national and international research grants. * A commitment to student care. * A commitment to own professional development. * Evidence of potential competence in the administration of academic

— / —

UBritishColumbia EvolutionaryBiology

Faculty Position in Evolutionary Biology (Tier 2 Canada Research Chair)

The Department of Zoology at the University of British Columbia, in Vancouver, Canada, invites applications for a faculty position in Evolutionary Biology (Canada Research Chair Tier 2). We seek an outstanding individual working with an innovative and integrative research program that would extend and complement existing faculty strengths in evolutionary biology and the Zoology Department. The position is tenure track and is expected to be appointed at the rank of Assistant Professor, although a higher rank might be considered for an applicant of exceptional qualifications. Applicants must have a Ph.D. degree, postdoctoral experience, and an exceptional research record with demonstrated potential in establishing a successful research program, as well as demonstrated potential for excellence in teaching at the graduate and undergraduate level. The appointment will begin no earlier than July 1, 2016.

The successful applicant will become a full member of the Department of Zoology and of the Biodiversity Research Centre, an outstanding group of scientists studying evolution, ecology, systematics, and genetics. The Centre provides exceptional opportunities to contribute to an interactive research community, develop strength in research and teaching, study and contribute to our physical collections, and to contribute to the Beaty Biodiversity Museum's community and outreach efforts. We welcome candidates working on any group of organisms and particularly encourage candidates who broaden our teaching and research approaches. The candidate will also actively interact with the broadly based group of biologists in the Zoology Department. The Department includes more than 44 principal investigators and vigorously promotes integrative research in biology. Its faculty and students pursue cutting edge questions in cell and developmental biology, comparative animal physiology, ecology and evolution.

Responsibilities of the position include establishing and conducting an internationally competitive and externally funded research program, excellent teaching at the undergraduate and graduate levels, supervising graduate and undergraduate students, and participating on service committees for the Department, University, and academic/scientific community.

Applicants should send a cover letter, curriculum vitae, statement of research, statement of teaching accomplishments and/or interests, and up to four publications to Dr. Sally Otto at evobiosearch@zoology.ubc.ca. Letters of support from three referees should be sent to the same address. The deadline for applications is September 21, 2015.

The Canada Research Chair is equally open to individuals of all nationalities. The Chair is subject to review and final approval by the CRC Secretariat. More information about the CRC program can be found at www.chairs.gc.ca. Applicants must meet eligibility requirement for a CRC Tier 2 position, including having received their PhD in 2006 or later, except under special circumstances.

UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. We especially welcome applications from members of visible minority groups, women, Aboriginal persons, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to engage productively with diverse communities.

Kind Regards, Lilia

Lilia Espenido <info@zoology.ubc.ca>

UCincinnati ResAssist HumanVariation

The Norton Laboratory in the McMicken College of Arts & Sciences at the University of Cincinnati seeks to hire a Research Associate with experience in molecular biology and/or genetics to work on a federally funded project examining normal variation in human skin, hair, and iris pigmentation. Duties will include coordinating data collection from study participants, collecting pigmentation data from subjects (training in data collection methods will be provided), collecting and extracting DNA from saliva samples, coordinating IRB and Human Subjects paperwork related to the project, data entry, maintaining DNA sample stocks and basic laboratory solutions, basic data analysis, and the supervision/training of undergraduate and graduate students working in the lab.

The minimum requirements are 1-2 years experience working in a molecular genetics laboratory, however, the

ideal candidate will have a B.S. in biology, anthropology or a related field. The individual should be familiar with basic methods of DNA extraction and amplification, and must have excellent organizational skills. The individual will also be comfortable interacting with study subjects both on the phone and in person. Proficiency in Spanish (written and conversational) is preferred. Basic knowledge of unix, perl or R is a plus, but is not required.

Minimum qualifications require a Bachelor's degree in a profession/field or equivalent level of knowledge. Knowledge/Experience Entry level professional that demonstrates understanding of research fundamentals (e.g. testing and evaluating procedures, data validation and interpretation) and knows fundamental concepts of particular field or research discipline. Independently evaluates and selects techniques, procedures and criteria; uses professional judgment to assist with the management of projects/studies.

Interested and qualified applicants must apply online at www.uc.edu and select job opportunities. In addition to completing the online application, submission must include a cover letter; curriculum vitae/resume and three letters of recommendation.

Heather L. Norton Assistant Professor Department of Anthropology 474 Braunstein Hall PO Box 210380 University of Cincinnati Cincinnati, OH 45221-0380 Office: 513-556-3594 heather.norton@uc.edu http://homepages.uc.edu/~nortonhr/MoCHA/Home.html "nortonhr@ucmail.uc.edu"

UGothenburg PhylogeneticsMacroevolution

Dear colleagues,

Please help us advertise these three fully funded positions at our lab.

Two Assistant Professorships / Postdoctoral Research Fellows, and one PhD student in macroevolution/biogeography and molecular phylogenetics.

More information on the positions and how to apply at http://antonelli-lab.net/join.php Many thanks and best wishes,

Alex

Alexandre Antonelli, PhD Professor in systematics and biodiversity Wallenberg Academy Fellow

Department of Biological and Environmental Sciences University of Gothenburg Delivery address: Box 461, SE 405 30 Göteborg, Sweden Visiting address: Carl Skottsbergs gata 22B, 413 19 Göteborg, Sweden

Scientific curator, Gothenburg botanical garden

Lab homepage: http://antonelli-lab.net Phone: + 46 (0) 703 989570 E-mail: alexandre.antonelli@bioenv.gu.se

alexandre.antonelli@bioenv.gu.se

UHawaii Manoa LabTech PopGenetics

Aloha! The USDA-ARS Pacific Basin Agricultural Research Center (Geib Lab) and University of Hawaii Manoa (Rubinoff Lab) have funding for entry level technician positions in the area of population genetics/phylogenomics/bioinformatics.

The research project is focused on utilizing genomic approaches for improving detection and identification of pest Tephritid fruit flies. Most of the work involves analyzing populations of Tephritid fruit fly species using genome-wide analysis techniques towards marker discovery and developing assays for determination of source populations. The duties are largely split between com-

putational biology/bioinformatics and wet lab molecular biology/genetics. For computational components, it will largely consist of analysis of NGS data, focusing on population biology, linkage mapping/QTL, genome assembly, annotation, and analysis. There are also opportunities to develop novel software and algorithms.

Minimum requirements: - BS in biology, genetics, computer science, or related field - Background in genetics/genomics and knowledge of linux/unix, scripting, etc. - Experience with wet laboratory protocols such as PCR and nucleic acid extraction

Preferred requirements: - MS in biology, genetics, computer science, or related field - Completion of coursework in computer science - Experience with NGS library preparation and molecular approaches - Experience with molecular cloning, injection-based RNAi and/or targeted genome editing techniques - Experience with insect husbandry and performing directed mating crosses in tephritids

We have advanced computing resources in house, automated laboratory instrumentation, and a very active research program. Based on the qualifications and interest of the applicant, they may be assigned only computational tasks, only molecular biology tasks, or a mixture of both.

Salary is ~$35,000/yr, hired through University of Hawaii Manoa, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo, HI (on the Big Island of Hawaii). Funding is secured for 1 year, with a second year of funding currently pending. If interested, please contact Dr. Scott Geib at scott.geib@ars.usda.gov and submit CV and contact for at least 3 references.

Scott Geib, PhD Research Entomologist-Insect Genomics USDA Pacific Basin Agricultural Research Center 64 Nowelo Street Hilo HI, 96720

Scott.Geib@ARS.USDA.GOV

UMainz AntLifeHistory

Job announcement

In the Faculty 10 Biology, Zoological Institute, Department of Evolutionary Biology at the University of Mainz is looking for an

Assistant Professor / Junior Group Leader[ ]

(Akademischer Rat at a University / Bes.Gr. A 13 BBesG)

Field: Evolution, Behavior and Genomics of Insects

from February 1ˆst 2016 on.

The contract is initially for 3 years with the possibility of extension to a total of nine years depending on previous employment at German universities (12-year rule). In case the prerequisites of civil service are not fulfilled, an engagement as a Scientific Assistant (EG 13 TV-L) is possible. More information on potential contract length and position can be given upon request. The earliest start of the position will be February 1ˆst 2016.

We invite applications for an Assistant Professor (Akademischer Rat / A 13) position in the Department of Evolutionary (Prof. Dr. Susanne Foitzik) at the Institute of Zoology at Johannes Gutenberg University of Mainz, Germany. This young international research team focusses on the evolution, behavior, transcriptomics, chemical ecology of social insects

(http://www.bio.uni-mainz.de/zoo/evobio/-index_ENG.php). Collaboration with the other groups of the Department of Evolutionary Biology are desirable. Scientific interactions or integration within the JGU research focus “Gene regulation in Evolution and Development” (www.imb-mainz.de/research/-initiatives/GeneRED) would be advantageous.

Excellent research conditions are available at the newly renovated and well-equipped genetic and chemical laboratories in Mainz. Furthermore, new climate chambers are available for animal maintenance. A NextGen sequencing facility is available on campus. For further information, please contact foitzik@uni-mainz.de.

We are seeking a highly motivated young researcher with a strong background in evolution, behavior and genomics to establish a junior research group within the Department of Evolutionary Biology. Candidates must hold a Ph.D. and postdoctoral experience is necessary. The successful candidate should address evolutionary, behavioral ecological or genomic questions in insects, preferentially social insects. Scientific experience with the newest genetic methods (e.g. Next-Gen sequencing and transcriptomics) including bioinformatics analysis is advantageous.

The successful candidate should have an excellent publication record. Experience with grant acquisition and teaching is advantageous. The candidate should set-up an independent, competitive research group and is encouraged to apply for grants in Germany or the EU (e.g., DFG, ERC). The position comes with a teaching requirement of 4 h per week during the semester in the Master and Bachelor programs. Some basic zoology

classes are preferably taught in German. Consequently, a willingness to learn German is required. The candidate has the option to acquire a Habilitation. The working language of the lab is English.

Requirements of appointment:

- University degree and a PhD in biology (or related field)

- a full-time employment of at least two years and six month after Master or PhD

The Johannes Gutenberg-University Mainz is interested in increasing the number of women in science. Applications from female scientists are strongly encouraged. Similarly, qualified candidates with disabilities will be preferred.

The University of Mainz (http://www.unimainz.de/-eng/) hosts many excellent scientific institutions, including the Institute of Molecular Biology (IMB, www.imb-mainz.de) and Mainz is a historic city located on the River Rhine with many students and a rich social and cultural life

(http://www.mainz.de/WGAPublisher/online/html/-default/hpkr-5nkek8.en.html).

Interested candidates should send an application (as a single e-mail pdf attachment) containing a CV, a list of publications (including reprints of the three most important publications), research and teaching statements, and contact information of two potential referees to:

Prof. Dr. Susanne Foitzik

Evolutionary Biology Institute of Zoology Johannes-v.-Müller-Weg 6 55099 Mainz Germany

Tel: +49 (0) 6131 39 27 840

foitzik@uni-mainz.de

Closing date for the application is September 13ˆth, 2015.

Earliest possible starting date is February 1ˆst 2016, later starting dates are negotiable, but participation in teaching in the summer semester 2016 (end April to July) is expected.

“Foitzik, Susanne” <foitzik@uni-mainz.de>

UMaryland ArthropodEvolution

Assistant Professor Position in Integrative Arthropod Biology Department of Entomology University of Maryland, College Park, USA

We seek candidates doing outstanding work on any aspect of terrestrial arthropod biology. Topics of special interest to us include, but are not limited to: vector biology; insect/microbe interactions; insect behavior; ecology, and biodiversity; systematics, evolutionary biology and evo-devo; developmental biology and physiology; functional and comparative genomics; and arthropod roles in urban ecosystems, ecosystem services and their link to human health. The appointee will be expected to build a nationally prominent, robustly funded research program, as well as contribute to our undergraduate and graduate teaching portfolios. The appointee will join an intellectually diverse but cohesive department dedicated to integrative, collaborative understanding of basic and applied terrestrial arthropod biology, and to serving the public. The department plays a leading role in the NSF-funded National Socio-Environmental Synthesis Center, and collaborates extensively with NIH, the U.S. Department of Agriculture, the Smithsonian and other local agencies. Nearby Washington D.C. and vicinity offer a wealth of cultural and recreational opportunities.

Applicants must have a Ph.D. in a relevant field, and demonstrated excellence in both scientific publication and ability to obtain external funding.

Candidates should submit a cover letter describing qualifications, a c.v., a summary of research and teaching experience and future plans, and contact information for five people from whom letters of recommendation can be requested. Electronic submission of application through the University’s web page is required (ejobs.umd.edu, search for position no. 102996). Applications will be accepted until the position is filled, but for best consideration, apply by 15 September 2015. Questions may be directed to Search Chair, cmitter@umd.edu.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin,

physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Charles Mitter <cmitter@umd.edu>

UMissouri Columbia BioinformaticsComputationalBiology

Assistant Research Professor in Bioinformatics and Computational Biology

The Division of Animal Sciences at the University of Missouri-Columbia invites applications for an Assistant Research Professor in Bioinformatics and Computational Biology. The University recognizes that a more complete understanding of the genomes of agriculturally important species and humans will underpin most advances in agriculture and biomedicine. Future research will take advantage of the recent advances in next generation sequencing technologies to generate de novo genome and transcriptome assemblies, identify and annotate regulatory elements, and perform genotyping by sequencing. The successful candidate will become a member of teams in genomics and reproductive biology focusing on improving the efficiency of livestock and human health. The candidate will be expected to design, develop and implement computational pipelines for analyzing genotype and sequence data of all varieties but primarily whole genome sequencing and RNA-seq. Experience in predicting non-coding RNAs and other functional elements is beneficial. The successful applicant should have programming experience, preferably in one compiled (C, C++, Fortran, etc.) and one interpreted language (Perl, Python, etc.). Knowledge of relational databases, particularly Postgres, and experience building/administering server hardware is also beneficial.

The successful candidate will be required to make a major contribution to the development of the Animal Genomics and Reproductive Biology programs within the Division of Animal Sciences. This will include the development and submission of grant applications and manuscripts to peer reviewed journals. It will also include the mentoring of graduate students and presenting guest lectures in undergraduate and graduate courses. Candidates for the position must have a Ph.D. degree in Bioinformatics, Computer Science, Statistics, Genetics or Molecular Biology; postdoctoral experience; and possess satisfactory verbal and written communication skills. The ability to critically assimilate information from a number of disciplines (molecular genetics, biology, comparative genetics and statistics), talent for structuring and analyzing data, and interest in teamwork and interdisciplinary cooperation are desirable. Background and/or interest in mammalian genomes is preferred. The position will be in the Division of Animal Sciences within the College of Agriculture, Food and Natural Resources. This is a professional track position with salary commensurate with experience and annual renewal of contract dependent on performance.

Apply using the online application, and be prepared to upload a letter describing interest in the position, the names of at least three individuals who might provide a reference, and curriculum vitae.

Applications Submission: Please visit http://-hrs.missouri.edu/find-a-job/academic/index.php to submit an application. Questions regarding this position should be directed to Dr. Thomas Spencer, at spencerte@missouri.edu.

Applications must be received by August 1, 2015.

The University of Missouri is an equal access, equal opportunity, affirmative action employer that is fully committed to achieving a diverse faculty and staff. The university will recruit and employ qualified personnel and will provide equal opportunities during employment without regard to race, color, religion, national origin, sex, sexual orientation, age, status as a protected veteran or status as a qualified person with a disability. For more information, call the Associate Vice Chancellor of Human Resource Services/Affirmative Action officer at 573-882-4256.

To request ADA accommodations, please call the Director of Accessibility & ADA Education at 573-882-5835.

MUs College of Agriculture, Food and Natural Resources strongly endorses the principles embodied in MUs values statement V respect, responsibility, discovery, excellence ((http://web.missouri.edu/ ~ jess105/-values).http://web.missouri.edu/~jesse105/pages/values.htm). In that context we seek to recruit and retain outstanding scholars who are: Committed to blending service with scholarship: Leaders; Good colleagues who will collaborate with others from diverse disciplines and backgrounds and be flexible and adaptable in an era of rapid change.

"Taylor, Jerry F. (Animal Science)" <taylorjerr@missouri.edu>

UOregon ResAssist AgingBiology

RESEARCH ASSISTANT. A full-time research position conducting drug screens leading to extended lifespan is available in the Phillips Lab at the University of Oregon, Eugene. Candidates having a B.A, B.S. or M.S. in biology or a related area and laboratory experience are invited to apply. We seek a highly motivated and responsible individual who enjoys participating in an interactive intellectual environment to join us in our studies of genetics and genomics using the nematode Caenorhabditis elegans and its relatives as model systems. The candidate will be responsible for working with a team conducting large scale longevity and fitness assays, as well as performing general laboratory tasks. Previous experience with basic molecular techniques and/or the genetics of model organisms is preferred. Further details regarding ongoing research is available at http://www.uoregon.edu/~pphil. Salary is commensurate with education and experience. Please send CV and names of three references to: Patrick Phillips, Ph.D., via ie2jobs@uoregon.edu or c/o Search # 15252ABC, Institute of Ecology and Evolution, 5289 University of Oregon, Eugene, OR 97403-5289.

The successful candidate will support and enhance a diverse learning and working environment. To ensure consideration, please submit applications by July 20, 2015, but position will remain open until filled.

EO/AA/ADA Institution committed to cultural diversity. The University encourages all qualified individuals to apply, and does not discriminate on the basis of any protected status, including veteran and disability status.

http://jobs.uoregon.edu/unclassified.php?id=3D5207 Patrick C. Phillips, Ph.D. Professor of Biology Institute of Ecology and Evolution Email: pphil@uoregon.edu Phone: (541) 346-0916 | FAX (541) 346-2364 Address: 5289 University of Oregon Eugene, OR 97403-5289 USA Web: Lab http://www.uoregon.edu/~pphil IEE http://evolution.uoregon.edu

"pphil@uoregon.edu" <pphil@uoregon.edu>

UPennsylvania EvolutionEnergyPathways

The University of Pennsylvania is seeking to add to its ongoing cluster hire on the theme of Energy. The full advertisement appears here: http://facultysearches.provost.upenn.edu/postings/590. The ad is written as broadly as possible, as the School of Arts and Sciences may make more than one hire and in multiple departments. I am writing to specifically encourage applicants with a specialization in evolutionary biology, whose research involves fundamental aspects of the science of energy. For example, one particular research area of interest is the evolution of early life through exploitation of novel energy pathways.

Douglas J. Jerolmack Department of Earth and Environmental Science, University of Pennsylvania Chair of the Graduate Group Editor, Earth Surface Dynamics (http://www.earth-surface-dynamics.net/-) 154A Hayden Hall/6316, 240 S. 33rd St., Philadelphia, PA 19104 office: (+1) 215-746-2823 sediment@sas.upenn.edu http://www.sas.upenn.edu/earth/people/douglas-j-jerolmack Douglas Jerolmack <sediment@sas.upenn.edu>

USaskatchewan FlowCytometryTech EvolutionPlantReproduction

The Global Institute for Food Security (GIFS), based at the University of Saskatchewan, is recruiting for a Research Technician in the Sharbel Lab, which focusses on the origin and evolution of asexual (apomictic) seed production in plants.

GIFS was founded by PotashCorp, the Government of Saskatchewan, and the University of Saskatchewan in December 2012 to provide a unique contribution, drawing on Saskatchewan©ös strengths, to address the challenge of food security worldwide. Visit www.gifs.ca for more information.

Term: The Flow Cytometry Research Technician is a full-time, two-year term position with the possibility of being extended. The start date of the position is

October 1, 2015.

Salary: The salary range for the position is between $18.65 and $23.68 per hour ($2,828.58 to $3,899.31 per month). The salary offered to the selected candidate will be commensurate with qualifications and experience.

Primary purpose: Under the direct supervision of the lab manager in the Seed Developmental Biology program led by Dr. Timothy Sharbel, the technician will carry out high-throughput flow cytometric analyses of genome size (i.e., ploidy) of plant leaves and seeds. The technician will be directly involved with protocol development, including the preparation of samples/tissues, buffers, and analyses. The technician is expected to troubleshoot problems with protocols in conjunction with the lab manager, keep detailed notes on procedures used and results obtained, and communicate effectively with all lab members to keep projects on time.

Qualifications and experience: The selected candidate will have a BSc in molecular biology, plant sciences, or a related discipline or a biotechnology diploma, together with experience in a flow cytometry laboratory. She or he will be familiar with evolving flow cytometry systems and will be required to travel to international laboratories for training and development of new protocols.

Skills: Knowledge of computer operation is a must, as the technician will be responsible for downstream data acquisition and formatting for scientists in the laboratory. The position requires a motivated, reliable, and well- organized person with the demonstrated ability to work in a multi-disciplinary group environment. Candidates must possess excellent oral and written communications skills in the English language.

To apply: Applications will be accepted only by e-mail and must include a cover letter, resume with complete contact information, and the names of three references. Please submit a single PDF document to the attention of:

Amber McCuaig Global Institute for Food Security amber.mccuaig@usask.ca Please include Flow Cytometry Technician in the e-mail subject line.

Applications that do not include all requested information will not be considered. The application deadline is Wednesday, August 19, 2015, at 5:00 p.m. The University of Saskatchewan is strongly committed to a diverse and inclusive workplace that empowers all employees to reach their full potential. All members of the university community share a responsibility for developing and maintaining an environment in which differences are valued and inclusiveness is practiced. The university welcomes applications from those who will contribute to the diversity of our community. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

sharbel@ipk-gatersleben.de

UStAndrews Bioinformatician

Dear Evoldir,

Applications from Evoldir readers are welcome. Projects include evolutionary genomics and phylogeny.

Details and application via:

http://www.jobs.ac.uk/job/ATW835/bioinformatician-ar1173kc The role will include:

o Active participation in the design and implementation of bioinformatics analyses and pipelines.

o Hacking, scripting, debugging and algorithm development. Advising and training researchers both informally and through structured workshops, to make most effective use of their sequence and metadata.

o Systems administration of the Unit's 192-core computer cluster (http://bioinformatics.st-andrews.ac.uk). Lead the management and expansion of the St Andrews Bioinformatics Unit.

The post will be available immediately and is for three years in first instance. It will be based in the School of Medicine but will involve working with groups based in the Schools of Biology, Chemistry and Computer Science. For informal enquiries please contact Dr Silvia Paracchini (sp58@st-andrews.ac.uk) or Dr Daniel Barker (db60@st-andrews.ac.uk).

- Daniel

–

http://biology.st-andrews.ac.uk/staff/db60 "db60@st-andrews.ac.uk" <db60@st-andrews.ac.uk>

UZurich FieldAssist Swedish Lapland

Expenses paid field assistant position to study social evolution in Siberian Jays in Swedish Lapland

For the upcoming field season (1 September- 30 October

2015) we are looking for a highly motivated field assistant to join our field project investigating social evolution in Siberian jays (Perisoreus infaustus) (main responsible Michael Griesser, University of Zurich, Switzerland). The study population is located near Arvidsjaur, Swedish Lapland.

Our current project investigates the influence of habitat quality on social decisions. The work of the field volunteers will be to help in field experiments, behavioural observations, following radio-tagged birds, and data management. This work will give insight into exciting experimental fieldwork and will be carried out partly in managed forests and partly in scenic pristine boreal habitats. We will work 5-7 days per week in the field depending on the workload of the experiments. Observe that temperatures in October can be as low as -10C.

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) Previous experience of social observations of animals (5) Driving license (6) Fluent in English

We will cover for the accommodation, travel expenses from and to the study site (in total up to 400 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 10th August 2015 will be given full consideration.

ââââââ

Michael Griesser Anthropological Institute & Museum University of Zurich - Campus Irchel Winterthurerstrasse 190 8057 Zürich Switzerland

http://www.aim.uzh.ch/Research/birdfamilies/-mgriesser.html

“michael.griesser@uzh.ch” <michael.griesser@uzh.ch>

Other

Bioinformatics with Python

Dear all,

I would like to announce “Bioinformatics with Python Cookbook” which I authored.

This book is slightly different from the standard books on Bioinformatics and Python. It is not about teaching Bioinformatics algorithms. It is also not an introductory book of Python (you can find plenty of those elsewhere).

It is about solving practical day-to-day problems with Python, for example:

Next-Generation Sequencing: FASTQ, BAM and VCF processing. Along with filtering of datasets.

Genomics: processing reference genomes of both high-quality references of model species and low-quality non-model species. Also discussed are genome annotations and gene ontologies.

Population Genetics: doing PCA, Admixture/Structure, computing FSTs, ...

Genome simulation: mostly forward-time simulations, but also a bit of coalescent

Phylogenetics: tree reconstruction and tree drawing

Proteins: PDB processing and visualization.

Other topics like processing map data, GBIF, interfacing with Cytoscape, accessing lots of online databases, ...

There is a bit on interacting with R/Bioconductor via Python.

Finally we discuss high-performance in Python: faster algorithms, clusters, Numba and Cython. Also related technologies like Docker

The book discusses the usual Python Libraries in the field: Biopython, PyVCF, Pysam, simuPOP, DendroPy, Pymol and also scientific libraries like NumPy, SciPy, matplotlib and scikit-learn.

The code is fully available for free at github https://-/github.com/tiagoantao/bioinf-python/blob/master/-notebooks/Welcome.ipynb I am keen on maintaining the book code, so if you find any issues please do contact me.

The book is available in the usual places (Amazon, etc.) in paperback and e-book format. The web page of the book is https://www.packtpub.com/application-development/bioinformatics-python-cookbook Regards, Tiago

Tiago Antao <tra@popgen.net> Tiago Antao <tra@popgen.net>

CNRS VolAssist TitEvolution

Opportunities available to participate in an ongoing project at the CNRS in Moulis, France, investigating aggressive and social behavior in wild and captive blue and great tits. We are seeking two motivated volunteer research assistants to help with behavioral analysis from videos recorded at winter feeders and in captivity. Volunteers may also conduct analyses of ornamental patches from photos and feather samples via spectrophotometry.

The positions are most suitable for graduates looking for a PhD position and seeking to gain further research experience. Good organizational skills, commitment and attention to details are required; previous experience with video analyses would also be desirable though not necessary. Positions start as soon as possible and will continue into Summer/Fall (dates flexible). Ideally, volunteers will spend at least a few days at the lab to get acquainted with analyses protocols, while subsequent work may be conducted remotely.

Applicants should send a cover letter and CV, including names and e-mail addresses of three potential referees, as soon as possible.

For further information and applications, please contact Enrico Sorato: enrico.sorato@ecoex-moulis.cnrs.fr or Alexis Chaine: Alexis.CHAINE@ecoex-moulis.cnrs.fr

“Enrico.SORATO@ecoex-moulis.cnrs.fr”

ESEB Outreach Fund DeadlineSep15

ESEB Outreach Fund

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

Applications for funding will be accepted for educational initiatives that promote evolution, development of evolutionary material (books, films, web sites) intended for a general audience, public outreach seminars, public exhibitions, etc. While most projects will be financed for a sum between 1000-1500 Euro, exceptions can be made if a strong argument is provided for additional funds.

The application form can be found on www.eseb.org (click on the “Outreach Fund” link). Applications will be accepted twice yearly (deadlines March 15, September 15) and should be submitted by email to Ute Friedrich (office@eseb.org; Subject: Outreach).

–

Ute Friedrich ESEB Office Manager Email: office@eseb.org European Society for Evolutionary Biology - www.eseb.org ESEB <office@eseb.org>

EvolutionMeeting Poster coding

Evolution Meeting Coding Project - Poster Invite System

The organizing committee for the annual Evolution Meetings (the joint annual meeting of the ASN/SSB/SSE) is looking to develop a poster-invite system for future meetings and we're therefore searching for someone (graduate student, pdf, or faculty) who would be we willing to do some coding to develop this for us. We're after a simple yet reliable system that looks nice, works well, that can easily be implemented across meetings (i.e. plug in a new database and go), and that can also be modified by others if needed (meaning open source with well annotated code).

For those not familiar, the basic idea of the poster invite system is that a week or two before the meeting everyone that is presenting a poster gets an email explaining that they can have a personal invite to their poster sent to up to 3 meeting attendees of their choice. The email directs them to a website where they can browse a list of attendees (names and institutions) and select up to three. Any given attendee can only receive a maximum of 5 invites, after which they are no longer available for selection by subsequent poster presenters (it's first come-first serve). After a few days, the system closes and emails get sent to every attendee that received one or more invites (up to the max of 5 per attendee). Each email indicates the name of the person that invited them, the title of their poster, and the date and time it is being presented. Past experience indicates that the majority of people visit posters to which they are invited, and this system can therefore dramatic ally alter the benefits of giving a poster compared to a talk.

We're willing to offer some financial compensation, and/or funds towards attending the next Evolution meeting in Austin, TX in 2016. However, this should be considered as much a volunteer service as a job. The ideal candidate would therefore be a member of one or more of these societies who values these meetings and would be interested in improving them.

If you're interested, or would like additional details, please contact me at hrundle@uottawa.ca. Those interested are asked to provide some evidence that they have the appropriate skills.

Sincerely, Howard Rundle, Chief Meeting Officer Evolution Conferences

howard.rundle@uottawa.ca

Evolution Photography Contest

As part of our commitment to promote science to a wide and general audience, Royal Society Publishing is pleased to announce details of our inaugural photography competition. This free competition, with a cash prize, is split into three categories each representing a key area within the biological sciences:

- Behaviour - Ecology and Environmental Science - Evolutionary Biology

I would be most grateful if you could circulate the brief details below to your members and readers via Evoldir in order to let as many people as possible know about the competition.

Many thanks for your help and I look forward to hearing from you.

Felicity

The inaugural Royal Society Publishing photography competition is now underway. This competition is split into 3 categories - behaviour, ecology and environmental science and evolutionary biology - and is free to enter. There is a cash prize of Â£500 (or equivalent in dollars/euros). Visit

https://blogs.royalsociety.org/publishing/launching-the-inaugural-biology-letters-and-proceedings-b-photography-competition for further details and to submit your photograph.

Felicity Davie Royal Society Publishing T +44 20 7451 2647 http://royalsociety.org The Royal Society 6-9 Carlton House Terrace London SW1Y 5AG Registered Charity No 207043 Join us as we celebrate 350 years of scientific publishing http://royalsociety.org/publishing350 "Davie, Felicity" <Felicity.Davie@royalsociety.org>

Shipping treating RNA

I am currently conducting research for my dissertation at Harvard. I would like to import some RNA from Canada to the US for use in comparative transcriptomics (using a cryo dry-shipper) and I would like to maintain the highest level of quality since I will be comparing it to RNA extracted here in the USA. Since it is avian RNA, it will require "treatment" in order to be cleared for import. I have been told that the following are all valid viral inactivation treatments on our current permit:

a) heated to 56C for 3 hours, 60C for 30 minutes, or 100C for 20 minutes b) subjected to affinity chromatography c) treated with a minimum of 2% SDS for 30 minutes d) treated with a minimum of 3% beta propiolactone for 12 hours at 4C and pH 7 e) immersed in 10% formalin f) immersed in a minimum of 70% ethanol g) immersed in phenol/chloroform h) treated with guanidine HCl i) treated with proteinase K

I was hoping to extract the RNA using a Qiagen RNeasy kit and I was wondering if adding proteinase K to the homogenate would be a reasonable way to treat the samples? If a better alternative jumps out at you based on the possible treatment options, please suggest it.

Thanks for your advice!

Phil Grayson PhD Candidate Edwards Laboratory, OEB Harvard University http://scholar.harvard.edu/philgrayson "Grayson, Phillip" <pgrayson@fas.harvard.edu>

Software Nemo 2 3 Released

Nemo version 2.3 has been released!

Nemo is an individual-based, forward-time, genetically explicit, and stochastic simulation software designed for the study of the evolution of life history and quantitative traits, and genetic markers under various types of selection, in a spatially explicit, metapopulation framework.

Packages with the code source, Windows and MaxOSX executables, and documentation are available on the download page.

WHAT'S NEW IN v2.3?

- A recombination map holding loci from multiple traits. - A new trait coding for (Bateson-)Dobzhansky-Muller incompatibility loci. - Selection may now act on multiple types of loci, placed on the same genetic map (QTL, DMI, deleterious mutations) - An unlimited number of quantitative traits can be modelled, with pleiotropic loci. - Selection affecting quantitative traits can vary spatially and temporally among populations. - Nemo has been optimized to model migration on very large population grids using connectivity and migration matrices - And more, check the homepage of Nemo.

homepage: http://nemo2.sourceforge.net download page: http://sourceforge.net/projects/nemo2/files/-Nemo/2.3.0/ twitter: @NemoSimul

/fg

frederic.guillaume@ieu.uzh.ch

@fred_guillaume

http://www.ieu.uzh.ch/research/evolbiol/-ecoevo.html "frederic.guillaume@ieu.uzh.ch" <frederic.guillaume@ieu.uzh.ch>

Software TESS Update

Dear evoldir members,

TESS3, a new version of the computer program TESS, is available from

http://membres-timc.imag.fr/Olivier.Francois/-tess.html TESS3 implements ancestry estimation algorithms for spatial population genetic analyses, and has functionalities similar to the previous versions of TESS. But it has run-times several order faster than those of common Bayesian clustering programs. In addition, the program can be used to perform genome scans for selection based on ancestral allele frequency differentiation statistics, and to separate non-adaptive and adaptive genetic variation. The program also contains R functions that facilitate the post-processing of the program outputs, and help visualizing ancestry coefficients in geographic space.

If you have any questions, do not hesitate to send an mail at: olivier.francois@imag.fr

Best regards,

Olivier

"olivier.francois@imag.fr" <olivier.francois@imag.fr>

SouthAfrica VolunteerFieldAssist StripedMouse

Volunteer opportunity

as field assistants for the project:

Evolution and Socio-Ecology of small Mammals in the Succulent Karoo of South Africa

Opportunity: This is a great opportunity for anybody who wants to get more experience in field work relating to eco-physiology, animal behavior, evolution, and ecology before starting an MSc or PhD project.

Project: We study the evolutionary and ecological reasons as well as physiological mechanisms of group living, paternal care, communal nesting and social flexibility in the striped mouse. One focus is on the adaptation to droughts, combining physiological, behavioral, ecological and evolutionary research. As this species is diurnal and the habitat is open, direct behavioral observations in the field are possible.

What kind of people are needed? Biology/zoology/veterinary students are preferred as candidates. Applicants must have an interest in working in the field and with animals. Hard working conditions will await applicants, as the study species gets up with sunrise (between 5 and 6 o' clock), and stops its activity with dusk (19 o' clock). Work during nights might also be necessary. Work in the field will be done for 5 days a week. Applicants must be able to manage extreme temperatures (below 0 at night in winter, sometimes over 40ÂC during summer days). Applicants must both be prepared to live for long periods in the loneliness of the field and to be part of a small social group.

Work of volunteer field assistants: Trapping, marking and radio-tracking of striped mice; direct behavioral observations in the field. Volunteers will also see how blood samples are collected for physiological measurements. Volunteers are expected to help with maintenance of the research station (water pump, solar power, etc.).

Confirmation letter: Students get a letter of confirmation about their work and can prepare a report of their own small project to get credit points from their university for their bachelor or masters studies.

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 1400 (around 180 US$, 110 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 3000, approx. 360 US$ or 250 Euro/month). Including extras (going out for dinner; shopping), you should expect costs of about 600 US$ / 450 Euros per month. Students get an invitation letter which they can use to apply for funding in their home country.

Place: The field site is in the Goegap Nature Reserve near Springbok in the North-West of South Africa. The vegetation consists of Succulent Karoo, which has been recognized as one of 25 hotspots of biodiversity. It is a desert to semi-desert with rain mainly in winter (June to September).

When and how long: At the moment we are looking for one or two volunteers starting in August-October 2015, and for two volunteers starting in December 2015/ January 2016. Volunteers are expected to stay at least three months, but longer periods of up to 6months are preferred.

How to apply? Send a short motivation letter stating why and for which period you are interested and your CV via email to succulent.karooo.research.station@kabelbw.de.

More information under

http://stripedmouse.com/site1_3_5.htm http://-www.youtube.com/watch?v=w6rvF5XrVn0&list=-UUd12oFYqs5OobiiKMhDnFtw&index=1 Contact via e-mail: succulent.karoo.research.station@kabelbw.de

Succulent Karoo Research Station

a registered South African non-profit organization

Dr. Carsten Schradin (Director)

South Africa

Dr. Carsten Schradin, DR2, http://www.iphc.cnrs.fr/-Carsten-Schradin-.html

Video presentation: https://www.youtube.com/-watch?v=vZmAXySr-EM

Institut Pluridisciplinaire Hubert Curien, Département d'Ecologie Physiologie et Ethologie, 23, rue Becquerel, UMR 7178 CNRS UdS, 67087 Strasbourg cedex 2, France

Tel: +33 (0)3 88 10 69 19

PD at the University of Zurich, Switzerland, http://www.ieu.uzh.ch/research/behaviour/-endocrinology.html

Honorary Professor at the University of the Witwatersrand, Johannesburg, South Africa

Director of the Succulent Karoo Research Station http://www.stripedmouse.com

Carsten Schradin <carsten.schradin@iphc.cnrs.fr>

Switzerland Internship BatReproduction

Internship for undergraduate/ Master's degree student for the bat project

Topic: Impact of oxidative stress on alternative reproductive tactics in bats.

Context: Oxidative stress is considered to be a major mechanism impacting on life history trade-offs. Carollia perspicillata, a neo-tropical bat, shows two reproductive tactics, with harem males defending a territory, and bachelor males. Our hypothesis is that bachelor males, because they have less mating opportunities will invest more in sperm quality then harem males. The project is based at the university of NeuchÃtel, Switzerland. We study a captive bat colony (Papiliorama http://www.papiliorama.ch). Bats can fly freely under a 40m-diameter dome, which includes an artificial cave. The light cycle is reversed, allowing us to work during the day. Therefore, it is a unique opportunity to study bats, animals still largely unknown.

Tasks of the intern, in collaboration with the two PhD students working on the project:

- Planning of the experiment

- Help to feed the bas that are in cages during the experiment

- Participation in blood and sperm collect

- Behavioral observation

- Possibility of lab work

About the position:

- It can be part of your studies. Therefore, the candidate is welcome to conduct a personal research project.

- Not paid, but housing could be reimbursed for two month maximum

- Minimum duration of two months, possibly starting in September

Please feel free to contact me if you have any questions. To apply, please send a CV and a cover letter to magali.meniri@unine.ch.

MENIRI Magali <magali.meniri@unine.ch>

UBern Cichlids InternshipBachelorProject

Internship or Bachelor project for Master/ undergraduate students Topic: Alternative reproductive tactics in cichlid fish I am looking for 1-2 motivated Interns or Bachelor students interested in doing a practical project at the Department of Behavioural Ecology, University of Bern, Switzerland (minimum 8 weeks, starting September 2015).

We study the evolutionary mechanisms involved in the origin and maintenance of alternative reproductive tactics (ARTs), with a shell brooding Lake Tanganyika cichlid as a model system. Lamprologus callipterus exhibits three male ARTs involving an extreme intrasexual size dimorphism determined by Mendelian inheritance. Large nest males defend territories and construct nests of empty snail shells in which females breed. In contrast, the genetically fixed dwarf males do not court but enter shells surreptitiously during spawning, in order to steal fertilizations. Finally, the plastic and conditional sneaker males enter nests during spawning to steal occasional fertilizations from nest owners. Reproductive investment and aggression patterns typically diverge between individuals pursuing ARTs.

We are interested in the following questions: - How do different ARTs perform and adjust to changes in morph densities? - How do different ARTs specialize in spawning behaviour, ejaculates and sperm? - What is the influence of different traits on spawning success?

Interns have the chance to choose a topic they would like to focus on, but may be involved in several projects.

Tasks of the intern/ student: - Participate in the planning process of your experiment - Help to feed, measure, weigh and prepare fish for the experiment - Help with behavioural observations and analysis of the data - Possibility to help with lab work

The project may be part of your studies. Unfortunately, the internship/ Bachelor project cannot be paid, but housing might be available at our institute for some time.

To apply, please send a letter of motivation and a CV to corinna.vonkuerthy@iee.unibe.ch

Also feel free to write an E-mail, if you have any

further questions: For more information about our Institute, please have a look at our homepage: http://behav.zoology.unibe.ch/index.php?pp=-3D55&p8 "corinna.vonkuerthy@iee.unibe.ch" <corinna.vonkuerthy@iee.unibe.ch>

UGeorgia DiseaseEvol TravelTrainingAwards

Our recently funded NSF RCN is going to begin offering travel awards next year. While our RCN is primarily focused on macroecological topics, we would also be very interested in projects focused on disease macroevolution and host pathogen co-evolution.

Macroecology of Infectious Disease RCN: Travel and Training Awards

An NSF funded Research Coordination Network is now inviting applications from undergraduate, graduate and postdoctoral scholars to visit participating institutions and collaborators to conduct research and engage in training on the macroecology of infectious diseases:

http://disease_macroecology.ecology.uga.edu/people/ Proposals (2 pages) should describe (a) applicant name, affiliation and current research; (b) proposed PI and institution for collaboration/training; (c) nature of the proposed research and activities; (d) timeline, milestones and budget ; (e) expected product(s); (f) the benefit to the individual of conducting the research at the proposed location; and (g) a brief letter of support from proposed mentor. To be most competitive, applicants should explain how their proposed research is synergistic with the core questions of the RCN including (but not limited to):

1. How should host-parasite biodiversity, occurrence and host breadth be quantified?

2. What is the global distribution of parasite /pathogen biodiversity?

3. What drives variation in parasite /pathogen biodiversity and endemism?

4. How will patterns of parasite /pathogen biodiversity change in the future?

Awards may cover lodging, per diem and transportation to the research institution. Awards are capped at $2,000. Applications should be emailed to prsteph@uga.edu by Sept 1 and Feb 1 of each year. Following committee review, applicants will be notified 4-6 weeks after the deadline.

Patrick R Stephens Odum School of Ecology 140 E Green St. University of Georgia Athens, GA 30605 FAX: (706) 542-4819

Patrick R Stephens <prsteph@uga.edu> Patrick R Stephens <prsteph@uga.edu>

UMelbourne VolFieldAssist AvianPersonality

Volunteer field assistant

We are looking for a field assistant to help monitor a colour-banded population of superb fairy-wrens near Melbourne, Australia, for a study on animal personality. Duties include catching birds for personality testing before the breeding season, regular censusing of colour-banded birds and nest searching during the breeding season; also behavioural observations, video analysis, and data proofing. Working days are long, with early starts six days a week. The volunteer should be an early riser, physically fit, able to work in extreme weather conditions, and enjoy basic shared living conditions. Enthusiasm, self-motivation, and a strong work ethic are a must. The study is based at Serendip Sanctuary, a small reserve on the outskirts of Melbourne.

Time period: From late August 2015 to early January 2016.

Qualifications: Must be very experienced mist-netter; ideally also experienced at re-sighting colour-banded birds and nest-searching.

Compensation: Free onsite accommodation in a house with shared dorm-style room is provided, but assistants cover travel to the site and their own food costs. The project will reimburse up to AUD$750/mo towards receipted food and travel expenses.

Contact: For more information, email Michelle Hall (hall.mATunimelb.edu.au). To apply, please email a letter outlining previous relevant field research experience, and a resume including names and contact information for 3 referees that are familiar with your mist-netting, colour-band re-sighting, and nest-searching experience.

Dr Michelle L Hall Research Fellow School of BioSciences Building 147 (Old Zoology) University of Melbourne Melbourne, Vic, 3010 Australia Email: hall.mATunimelb.edu.au Web: http://-michellelhall.wordpress.com/ "hall.m@unimelb.edu.au"

<hall.m@unimelb.edu.au>

USaskatchewan VolAsst PrairieDogEcoEvo

Field Assistants Required IMMEDIATELY- Black-tailed prairie dogs Grasslands National Park, Saskatchewan, Canada

We are looking for 2-4 volunteers to assist with fieldwork beginning ASAP and continuing until Aug 31 (later end-dates (Sept 31 or Oct 31 may be possible for at least some of the volunteers). The project investigates the ecology of Black-tailed prairie dogs and will involve live-trapping, handling and monitoring of individuals. Prairie dog towns are home to (among others): burrowing owls, swift fox and, the recently reintroduced, black-footed ferret. Assistants will have the opportunity of seeing all of these iconic grassland species, plus the many more that reside in the Park. This is an excellent opportunity to gain experience working with a population of wild mammals in a spectacular setting and to network with researchers and staff from Universities, Parks Canada and the Calgary Zoo.

All fieldwork is carried out in Grasslands National Park, southern Saskatchewan, one of the largest remaining tracts of native prairie in Canada. We will be staying in Parks Canada housing in the heart of the Park. Food and accommodation are provided. Volunteers are required to provide for their own travel to Saskatoon, Saskatchewan. Travel between the field station and Saskatoon is provided. Training will be provided and no experience is necessary, but candidates should have an interest in the following (the more the better!): ecology, evolutionary biology, wildlife, field biology, and conservation biology. The field house and study population is isolated (the nearest town is ˜ 45 min away) and, as such, successful applicants need to be able to cope under these conditions, enjoy the outdoors, be up-beat, positive, responsible and work well as a member of a team.

If you wish to apply for one of these posts then please send a CV with a cover letter and contact details for three references (with e-mail addresses), by email to Jeff Lane (contact info below) ASAP.

Contact: Dr. Jeff Lane Department of Biology University of Saskatchewan jeffrey.lane@usask.ca www.lanelab.ca Dr. Jeffrey Lane Assistant Professor Department of Biology University of Saskatchewan www.lanelab.ca "Lane, Jeffrey" <jeffrey.lane@usask.ca>

PostDocs

AarhusU EvolutionRecombination

Evolution and mechanisms of genetic recombination

A post doc position is available to work in the research group of Kasper Munch at the Bioinformatics Research Centre at Aarhus University on the evolution and genomic control of recombination rate. The position is funded by the Danish National Research Council for Independent Research.

We recently published a method that infers recombination maps in ancestral species. This new line of research offers great promise for a detailed understanding of how recombination is controlled by the genome and how the mechanisms of this control evolve. By comparing recombination maps for all living and ancestral species in the great ape species tree, the candidate will work in close collaboration with me on research questions such as:

* What is the role of positive selection in the evolution of recombination landscapes across the species tree? * Which changes in genomic sequence features trigger change in fine and broad-scale recombination rate along branches of the species tree? * What is the isolated effect of chromosomal rearrangements on recombination rate in the affected region?

A PhD degree and strong expertise in statistical analysis and population genetics is essential. Analyses will require programming skills and familiarity with high performance computing.

The position is initially for 1 year with extension for 1 additional year on mutual agreement. The starting salary depends on qualifications but is typically in the range of EUR 59,000-65,000 per annum, and taxation is often strongly reduced for applicants, which have not lived and worked in Denmark for the past 3 years.

The working environment is the Bioinformatics Research Center (www.birc.au.dk), which has a strong emphasis on evolutionary analyses and includes the research groups of Drs Mikkel. Heide Schierup, Thomas Mailund, Thomas Bataillon and Asger Hobolth with whom there are extensive collaborations.

Informal inquiries are encouraged and should be sent to Kasper Munch at kaspermunch@birc.au.dk. The application with CV, list of publications and names of three referees should also be sent to kaspermunch@birc.au.dk before Aug 15. Starting date is negotiable, but the position is available immediately.

Kasper Munch, Bioinformatics Research Center, Aarhus University,

CF Mollers Alle Building 1110, 8000 Aarhus C, Denmark

Office phone: +45 8715 5626

https://kaspermunch.wordpress.com Kasper Munch Terkelsen <kaspermunch@birc.au.dk>

ChineseAcademenyScience InternationalFellowships

Hello all,

This is a general notice to interested parties that the Chinese Academy of Sciences has announced this year's PIFI fellowships. Faculty members, postdocs, and prospective PhD students can get funding (salaries) to collaborate with CAS scientists. Deadline is 1 Sep.

The Chinese-language webpage is: http://-www.bic.cas.cn/tzgg/201507/t20150702_4383974.html The English-language webpage is still not updated but should be largely the same for this year: http://english.bic.cas.cn/AF/Fe/201408/-t20140807_125680.html For my part, if anyone would like to spend time in my lab to collaborate on high-throughput biodiversity research (eDNA, iDNA, metabarcoding, and mitogenomics), please contact me. We are funded to provide infinite amounts of coffee (and tea, of course).

doug

– Douglas W. Yu School of Biological Sciences, University of East Anglia, Norwich, Norfolk NR4 7TJ UK, 44-(0)1603-593-835 Kunming Institute of Zoology, 32 Jiaochang Dong Lu, Kunming, Yunnan 650223, China 650223, China, ofc +86-871-519 9178, mob 1860-871-7369 www.uea.ac.uk/-bio/People/Academic/Douglas+Yu, eastanglia.academia.edu/DouglasYu/Papers for pdfs

"Douglas Yu (BIO)" <Douglas.Yu@uea.ac.uk>

CIBIO-InBIO Portugal 2 Biodiversity

1. REFER BIODIVERSITY CHAIR POST-DOC FELLOWSHIP: THEORY OF NOVEL COMMUNITY ASSEMBLAGES

REF: BPD-REFER-NC

Scientific area: Biological sciences

Link to the call: http://www.eracareers.pt/-opportunities/index.aspx?task=global&jobId=-64760&lang=pt Admission requirements

The post-doc fellowship is suitable for candidates of any nationality holding a PhD degree in biology, ecology, environmental sciences or related fields. The candidate should have a strong quantitative background, and previous experience with macroecological methodology (e.g. species distribution modeling, measurement of taxonomic and functional changes in biological communities; analysis of spatial patterns of biodiversity) is a plus. Preference goes to candidates that have demonstrable experience in GIS and data analysis in R. Further preferred skills include excellent verbal and written communication skills. Excellent speaking and written knowledge of English is required. A proven publication track record is required.

Project overview

We search for a candidate who will develop a project investigating the dynamics behind the assemblage of novel ecological communities and consequences for ecosystem functioning. Potential topics include: the dynamics of ecological invasions and species distributions rearrangements caused by climate change, trade, or other drivers; management approaches for rewilding, including the introduction of functional equivalents of extinct species; or a more theoretical approach on the rules of community assembly. Projects looking at links between novel community assemblages and linear infrastructures are particularly welcome, including the effects of dispersal corridors and of fragmentation. The candidate will join a dynamic team led by CÃÂ©sar Capinha and Henrique M. Pereira working on ecological theory of biodiversity change.

Fellowship

The duration of the fellowship is 12 months, renewable up to a maximum of two years.

Salary

Monthly stipend is 1495 according to the stipends established by FCT, I.P. in Portugal (http://-alfa.fct.mctes.pt/apoios/bolsas/valores). Payment will be made by bank transfer on a monthly basis.

Applicable legislation

Regulamento de Bolsas de Investigao da Fundao para a Cincia e a Tecnologia, I.P. - 2013 Regulamento de Bolsas de Investigao da FCT, I. P., aprovado pelo Regulamento n 234/2012, de 25 de junho, alterado pelo Regulamento n 326/2013, de 27 de agosto de 2013

Work place

Work will be conducted at CIBIO-InBIO branch located

at the Tropical Research Institute, Lisbon, Portugal

Application: The call for applications is open between August 03 and September 04, 2015 (24:00 GMT).

Applications should be submitted by email to bolsas@cibio.up.pt and will include: a) Curriculum vitae (including a publication list and other relevant information in the context of the project research goals); b) Motivation Letter (including a brief description of research experience and why you are suitable for the announced position);

Selection criteria

The jury panel will select the best candidate based on his/her merit, through the analysis of: - Overall appreciation of the Curriculum Vitae, particularly the publication record (60%); - Specific experience in research projects related to the call (40%); The best candidates will be invited for an interview (typically ca. 25%), in person or by videoconference, to establish the final ranking.

Jury Panel

Henrique Miguel Pereira (Chair), CÃÂ©sar Capinha, LuÃs Borda de Ãï¿½gua, and Ainara Cortes-Avisanda.

Results announcement

Candidates will be directly informed by email about the result of their application. The ranking of the candidates will be published at a visible and public area of ICETA facilities.

***

2. REFER BIODIVERSITY CHAIR POST-DOC FELLOWSHIP: IMPACT OF LINEAR INFRASTRUCTURES ON BIODIVERSITY

REF: BPD-REFER-INFRASTRUCTURE

Scientific area: Biological sciences

Link to the call: http://www.eracareers.pt/-opportunities/index.aspx?task=global&jobId=-64761&lang=pt Admission requirements The post-doc fellowship is suitable for candidates of any nationality holding a PhD degree in biology, ecology, environmental sciences or related fields but candidates from mathematics, statistics or other quantitative areas are also eligible. The candidate should have a strong quantitative background, but experience with field work, environmental impact assessments or policy advice is a plus. Further preferred skills include excellent verbal and written communication skills. Excellent speaking and written knowledge of English is

— / —

ClemsonU ComputationalGenomics

Computational Genomics Postdoctoral Research Associate Position Clemson University

The Lawton-Rauh Lab is recruiting a computational genomics postdoctoral research associate to join the RosBREED team on the newly-funded RosBREED2 project (www.rosbreed.org; USDA-Specialty Crops Research Initiative, 5 years). The RosBREED team is an extensive collaboration amongst computational scientists, breeders, geneticists, physiologists, pathologists, and socio-economists. A major goal of this project is to translate genome evolution and diversity/divergence amongst cultivars and wild relatives into modern DNA-based diagnostic tools to help deliver new cultivars with combined superior horticultural quality and disease resistance.

This computational genomics scientist will be based at Clemson University to work with Amy Lawton-Rauh as postdoctoral advisor. Resources will include the Institute for Translational Genomics (Stephen Kresovich), the CU-Genomics and Computational Biology Lab (Chris Saski), and research computing training opportunities (http://citi.clemson.edu/ciprac/). This position is targeted to begin late summer/early Fall 2015 and is currently funded for two full years.

Activities: The major research focus for this postdoc will be on comparative genomics analysis of domestication-related genome regions plus locus-specific and genome-wide haploblock discovery and diagnostic tool implementation and optimization. This post has several specific, cutting-edge objectives for basic research-enabled tool development to successfully achieve goals of this grant coupled with excellent opportunities for other related exploratory projects. Scientific publications, extension articles, participation in conferences and project meetings, and networking across breeding programs and allied science programs both U.S-wide and internationally are expected.

Job functions: * Work with the CU-GCBL web portal computational genomics group to collate and curate relevant genome sequence data from multiple platforms * Employ and optimize comparative analytical methods

to discover haplotype blocks (haploblocks) in cultivars, diverse germplasm, and wild relatives * Actively participate in networking and project team activities (including extensively with the international RosBREED group) * Communicate results in multiple formats (journals, conferences, project reports, plus miscellaneous relevant media)

Qualifications: Applicants must have a Ph.D. in Genetics, Bioinformatics, Genomics, Computational Biology, Biological Sciences, Crop Sciences, or a closely related field. The successful candidate will be a highly motivated team player with excellent communication skills and computational genomics experience. Preference will be given to candidates with evidence of successful management and documentation of large datasets and a strong publication record. Experiences with complex genomes, diverse sequencing platforms, workflow implementation and optimization, creative problem-solving, and a commitment to translation of genome dynamics models to practical applications are highly desired. Familiarity with the following is advantageous but not required: statistical genetics, population and quantitative genetics, and domestication processes.

Pay & work schedule: Standard hours: 37.5. Salary will be commensurate with credentials and experience. This position is funded for two years.

Applying: If you are interested in this position, please send inquiries to Amy Lawton-Rauh (amylr@clemson.edu). To apply, email the following: a cover letter, current CV, and the contact information (phone number and email address) of three referees.

Consideration of applications will begin immediately and will continue until the position is filled. To ensure full consideration, please submit materials by Thursday July 16, 2015. Applications will be reviewed as received and qualified applicants will be invited to interview on or after Thursday July 9, 2015 or until the position is filled.

JOB LOCATION: Biosystems Research Complex (BRC) - Clemson Main Campus

The Jeanne Clery Disclosure Act requires institutions of higher education to disclose campus security information including crime statistics for the campus and surrounding areas. As a current or prospective Clemson University employee, you have a right to obtain a copy of this information for this institution. For more information regarding our Employment, Campus Safety and Benefits, please visit the Human Resources-Prospective Employees web page below: http://www.clemson.edu/cao/humanresources/prospective/ Clemson University is an Affirmative Action/Equal Opportunity employer

— / —

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

CornellU BeeDiversityMojaveDesert

Postdoctoral Researcher on Impact of Concentrating Solar Power Plants on Bee Diversity in the Mojave Desert.

A postdoctoral position is available in the laboratory of Monica Geber, Department of Ecology and Evolutionary Biology, Cornell University. This position is funded by a grant from Cornells Atkinson Center for a Sustainable Future (ACSF) to compare bee diversity in undisturbed areas of the Mojave Desert (e.g. Sweeney Granite Mountain Preserve) to diversity at Concentrating Solar Power Plants (Ivanpah Solar Electric Generating System) and other developed areas (e.g., Conventional Solar Electric Generating Facilities, Primm Valley Gulf Course and Casino). The postdoc will interact with Co-PIs Jefferson Tester and Mikal Moore, Department of Chemical and Biomolecular Engineering, in the development of an economic and environmental cost benefit analysis of Ivanpah compared to other electric power plants of similar generating capacity. The bee diversity data will be used to assess environmental impact.

The primary responsibilities of this position include 1) conducting field censuses of bee and plant diversity in developed and undeveloped areas of the Mojave Desert, 2) in collaboration with Dr. Terry Griswold at the USDA Bee Laboratory, Logan, UT, identifying bee collections, including those from a prior 5-year study of bee diversity at the Sweeney Granite Mountain Preserve, 3) analyzing bee and plant data and writing manuscripts, 4) interacting with engineers and economists on cost-benefit analysis of Electric Generating Facilities, 5) and contributing to grant proposals for future work.

For additional information about this and other research programs ongoing in our laboratory please visit our web site at http://www.eeb.cornell.edu/geber/geber.html
** Qualifications **

Required qualifications include a Ph.D. in entomology or related field with expertise in bee identification; ability to organize and lead field censuses in the Mojave Desert; strong writing skills; and the ability to work

independently. Candidates familiar with native desert bees, experience in analyses of bee community data, including analyses of plant-pollinator networks, and interest in applications of diversity studies to ecological and economic assessment of energy development will be preferred.

** Terms of Appointment **

Starting salary is $42K - $44K depending on experience. Funds are available for one year.

** Applications **

To apply, please send cover letter, CV, a statement of research interests/experiences, and names and contact information for three references that are familiar with your work. Applications should be in PDF format, e-mailed to Monica Geber (mag9@cornell.edu)

Position is available starting October 2015 (negotiable). Review of applications will begin August 15, 2015, and continue until suitable candidate is found.

Cornell University

Department of Ecology and Evolutionary Biology

E413 Corson Hall

Ithaca, NY 14853-2701 Cornell University is an equal opportunity, affirmative action educators and employers. Applications from women and minorities are encouraged.

Monica Geber mag9@cornell.edu

Katherine Eisen <kee39@cornell.edu>

CornellU NY Ornithology

Annual Cornell Lab of Ornithology Postdoctoral Competition

The Cornell Lab of Ornithology encourages applications to our competitive postdoctoral program (www.birds.cornell.edu/postdoc) that supports innovative, independent research by early career scholars of exceptional promise. Two or more named positions are available annually, with applications due on September 8.

These postdoctoral opportunities support individuals pursuing cutting-edge scholarship, while fostering intellectual interaction with two or more of the Lab's programs. Any area of inquiry related to the Lab's mission to interpret and conserve the earth's biological diversity through research, education, and citizen science focused on birds may be appropriate. Potential applicants are encouraged to learn more about our activities and opportunities, including our formal programs in Bioacoustics, Bird Population Studies (avian ecology), Citizen Science, Conservation Science, Communication, Education, Evolutionary Biology, Information Science, Macaulay Library (animal behavior), Multimedia Productions, and Public Engagement in Science. Research or activities involving several of these areas are particularly appropriate, and therefore each postdoctoral scholar may be co-mentored by two senior Cornell scholars. Potential applicants are encouraged to contact relevant faculty and staff at the Lab to brainstorm about areas of mutual interest and synergistic projects. We are especially interested in supporting the independent research of individuals who can bring new ideas and approaches to the Lab, while simultaneously leveraging our existing tools, data, and expertise in science, education, and communication.

Each Postdoctoral Scholar will be a one year, renewable appointment for up to two years at the Lab. Located at the Imogene Powers Johnson Center for Birds and Biodiversity in the 220-acre Sapsucker Woods sanctuary, the Cornell Lab of Ornithology is a vibrant unit within Cornell's University's College of Agriculture & Life Sciences. More than 200 faculty and staff work at the Lab within our 10 mission-driven programs. Our management and staff are committed to the highest standards of ethics and excellence in all areas of our work, and our Board leadership includes faculty from Cornell and other universities, successful entre preneurs and managers from the business and non-profit sectors, and conservation-minded citizens from the United States and beyond.

These appointments provide a competitive salary, standard Cornell health and other benefits, and funds to help support the Scholar's research and professional travel needs. Start dates are flexible between February and September of the year following the application.

The application package consists of a cover letter, CV, two-page research proposal, pdfs of up to three representative publications, and names and contact information for three references. Postdoctoral Scholars must have received their PhD before beginning their postdoctoral appointment at Cornell. Application materials should be sent as a single pdf file to the attention of Sue Taggart (SET2@cornell.edu). Applications for the two positions available in 2016 will be accepted until September 8, 2015. The selection committee is chaired by Dr. Irby Lovette (IJL2@cornell.edu), Fuller Professor of Ornithology and Associate Director for Academic Affairs at the Lab.

Cornell University is an innovative Ivy League university and a great place to work. Our inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement. Located in Ithaca, NY, Cornell's far-flung global presence includes the medical college's campuses on the Upper East Side of Manhattan and in Doha, Qatar, as well as the new Cornell Tech campus to be built on Roosevelt Island in the heart of New York City.

Diversity and inclusion are a part of Cornell University's heritage. Werre an employer and educator recognized for valuing AA/EEO, Protected Veterans, and individuals with Disabilities.

Irby Lovette <ijl2@cornell.edu>

FloridaStateU ExperimentalEvol

Postdoctoral position: Experimental viral evolution and biophysical adaptation

A postdoctoral position in experimental viral evolution is available in the laboratory of Dr. Darin R. Rokyta in the Department of Biological Science at Florida State University in Tallahassee, FL. This position is part of an NIH-funded project designed to test theoretical predictions about pleiotropy, epistasis, and adaptation in ssDNA microvirid bacteriophages and to identify the mechanistic, biophysical bases for these phenomena. The successful candidate will use an array of laboratory experimental-evolution protocols designed to select for particular biophysical properties of viral capsids. Identified beneficial mutations will be used to study the relationships between these properties and growth rate and to measure epistatic interactions between mutations at the phenotypic and fitness levels. Empirical work will be mirrored by theoretical and computational, molecular-dynamics-based studies in collaboration with Wei Yang in the Department of Chemistry and Biochemistry at Florida State University.

A Ph.D. in biology or a related field is required. Preference will be given to candidates with experience in molecular or microbial evolution or to candidates with strong theoretical or computational backgrounds. A mix of these skills would be ideal. Each application should be submitted as a single pdf file and include a CV, a summary of research accomplishments and future research objectives, and the names and contact information for two to three professional references. Application materials or inquiries should be sent electronically to Darin Rokyta (drokyta@bio.fsu.edu). Review of applications will begin July 24, 2015 and continue until a suitable candidate is identified. This position is available immediately, but the start date will be flexible. Florida State University is an Affirmative Action/Equal Opportunity Employer.

"drokyta@bio.fsu.edu" <drokyta@bio.fsu.edu>

GulbenkianInst Portugal 2 EvolutionaryDynamics

The newly founded Evolutionary Dynamics lab, led by Claudia Bank, at the Gulbenkian Institute (IGC, http://www.igc.gulbenkian.pt/) in Oeiras, Portugal (20km from Lisbon) is looking for two postdocs and a programmer.

Individuals with any scientific background (i.e., including biology, chemistry, computer science, mathematics, physics, statistics, and its hybrids) with a genuine interest in evolutionary questions are welcome to apply. Research in the lab revolves around the population genetics of adaptation and speciation, with a particular interest in the prevalence and importance of epistasis and other interaction effects on both the molecular and the population level. We study evolution by means of mathematical modeling, computer simulations, and statistical data analysis (primarily from experimental-evolution approaches). While we are a theoretical and computational group by nature, a lab component could be integrated in collaboration with Isabel Gordo or other principal investigators at the IGC. More detailed information can be found on the lab website: www.evoldynamics.org/positions/ Applications should be sent by email and include a letter of motivation, a CV, and names and contact information of three referees. The earliest starting date is 1 January 2016, and the duration of each position is up to three years (based on renewable 12-month fellowships). Applications are accepted from now on until all positions are filled. Informal inquiries are welcome, and I will be available for meetings at the upcoming 'Forecasting evolution?', SMBE, and ESEB conferences.

Claudia Bank cbank@igc.gulbenkian.pt

Claudia Bank <cba@evoldynamics.org>

KansasStateU EcologicalGenomics

The Ragland lab at Kansas State University is searching for a postdoctoral associate to conduct research on the genomic and physiological underpinnings of seasonal adaptations in insects. This is a flexible position that will contribute to ongoing, NSF-funded research in Rhagoletis pomonella, a model for sympatric speciation via seasonal isolation and additional studies of seasonality and environmental sensitivity in mountain pine beetles (Dendroctonus ponderosae) and Drosophilid species (http://www3.nd.edu/~gragland/index.html). In addition to current research priorities, the selected candidate will have ample opportunity to develop new studies and research directions in these and possibly other systems. Many projects in the lab are collaborative, and there will be opportunities to interact with collaborators at the University of Notre Dame, University of Florida, Utah State University, and BOKU Vienna. Details on desired qualifications below.

Kansas State University houses the Ecological Genomics Institute and the Arthropod Genomics Center, with associated faculty from across campus conducting genomics-enabled research on fundamental questions in ecology and evolutionary biology, as well as applied agricultural systems. In addition to cross-departmental research strengths in genomics applications, both of these centers host annual symposia that are well attended by leaders in the field ,e.g.,

http://www.k-state.edu/agc/images/symposium/-AGC_Schedule-Final-1.pdf http://ecogen.k-state.edu/-symposia/2015%20symposium%2006242015.pdf Direct informal inquiries to Greg Ragland, gragland@ksu.edu

Recent representative publications:

Egan, SP, GJ Ragland, L Assour, THQ Powell, GR Hood, S Emrich, P Nosil and JL Feder. 2015. Experimental evidence of genome-wide impact of ecological selection during early stages of speciation-with-gene-flow. Ecology Letters, DOI: 10.1111/ele.12460. http://-onlinelibrary.wiley.com/doi/10.1111/ele.12460/abstract

Ragland, GJ, K Almskaar, KL Vertacnik, HM Gough, JL Feder, DA Hahn and D Schwarz. 2015. Differences in performance and transcriptome-wide gene expression associated with Rhagoletis (Diptera: Tephritidae) larvae feeding in alternate host fruit environments. Molecular Ecology, DOI: 10.1111/mec.13191. http://onlinelibrary.wiley.com/-doi/10.1111/mec.13191/abstract Ragland, GJ, SP Egan, JL Feder, SH Berlocher, and DA Hahn. 2011. Developmental trajectories of gene expression reveal candidates for diapause termination, a key life history transition in the apple maggot fly, Rhagoletis pomonella. Journal of Experimental Biology 214: 3948-3960. http://jeb.biologists.org/content/-214/23/3948.abstract?sid=3D2baad009-cff5-4e 34-8c86-c78b2f6bda1d

Position Details:

Research Associate, Department of Entomology, Kansas State University, Manhattan, KS 66506-4004.

Appointment: 12-month, full-time (40 hours/week), term, non-tenure track position. Annual renewal contingent on satisfactory performance and availability of funding.

Salary: $35,000 to $38,000/year plus benefits

Starting Date: On or after August 16, 2015

Responsibilities: Primary responsibilities include 1) designing, implementing, and analyzing experiments addressing the genetics and evolution of responses to variable environments, 2) preparation of DNA and RNA sequencing libraries, 3) statistical modeling of genetic differentiation and transcriptome-wide differential gene expression. The successful candidate will work independently, effectively manage graduate and undergraduate students, perform field collections when necessary, coordinate with collaborators at domestic and foreign institutions, and communicate results at international conferences.

Qualifications: Ph.D in Biology, Entomology, or a closely related field with a strong background in evolutionary biology, ecology, and environmental physiology, and some experience with genomic methods. Ideally, the candidate will have substantial experience with environmental ecology/physiology in ectotherms, including applications of genomic techniques to ecological/evolutionary questions. A background in the application of statistical models (e.g., glm, mixed models, multivariate analysis) is required, and experience with Linux command line environments and scripting languages (R, python, perl) is strongly preferred. Candidate must also demonstrate evidence of successful communication of results through published manuscripts, conference

— / —

KansasStateU QuantitativeGenomics

Postdoc in Quantitative Genetics & Genomics

A postdoc position is available in the Morris lab to study quantitative genetics & genomics of biomass accumulation and environmental adaptation in sorghum.

The Morris lab studies genomics of crop adaptation to support crop improvement (Morris et al. 2013 PNAS, Lasky et al. 2015 Science Advances). The successful candidate will lead quantitative genetics activities for a new 4-year, $8M project funded by Department of Energy ARPA-E to dissect the genomic basis of yield in bioenergy sorghum.

The postdoc will be primarily responsible for: (1) conducting genome-wide association studies and linkage mapping using multi-environment high-throughput phenotyping data and whole genome resequencing data and (2) publishing findings in high-quality peer-reviewed manuscripts.

Other activities include improving methods for unmanned aerial vehicle based phenotyping and conducting population genomic analyses of diverse global germplasm to support dissection of adaptive traits.

Salary commensurate with experience and training, up to $50,000 + benefits.

For more details and instructions how to apply, go to the full job posting: http://jobs.sciencecareers.org/job/378058/postdoc-plant-quantitative-genetics-and-genomics/ Geoff Morris, Assistant Professor Department of Agronomy | Kansas State University 3004 Throckmorton Plant Science Center | Manhattan KS, 66506 E-mail: gpmorris@k-state.edu | Web: http://www.morrislab.org Office: 785-532-3397 | Cell: 312-909-1330 | Skype/Google ID: morris.geoff.p

Geoffrey Morris <gpmorris@ksu.edu>

MaxPlanck Plon PopulationGenomics 2

**** CORRIGENDUM: NOW WITH CORRECT CONTACT ADDRESS! *****

Postdoctoral Position - Population genomics

A postdoctoral position is available for up to three years in the field of population genomics with the Max Planck research group "Environmental Genomics" headed by Prof. Eva H. Stukenbrock. The Max Planck group is affiliated with the Max Planck Institute for Evolutionary Biology in Plön and the Christian-Albrechts University of Kiel in the North of Germany. The position is funded by the German Research Foundation, DFG, in the framework of the Priority Program "Rapid Evolutionary Adaptation - Potentials and Constraints". The project will be conducted in close collaboration with Prof. Wolfgang Stephan, LMU Munich (soon at the Museum für Naturkunde Berlin), Germany.

Background

Antagonistic co-evolution between pathogens and their hosts can drive rapid adaptive changes in both partners. In this project we aim to understand the underlying mechanisms that drive rapid adaptation in two closely related fungal plant pathogenic species Zymoseptoria tritici (pathogen of cultivated wheat) and Z. ardabiliae (pathogen of wild grasses). These two species differ not only in terms of host and environment (agro-ecosystem versus natural grassland) but also in terms of demography. Our previous analyses have documented a high effective population size in Z. tritici and a strong impact of natural selection on genome evolution.

In this project we aim to investigate the role of recombination in rapid adaptation of Z. tritici and Z. ardabiliae. Comparing patterns of genome evolution in the two species that exist in contrasting environments will allow us to address the impact of ecological constraints on evolution of pathogens. We will use a population genomic approach to infer the genomic recombination landscape in the two species and identify the presence of recombination hot spots in coding sequences in both species. We will detect genes affected by high recombination rates in hot spots and evaluate the role of high recombination rates in rapid adaptation. Furthermore, we aim to identify signatures of positive selection in the genomes of Z. tritici and Z. ardabiliae using com-

posite likelihood ratio (CLR) statistics. Hereby we will infer the genome-wide distribution of selective sweeps in the two species and we will correlate this information with recombination maps to assess the importance of recombination to adaptive evolution.

The development and application of appropriate models will be conducted with Prof. Wolfgang Stephan. Furthermore, the candidate will collaborate closely with a molecular biologist in the Environmental Genomics group that will conduct functional analyses of candidate "hot spot" and "sweep" genes to be identified in the genome analyses.

Relevant Literature

* Wilches R, Voigt S, Duchen P, Laurent S, Stephan W (2014) Fine-mapping and selective sweep analysis of QTL for cold tolerance in Drosophila melanogaster. G3: Genes| Genomes| Genetics 4(9):1635-1645 * Stukenbrock EH, Bataillon T, Dutheil JY, Hansen TT, Li R, Zalaˆ M, McDonald BA, Wang J, Schierup MH (2011). The making of a new pathogen: Insights from comparative population genomics of the domesticated wheat pathogen Mycosphaerella graminicola and its wild sister species. Genome Research 21.12 (2011): 2157-2166

* Stukenbrock EH, Banke S, Javan-Nikkhah M, McDonald BA. 2007. Origin and domestication of the fungal wheat pathogen Mycosphaerella graminicola via sympatric speciation. Molecular Biology and Evolution 24: 398-411 * Kim Y, Stephan W (2002).â Detecting a local signature of genetic hitchhiking along a recombining chromosome. Genetics 160: 765-777

The candidate should have a PhD in the field of population genetics with expertise in population genomics analyses. Proficiency in Linux scripting, in a major programming language and in handling large datasets are needed. The selected candidate will have the opportunity to collaborate with a team of biologists (molecular biologists, evolutionary biologists and population geneticists) as well as to pursue unique research in the fields of population genomics and evolutionary genomics of pathogenic fungi. For further information please contact Eva Stukenbrock (stukenbrock@evolbio.mpg.de).

This position requires a highly self-motivated candidate with excellent oral communication skills and great interpersonal skills. Interested candidates should send a motivation letter including a description of current research directions, an up-to-date CV, together with the names and the contact information of two references to Eva H. Stukenbrock as pdf. Application deadline is August 31, 2015.

Eva Holtgrewe Stukenbrock Environmental Genomics Botanical Institute Christian-Albrechts University of Kiel Am Botanischen Garten 1-9, 24118 Kiel & Max Planck Institute for Evolutionary Biology August-Thienemann-Str. 2, 24306 Plön

— / —

MaxPlank Plon PopulationGenomics

Postdoctoral Position - Population genomics

A postdoctoral position is available for up to three years in the field of population genomics with the Max Planck research group "Environmental Genomics" headed by Prof. Eva H. Stukenbrock. The Max Planck group is affiliated with the Max Planck Institute for Evolutionary Biology in Plön and the Christian-Albrechts University of Kiel in the North of Germany. The position is funded by the German Research Foundation, DFG, in the framework of the Priority Program "Rapid Evolutionary Adaptation - Potentials and Constraints". The project will be conducted in close collaboration with Prof. Wolfgang Stephan, LMU Munich (soon at the Museum für Naturkunde Berlin), Germany.

Background

Antagonistic co-evolution between pathogens and their hosts can drive rapid adaptive changes in both partners. In this project we aim to understand the underlying mechanisms that drive rapid adaptation in two closely related fungal plant pathogenic species Zymoseptoria tritici (pathogen of cultivated wheat) and Z. ardabiliae (pathogen of wild grasses). These two species differ not only in terms of host and environment (agro-ecosystem versus natural grassland) but also in terms of demography. Our previous analyses have documented a high effective population size in Z. tritici and a strong impact of natural selection on genome evolution.

In this project we aim to investigate the role of recombination in rapid adaptation of Z. tritici and Z. ardabiliae. Comparing patterns of genome evolution in the two species that exist in contrasting environments will allow us to address the impact of ecological constraints on evolution of pathogens. We will use a population genomic approach to infer the genomic recombination

landscape in the two species and identify the presence of recombination hot spots in coding sequences in both species. We will detect genes affected by high recombination rates in hot spots and evaluate the role of high recombination rates in rapid adaptation. Furthermore, we aim to identify signatures of positive selection in the genomes of Z. tritici and Z. ardabiliae using composite likelihood ratio (CLR) statistics. Hereby we will infer the genome-wide distribution of selective sweeps in the two species and we will correlate this information with recombination maps to assess the importance of recombination to adaptive evolution.

The development and application of appropriate models will be conducted with Prof. Wolfgang Stephan. Furthermore, the candidate will collaborate closely with a molecular biologist in the Environmental Genomics group that will conduct functional analyses of candidate "hot spot" and "sweep" genes to be identified in the genome analyses.

Relevant Literature * Wilches R, Voigt S, Duchen P, Laurent S, Stephan W (2014) Fine-mapping and selective sweep analysis of QTL for cold tolerance in Drosophila melanogaster. G3: Genes| Genomes| Genetics 4(9):1635-1645 * Stukenbrock EH, Bataillon T, Dutheil JY, Hansen TT, Li R, Zalaˆ M, McDonald BA, Wang J, Schierup MH (2011). The making of a new pathogen: Insights from comparative population genomics of the domesticated wheat pathogen Mycosphaerella graminicola and its wild sister species. Genome Research 21.12 (2011): 2157-2166

* Stukenbrock EH, Banke S, Javan-Nikkhah M, McDonald BA. 2007. Origin and domestication of the fungal wheat pathogen Mycosphaerella graminicola via sympatric speciation. Molecular Biology and Evolution 24: 398-411 * Kim Y, Stephan W (2002).â Detecting a local signature of genetic hitchhiking along a recombining chromosome. Genetics 160: 765-777

Description

The candidate should have a PhD in the field of population genetics with expertise in population genomics analyses. Proficiency in Linux scripting, in a major programming language and in handling large datasets are needed. The selected candidate will have the opportunity to collaborate with a team of biologists (molecular biologists, evolutionary biologists and population geneticists) as well as to pursue unique research in the fields of population genomics and evolutionary genomics of pathogenic fungi. For further information please contact Eva Stukenbrock (stukenbrock@mpi.evolbio.de).

This position requires a highly self-motivated candidate with excellent oral communication skills and great interpersonal skills. Interested candidates should send a motivation letter including a description of current research directions, an up-to-date CV, together with the names and the contact information of two references to Eva H. Stukenbrock as pdf. Application deadline is August 31, 2015.

Eva Holtgrewe Stukenbrock Environmental Genomics Botanical Institute Christian-Albrechts University of Kiel Am Botanischen Garten 1-9, 24118 Kiel & Max Planck Institute for Evolutionary Biology August-Thienemann-Str. 2, 24306 Plön Germany Tel +49 (0) 431 880 6368

— / —

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

MfN Berlin TheoreticalPopGenetics

Postdoctoral position in Theoretical Population Genetics

A postdoctoral position in Theoretical Population Genetics is available at the Museum of Natural History in Berlin. The postdoc will participate in research related to the Germany-wide Priority Program "Rapid Evolutionary Adaptation" funded by the German Research Foundation (DFG).

The specific project focuses on the role of polygenic selection in fast adaptation. It involves the mathematical analysis of a multi-locus model of a quantitative trait that is subject to stabilizing selection and mutation. We will study the response to selection after an environmental shift of the trait optimum. Furthermore, we construct statistical tests to detect the signatures of polygenic selection in the genome. Our recent publications on these topics include:

Stephan, W. (accepted): Signatures of positive selection: from selective sweeps at individual loci to subtle allele frequency shifts in polygenic adaptation. Molecular Ecology.

Jain, K. and W. Stephan (2015): Response of polygenic traits under stabilizing selection and mutation when loci have unequal effects. G3-Genes Genomes Genetics 5: 1065-1074.

Wollstein, A. and W. Stephan (2014): Adaptive fixation

in two-locus models of stabilizing selection and genetic drift. Genetics 198: 685-697.

Pavlidis, P., D. Metzler, and W. Stephan (2012): Selective sweeps in multi-locus models of quantitative traits. Genetics 192: 225-239.

We seek a very highly motivated colleague with a strong record of accomplishments from her/his PhD work. Ideally, applicants should have a strong background in population genetics, computational biology and statistics.

The research group of Wolfgang Stephan will relocate to the Museum of Natural History (MfN) Berlin this fall. MfN is located in the middle of Berlin on a vibrant campus of bioscience institutes of the Humboldt University and various other institutions with a broad interest in evolutionary and theoretical biology.

The postdoc will receive a salary according to the German pay scale (100% E13 TV-L). Interested candidates should send a CV, statement of interest, and contact information of three potential referees as a single PDF file to Prof. Wolfgang Stephan (stephan@bio.lmu.de).

Website: http://evol.bio.lmu.de Review of applications will begin on July 30, 2015 and will continue until the position is filled.

"hutter@zi.biologie.uni-muenchen.de"

MfN Berlin TheoreticalPopGenetics 2

Postdoctoral position in Theoretical Population Genetics

A postdoctoral position in Theoretical Population Genetics is available for up to three years at the Museum of Natural History in Berlin. The postdoc will participate in research related to the Germany-wide Priority Program 'Rapid Evolutionary Adaptation' funded by the German Research Foundation (DFG).

The specific project focuses on the role of polygenic selection in fast adaptation. It involves the mathematical analysis of a multi-locus model of a quantitative trait that is subject to stabilizing selection and mutation. We will study the response to selection after an environmental shift of the trait optimum. Furthermore, we construct statistical tests to detect the signatures of polygenic selection in the genome. Our recent publications on these topics include:

Stephan, W. (accepted): Signatures of positive selection: from selective sweeps at individual loci to subtle allele frequency shifts in polygenic adaptation. Molecular Ecology.

Jain, K. and W. Stephan (2015): Response of polygenic traits under stabilizing selection and mutation when loci have unequal effects. G3-Genes Genomes Genetics 5: 1065-1074.

Wollstein, A. and W. Stephan (2014): Adaptive fixation in two-locus models of stabilizing selection and genetic drift. Genetics 198: 685-697.

Pavlidis, P., D. Metzler, and W. Stephan (2012): Selective sweeps in multi-locus models of quantitative traits. Genetics 192: 225-239.

We seek a very highly motivated colleague with a strong record of accomplishments from her/his PhD work. Ideally, applicants should have a strong background in population genetics, computational biology and statistics.

The research group of Wolfgang Stephan will relocate to the Museum of Natural History (MfN) Berlin this fall. MfN is located in the middle of Berlin on a vibrant campus of bioscience institutes of the Humboldt University and various other institutions with a broad interest in evolutionary and theoretical biology.

The postdoc will receive a salary according to the German pay scale (100% E13 TV-L). Interested candidates should send a CV, statement of interest, and contact information of three potential referees as a single PDF file to Prof. Wolfgang Stephan (stephan@bio.lmu.de).

Website: http://evol.bio.lmu.de Review of applications will begin on July 30, 2015 and will continue until the position is filled.

Stephan Hutter <hutter@zi.biologie.uni-muenchen.de>

Montpellier 3 Phylogenetics

The Methods and Algorithms for Bioinformatics (MAB) team at the University of Montpellier, France is looking for talented individuals to fill three postdoctoral research fellowships. Each position is for one year, renewable upon completion. We are seeking candidates with a strong background in mathematical and computational evolutionary biology.

The first of the positions, associated with the Insti-

tute for Computational Biology (IBC - http://www.ibc-montpellier.fr), concerns evolutionary analyses of large-scale genomic data. Topics include – but are not limited to – the inference of very large phylogenies including branch supports and testing, reconciliation of gene/species trees at a genomic scale, comparative genomics, phylogenetic network inference and verification, phylogeography, use of phylogenies to study the evolution of characters.

The second position, associated with the European VIROGENESIS project (http://www.kuleuven.be/-english/research/EU/p/horizon2020/sc/sc1/-Virogenesis), concerns the genomic analysis of virus sequences. Phylogenetic placement of metagenomic reads, and bacteriophage evolution by recombination are among subjects of interest.

The third position is also associated with VIROGENESIS, with focus on molecular epidemiology, virus evolution, and transmission of resistances. This position will be supervised by Olivier Gascuel, with possibility to be hosted at the Institut Pasteur, Paris, in the new Center for Bioinformatics, Bioistatistics and Integrative Biology.

A one thousand year old city, Montpellier is a thriving research community with a multitude of biology and biomedical research centers. It is the fastest growing city in France where approximately one-third of the population are students. The computer science, robotics and microelectronics department (LIRMM) is one of the most visible in France. Sandwiched between the Mediterranean to the south, and the hills to the north, Montpellier is a wonderful location for water sports such as kite/wind surfing, sailing, kayaking, swimming; and outdoor sports such as hiking and rock climbing. This international city has a center that is reserved for pedestrians, and contains countless local businesses, bars, and restaurants to fuel a lively atmosphere day and night. The unpopulated surroundings are peppered with vineyards, hills, rivers, and cliffs.

https://www.lirmm.fr/ ~ gascuel/ https:/-/sites.google.com/site/fabiopardi/ http://-www.lirmm.fr/ ~ swenson/ http://www.lirmm.fr/-lirmm_eng/recherche/equipes/mab http://www.ibc-montpellier.fr/ https://en.wikipedia.org/wiki/-Montpellier Olivier Gascuel <olivier.gascuel@lirmm.fr>

Montpellier ModelingEvolutionDiseases

Post-doc position in Montpellier on statistical modeling of ecology and evolution of vector-borne diseases

During the last century, WHO have led public health interventions that resulted in spectacular achievements such as the worldwide eradication of smallpox and the elimination of malaria from the Western World. However, besides major successes achieved in control of infectious diseases, most elimination/control programs remain frustrating in many tropical countries where specific biological and socio-economical features have prevented implementation of disease control over broad spatial and temporal scales. Emblematic examples include malaria, dengue, yellow fever, measles and HIV. There is consequently an urgent need to develop affordable and sustainable disease control strategies that can target the core of infectious disease transmission in highly endemic areas.

Focusing on Dengue transmission in Phnom Penh (Cambodia) and on malaria spreading in Bobo-Dioulasso (Burkina Faso), the PANIC project (PAthogenÂs NIChe: a new approach for infectious diseases control) aims to develop conceptual, empirical and theoretical frameworks to envision optimized public health strategies for vector-borne diseases by considering the most recent advances in ecology and evolution of infectious diseases. Funded by the Agence Nationale de la Recherche (ANR, www.agence-nationale-recherche.fr < http://-www.agence-nationale-recherche.fr >) for five years, this project involves French, Burkinabe and Cambodian researchers from various fields (entomology, virology, epidemiology, disease ecology, modeling) to tackle this issue.

Within this context, we are seeking for a post-doctoral fellow who will focus on data analyses to quantify the relative contribution of mosquito, human, pathogen and environmental factors on the spatio-temporal transmission dynamics of (i) malaria in Bobo-Dioulasso and (ii) Dengue viruses in Kampong Cham, Cambodia. Most of the data relevant to this project (household socio-economic data, epidemiological time series and mosquito population dynamics from different neighborhoods) are already available, and additional data will be collected in the field at the beginning of the project. The post-doc will work in close collaboration with two other post-docs,

each of these other post-docs will focus on one disease only and on other facets of disease transmission than the candidate for this position. Therefore, the post-doc will play an essential transversal role within the project and we expect to create a scientific synergy between the three post-docs.

The ideal candidate will have a PhD in epidemiology, in ecology and evolution of infectious diseases or in statistics, with evidence of scientific autonomy. A good background in quantitative epidemiology with cutting-edge statistical methods (Spatial models, GLMs or Structural Equations Modeling among other possibilities) is required. Previous experience in infectious diseases epidemiology/dynamics in southern countries will be greatly appreciated. This position is for two years, starting in January 2016, in MIVEGEC lab in Montpellier (www.mivegec.ird.fr).

Interested candidates should apply by October 1st by sending (1) a letter of motivation, (2) a CV with publication list, and (3) the names, institutions and email addresses of three references to Dr. Benjamin Roche at benjamin.roche@ird.fr.

Benjamin Roche, PhD

Labs: International Center for Mathematical and Computational Modeling of Complex Systems (UMMISCO) Infectious Diseases: Vector, Control, Genetic, Ecology and Evolution (MIVEGEC) Centre for Ecological and Evolutionary Research on Cancer (CREEC)

Postal address: Research Institute for Development (IRD) 911, avenue Agropolis BP 64504 34394 Montpellier Cedex 5 France

Phone:+33629585460 e-mail:roche.ben@gmail.com web: http://roche.ben.googlepages.com Benjamin Roche <roche.ben@gmail.com>

Montpellier Phylogeography PopGenetics

This message is in MIME format.

–=_we8Xtm9nHUvmwEoYC-ugdA4 Content-Type: text/plain; charset=UTF-8; format=flowed; DelSp=Yes Content-Description: Message en texte brut Content-Disposition: inline Content-Transfer-Encoding: 8bit

Post-Doctoral Fellowship in Phylogeography and Population Genetics - Montpellier, France

The application of molecular genetic data in fields such as population genetics, phylogeography, and evolutionary biology have improved abilities to make inferences regarding evolution of invasiveness. These approaches stand to aid materially in the development of effective management strategies such as biological control and sustainable science-based policies. Continued advancements in the statistical analysis of genetic data promise to overcome some existing limitations of current approaches.

Purpose and responsibilities A postdoctoral position is available at the Centre de Biologie pour la Gestion des Populations, (CBGP) in partnership with the European Biological Control Laboratory (EBCL) -USDA-ARS. Both laboratories are located near Montpellier (France) at the International Campus of Baillarguet, at Montferrier sur Lez.Â The successful applicant will be expected to apply latest models and advances of Phylogeography and Population Genetics inference to address the evolutionary pattern of an invasive pest and a potentially invasive pest. The applicant will work on two case studies: the Wheat Stem Sawfly (Cephus cinctus), an invasive insect pest in the U.S. which is presently experiencing unprecedented outbreaks and the Eurasian cabbage gall weevil (Ceutorhynchus assimilis syn. C. pleurostigma) which has some potentially invasive host races. For both targets, two large data sets of mitochondrial sequences and microsatellites are already available. The applicant should possess a communication skill set conducive to assist with management of a large interdisciplinary project. Experience in writing scientific reports and manuscripts, excellent communication skills, and ability to interact productively with a diverse group of collaborators is required.Â Expertise in sequence analysis, Phylogeography and Population Genetics are skill sets highly relevant to this position. The successful applicant

will manage a large and complex sample database and will conduct guided but independent analyses leading to first author publications. The ideal candidate will demonstrate initiative, creativity, and will have excellent organizational skills; we also seek candidates with enthusiasm who work well as part of a team as well as independently.Â The position is funded for one year. Practical information for applications The post-doc position will be held at CBGP and EBCL labs next to each other. Applicants are expected to speak and write English although French is always welcome given the location of this position. Montpellier hosts one of the most vibrant communities of biodiversity research in Europe with several research centers of excellence in the field. Applicants will find some information about living at Montpellier here: http://www.agropolis.org/english/-guide/index.html The position is available for 1 year and starts in August/September 2015 although some flexibility is possible in agreement with the selected applicant. We will start reviewing the applications from now but will continue to consider incoming applications until the position is filled. The gross salary of the post-doc candidate would be around 30,000 euro per year.

Qualifications Ph.D. inÂ Phylogeography and Evolution Specific skills and technical/administrative training required: Scientific writing Interpersonal communication Preferred Experience: Experience in Insect population biology Population genetics and phylogeography data analysis

Informal enquiries and applications should be sent to Jean-François Martin (CBGP, jean-francois.martin@supagro.fr and Marie-Claude Bon (USDA-ARS-EBCL, mcbon@ars-ebcl.org). Applications should include a cover letter with a statement of research interests and qualifications for the position, complete CV with publication list, and contact details of three referees, embedded in a single pdf file.

"jean-francois.martin@supagro.fr" <jean-francois.martin@supagro.fr>

MontpellierU PhylogeographyPopulationGenomics

Post-Doctoral position in phylogeography and population genomics Montpellier, France

Purpose and responsibilities:

The research program GENESIS focuses on the role of GENetic diversity and phenotypic plasticity in adaptations to changing Environments: a genomic analySIS of a biological invasion. It involves four academic research teams from UK and France for the three next years and is opening a post-doctoral position to work on the conservation genomics of fish topmouth gudgeon Pseudorasbora parva, a small cyprinid species native to East Asia.

The post-doc will be in charge of the analysis of genomic data (GBS) for conservation genomics (phylogeography) and estimating heritability of fitness related traits using a molecular based pedigree.

Research program

The main question for the program is to assess the role of genetic diversity and phenotypic plasticity in adapting to changing environmental conditions. GENESIS uses the framework of biological invasion to answer this question as the challenge for an invasive species is to respond quickly and efficiently to changes in the selective regime imposed by the colonized ecosystem. In addition, a series of stochastic sampling events associated with the colonization process is predicted to result in strong genetic drift in invasive populations, providing the opportunity for rapid evolutionary change through both selection and drift, and the majority of studies report marked phenotypic change in invasive populations. The information on heritability of ecologically significant life history traits or behaviors is crucial in accurately predicting responses to selection and is therefore a key element of GENESIS that aims at increasing our understanding of factors that promote establishment success of invasive species and the response of small fragmented populations to climate change.

A phylogeography will be constructed based on the genomics data. Further, in order to identify genomic regions under selection between populations, an ≪ outlier analysis ≫ will be conducted. The problem of identifying statistically significant departure from neutrality is complicated and results related to assumptions made, by example to the demographic history of the samples. A variety of tests have been developed either making strict assumptions about demographic history of the populations or estimating for evolutionary non independence among samples. The candidate will have a significant experience of such tests including methods based on summary statistics (eg Fst) as well as bayesian hierarchical modelling. The candidate will be able to choose a justified approach taking into account the characteristic of the data (SNP and NGS sequencing), the robustness of the methods to departures from assumptions, and the consideration of false positive rate.

Practical information for applications

The post-doc position will be hold at the Center for Biology and Management of Populations at the international capus of Baillarguet, near Montpellier, France (http://www1.montpellier.inra.fr/CBGP/). Applicants are expected to speak and write English although French is always welcome given the location of this position. Applicants will find some information about living at Montpellier here: http://www.agropolis.org/english/-guide/index.html The position is available for 2 years and starts at the latest in November 2015. We will start reviewing the applications from now but will continue to consider incoming applications until the position is filled. The gross salary of the post-doc candidate would be around 24 271 per year.

Qualifications

Ph.D. in population genomics and biostatistics

Specific skills and technical/administrative training required:

One or more programming languages

Scientific writing

Interpersonal communication

Previous experience with RAD/GBS data

Informal enquiries and applications should be sent to jean-francois.martin@supagro.fr. Applications should include a cover letter with a statement of research interests and qualifications for the position, complete CV with publication list, and contact details of three referees, embedded in a single pdf file.

http://www1.montpellier.inra.fr/CBGP/?q=-fr/content/post-doctoral-position-population-genomics Jean-Francois Martin <jean-francois.martin@supagro.fr>

NHM London 2 EvolutionaryBiol

1st Post Post: Postdoctoral Research Assistant - Forams

The Natural History Museum is one of the world's leading museums, internationally recognised for its dual role as a centre of excellence in scientific research and as a leader in the presentation of natural history through exhibitions, public programmes, publications and the web.

We are currently recruiting for a Post-Doctoral Research Assistant - Forams to work with Prof Andy Purvis on a NERC-funded project within Life Science. This project aims to test whether adaptive zones have been important in shaping macroevolution, by focusing on the clade with the most detailed fossil record - macroperforate planktonic foraminifera - over the last 23 million years.

The successful candidate will focus on three essential tasks. The first, existing IODP cores will be stitched together to provide continuous synthetic stratigraphic columns through the Neogene in each of two widely-separated subtropical gyres. Second, these columns will be sampled at regular intervals, with the foraminiferal community characterized by complete assemblage counts and 2-D morphometrics. Third, the resulting data will be analysed using community phylogenetic and phylogenetic comparative approaches to test a range of predictions, and the results written up for publication.

BEFORE beginning your application - Please read the section about the 'Online Application Process' carefully as we will require an up-to-date CV and Covering Letter to be submitted for initial selection purposes.

The Museum is an equal opportunity employer, supports a diverse workplace and offers a competitive benefits package including:

. Defined benefit occupational pension scheme . Annual leave allowance of 27 Â$\frac{1}{2}$ days a year plus 8 public holidays . Free entry to a wide range of museums and exhibitions . Interest-free season ticket loan . Child care voucher scheme . Access to a full programme of learning and development opportunities . Employee Assistance Programme . Discounts on food and gift shop purchases

For more information on this position and to apply please visit the Natural History Museum website on http://www.nhm.ac.uk/search-vacancies Salary: Up to Â£30,332 per annum plus benefits Contract: 36 Month Fixed-Term Appointment Closing date: Midnight on Sunday 23rd August 2015

Why not sign up to our 'vacancy alerts' service and follow us on LinkedIn at http://www.linkedin.com/company/-natural-history-museum to hear of future opportunities.

2nd Post Post: Senior Postdoctoral Research Assistant - PREDICTS2

The Natural History Museum is one of the world's leading museums, internationally recognised for its dual role as a centre of excellence in scientific research and as a leader in the presentation of natural history through exhibitions, public programmes, publications and the web.

We are currently recruiting for a Senior Postdoctoral Research Assistant to work with Prof Andy Purvis on a NERC-funded project within Life Sciences. This will build on the success of the PREDICTS project

(www.predicts.org.uk), extending the framework to consider 'biotic lag' and ecosystem function.

The new project will collate data from published before-and-after comparisons of how terrestrial sites' ecological assemblages changed when land use changed. This position involves developing and using tools to integrate these data with new datasets on species' functional ecology and phylogeny, in order to estimate how global land-use change affects local biodiversity, ecosystem structure and ecosystem function. This role would suit a statistical conservation ecologist, and will involve spending some time at UNEP-WCMC in Cambridge.

BEFORE beginning your application - Please read the section about the 'Online Application Process' carefully as we will require an up-to-date CV and Covering Letter to be submitted for initial selection purposes.

The Museum is an equal opportunity employer, supports a diverse workplace and offers a competitive benefits package including:

. Defined benefit occupational pension scheme . Annual leave allowance of 27 Â$\frac{1}{2}$ days a year plus 8 public holidays . Free entry to a wide range of museums and exhibitions . Interest-free season ticket loan . Child care voucher scheme . Access to a full programme of learning and development opportunities . Employee Assistance Programme . Discounts on food and gift shop purchases

For more information on this position and to apply please visit the Natural History Museum website on http://www.nhm.ac.uk/search-vacancies Salary: Up to Â£34,000 per annum plus benefits Contract: 36 Month Fixed-Term Appointment Closing date: Midnight on Sunday 23rd August 2015

— / —

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

NIH Bethesda InfluenzaEvolution

Post-doc position at the NIH to study phylodynamics of influenza viruses in swine

The Fogarty International Center's Division of International Epidemiology and Population Studies (DIEPS) at the National Institutes of Health in Bethesda, MD is seeking a postdoctoral researcher to study influenza A virus evolution in swine. The position is for one year, renewable. We are seeking candidates with a strong background in mathematical and computational evolutionary biology.

Specifically, we are interested in a researcher who can use a range of phylogenetic methods (including Bayesian) to study how animal movements, farm production practices, inter-species transmission, and genomic reassortment drive the emergence of novel influenza viruses with pandemic potential in swine on a global scale.

The position is funded by NIAID's Centers of Excellence in Influenza Research (CEIRS) program, a global research network that performs influenza surveillance, integrated with research on host immune response, viral pathogenesis, and factors that drive the emergence and transmission of influenza viruses. The project will be conducted in partnership with members of this network who are collecting influenza viruses in swine globally and performing experimental studies in pigs. The work will also be conducted as part of Fogarty's MISMS project, initiated in 2001 to study the interaction between the epidemiology, ecology, and evolutionary dynamics of influenza on a global scale.

For further information, please contact Dr Martha Nelson at nelsonma@mail.nih.gov.

http://www.niaidceirs.org/ http://www.fic.nih.gov/-http://www.origem.info/misms/ Martha I. Nelson Research Fellow Division of International Epidemiology and Population Studies Fogarty International Center National Institutes of Health nelsonma@mail.nih.gov

"Nelson, Martha (NIH/FIC) [V]" <nelsonma@mail.nih.gov>

NIST RockvilleMaryland Phyloinformatics

In 2012 and 2013, NESCent sponsored 2 hackathons to build a prototype "Phylotastic" [1] system with the goal of providing an open, distributed, community-owned system for efficient delivery of "Tree of Life" knowledge, so that scientists, educators, and the public can get online species trees as easily as they currently get online driving directions. NSF recently funded a 3-year collaborative project [2] to develop a production system based on this prototype.

As part of this project, a post-doc position is available with Arlin Stoltzfus at the Institute for Bioscience and

Biotechnology Research (IBBR), a joint NIST-UMD-UMB institute in Rockville, Maryland, in the midst of a major biotechnology corridor in the greater Washington, DC area.

Interested individuals are encouraged to apply for this position, which provides a unique opportunity to build tools with a broad impact in spreading phylogenetic knowledge (in the scientific community and beyond). The successful applicant will become part of a distributed, collaborative team with colleagues from IBBR as well as NMSU (Enrico Pontelli), UTK (Brian O'Meara), Open Tree of Life (Karen Cranston), and Global Names (Dmitry Mozzherin).

To apply, use the online form at https://ejobs.umd.edu/-postings/33884 .Be sure to include a code sample.

Salary is from 42000 to 46000 USD depending on experience. The desired applicant is expected to bring a scientific understanding of phylogeny use-cases into the design and testing process, and also to participate in implementation of tools where appropriate. Experience in scientific programming is required. Understanding how and why scientists use phylogenies will be extremely valuable. Knowledge of R or Python (the language of some of the prototype tools), though helpful, is not necessary. If in doubt, ask: please do not self-select yourself out from what might be a mutually beneficial position.

The University of Maryland, College Park, actively subscribes to a policy of equal employment opportunity, and will not discriminate against any employee or applicant because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. Minorities and women are encouraged to apply.

Review of applications will begin immediately and continue until the position is filled (start dates are flexible). Presubmission inquiries are encouraged.

Arlin Stoltzfus (arlin@umd.edu) Research Biologist (NIST) Fellow (IBBR) Adjunct Associate Professor (UMD)

[1] Stoltzfus, et al., 2013, "Phylotastic! Making tree-of-life knowledge accessible, reusable and convenient" (BMC Bioinformatics 2013, 14:158), available at http://-/www.biomedcentral.com/1471-2105/14/158 . [2] Arlin Stoltzfus, Enrico Pontelli, and Brian O'Meara. "Collaborative Research: ABI Development: An open infrastructure to disseminate phylogenetic knowledge.$B!I(B

Arlin Stoltzfus <arlin@umd.edu>

OregonStateU SalmonFounderEffects

DEADLINE: August 4^th, 2015

POSTDOCTORAL RESEARCH ASSOCIATE – The Coastal Oregon Marine Experiment Station at Oregon State University invites applications for a Postdoctoral Researcher in Ecological Genetics. The postdoc will hold a leadership role among a larger research team studying founder effects of recently reintroduced populations of Chinook salmon. Core responsibilities will be to develop and apply genetic pedigree methods to examine 1) the effects of hatchery propagation on the total lifetime fitness of Chinook salmon in the wild and 2) the evolutionary response of reduced hatchery influence on recently reintroduced wild populations with the aim of producing several publications for the primary literature. The successful candidate will be expected to provide general support and collaboration towards scholarly advancement in the Marine Genomics Program located at the Hatfield Marine Science Center in Newport, Oregon.

ONLINE APPLICATION: To review posting and apply, go to https://jobs.oregonstate.edu/hr. Apply to posting #0015313. Closing Date: 08/04/15. OSU is an AA/EOE. Email questions to: Kathleen.omalley@oregonstate.edu

Kathleen O'Malley <kathleen.omalley@oregonstate.edu>

OregonStateU SalmonFounderEffects 2

DEADLINE: August 4^th, 2015

POSTDOCTORAL RESEARCH ASSOCIATE – The Coastal Oregon Marine Experiment Station at Oregon State University invites applications for a Postdoctoral Researcher in Ecological Genetics. The postdoc will hold a leadership role among a larger research team studying founder effects of recently reintroduced populations of Chinook salmon. Core responsibilities will be to develop and apply genetic pedigree methods to examine 1) the effects of hatchery propagation on the

total lifetime fitness of Chinook salmon in the wild and 2) the evolutionary response of reduced hatchery influence on recently reintroduced wild populations with the aim of producing several publications for the primary literature. The successful candidate will be expected to provide general support and collaboration towards scholarly advancement in the Marine Genomics Program located at the Hatfield Marine Science Center in Newport, Oregon.

ONLINE APPLICATION: To review posting and apply, go to https://jobs.oregonstate.edu. Apply to posting #0015313. Closing Date: 08/04/15. OSU is an AA/EOE. Email questions to: Kathleen.omalley@oregonstate.edu

Kathleen O'Malley, Assistant Professor Oregon State University, Hatfield Marine Science Center Coastal Oregon Marine Experiment Station 2030 SE Marine Science Drive, Newport, Oregon 97365 ph: (541) 961-3311 fax: (541) 867-0345 http://-people.oregonstate.edu/~omalleyk/ Kathleen O'Malley <kathleen.omalley@oregonstate.edu>

OxfordBrookesU EvoDevo

Postdoctoral Research Fellow in Evolution and Development

Starting salary: £29,552, rising annually to £32,277 This is a fixed-term appointment for two years This is a NERC funded post based in the group of Dr. Alistair McGregor in the Department of Biological and Medical Sciences at Oxford Brookes University. The project will focus on characterising the genetic basis for differences in morphology among Drosophila species and investigating the evolutionary forces involved.

You will be responsible for: - carrying out a research project on Drosophila morphology, genetics, developmental and population biology - liaison with other members of the research team working on related projects - assisting with the preparation of papers for publication and making presentations at meetings and/or conferences - assisting with the supervision of students - assisting with the general running of the research group

You should have: - a PhD in Genetics or Evolutionary Biology or Developmental Biology or equivalent - experience in evolutionary genetics and/or developmental biology research - familiarity with concepts and approaches in evolutionary biology - skills in biostatistics and bioinformatics - excellent communication and presentation skills - good organisational skills and the ability to manage competing priorities

International applicants from outside the EU will need to demonstrate their eligibility to work in the UK.

Apply here:

https://cloud.corehr.com/pls/obulivehrrecruit/-erq_jobspec_details_form.jobspec?p_id=002542 Closing date August 13th.

For informal enquiries please contact Dr. Alistair McGregor: amcgregor@brookes.ac.uk

Professor Alistair P. McGregor Evolution of Animal Development and Morphology Department of Biological and Medical Sciences Oxford Brookes University Gipsy Lane Oxford OX3 0BP United Kingdom Tel: +44 (0)1865484191 Fax: +44 (0)1865483242 www.mcgregor-evo-devo-lab.net twitter: @McGregorLab

Alistair McGregor <p0032455@brookes.ac.uk>

OxfordU AncientDNA

Postdoctoral Research Assistant in the Effects of the Industrial Revolution on Oral Biology and Health

The School of Archaeology, 34-36 Beaumont Street, Oxford

Grade 7: £30,434 - £37,392 p.a.

Applications are invited for a postdoctoral research assistant position to work on a project entitled: 'Investigating the effects of the Industrial Revolution on oral biology and health' funded by the Oxford University Fell Fund. The successful candidate will join a multidisciplinary team of archaeologists and geneticists to explore how applying a variety of analyses to ancient human dental calculus can enable a quantitative investigation of a broad suite of bacterial, dietary, and environmental factors that contribute to human health and disease. The project is led by Prof Greger Larson at Oxford in collaboration with Drs Tina Warriner and Camilla Speller at Oklahoma and York Universities, respectively.

The position is full-time and fixed-term for 1 year and available from October 2015.

The postholder will focus primarily on dental calculus from 50 skeletons dating to the last two centuries that have been recovered from secure archaeological contexts.

This pilot project will establish the research potential of dental calculus from this pivotal time period and the links that can be made to modern databases containing information on modern oral health.

Experience of working practice with periodontology or oral microbiomes is beneficial.

The candidate will possess an excellent academic track record and have completed a PhD in bioinformatics, population genomics, evolutionary genetics, biomedical sciences, microbiology, or related discipline.

Applications for this vacancy are to be made online.

The closing date for applications is 12.00 midday on Friday 21 August 2015. Vacancy ID : 119308 Contact Phone : 01865 611745 Contact Email : greger.larson@arch.ox.ac.uk

Greger Larson <greger.larson@arch.ox.ac.uk>

Sanger UK MosquitoFieldBiologist

This is a rare and exciting opportunity for a Postdoctoral Fellow or a Staff Scientist (no PhD required) to investigate wild African mosquitoes and malaria parasites as part of a project on natural genetic variation in these species of great medical relevance. The fieldwork will take place primarily in Uganda but with opportunities to expand to other regions of Africa, and we seek someone with commitment to the project and its goals including a desire to be based in Uganda (or other African sites) for long periods of time.

You will take leadership on and be responsible for delivering two main facets of our large project on natural genetic variation. First, we aim to do genetic surveillance to understand population changes of vectors and parasites over space and time. This will require a dedicated field biologist who coordinates large-scale collections of wild parasites and mosquitoes with detailed record-keeping. Second, we aim to carry out infections of mosquitoes with malaria parasites in our field insectary to understand the genetic factors that make mosquitoes susceptible to parasites. This will require someone who deeply understands experimental design and can coordinate the rearing and infections of thousands of mosquitoes while keeping careful records. In practical terms, the role requires you to be in charge of delivering high quality, meticulously curated mosquito and parasite samples back to the Sanger. The resources you generate will be then be whole genome sequenced resulting in open access genomes on these important organisms.

The level of your involvement in the analyses of these data depends on your own interests and whether this is a postdoctoral or staff scientist role for you. The position requires someone who has a proven ability to execute projects and deliver results at a practical level while working relatively independently. The position will be tailored to fit those with or without PhDs incorporating further excellent training in population genomics and vector and parasite biology as desired.

Essential Skills: Field experience, preferably in Africa, of >1 month at a time working in remote locations

Standard molecular biology wet lab experience (DNA /RNA extraction, PCR, qPCR)

Experience working with insects and/or parasites, preferably mosquitoes/malaria

Detail oriented and highly organized

Dedicated effort towards meticulous record-keeping (thousands of samples will need to be individually preserved with recorded phenotypes)

Experience working with international collaborators

Salary range for Staff Scientist: Â£30574 to Â£38564 per annum plus excellent benefits

Salary range for Postdoctoral Fellow: Â£30202 to Â£37860 per annum plus excellent benefits.

If you would like an opportunity to discuss details of this position in further detail please contact me at mara@sanger.ac.uk

More details at https://jobs.sanger.ac.uk/-wd/plsql/wd_portal.show_job?p_web_site_id=-1764&p_web_page_id=221211 You can find out more about my group at http://www.sanger.ac.uk/-research/projects/vectorparasite/ Thank you, Mara Lawniczak

The Wellcome Trust Sanger Institute is operated by Genome Research Limited, a charity registered in England with number 1021457 and a company registered in England with number 2742969, whose registered office is 215 Euston Road, London, NW1 2BE.

Mara Lawniczak <mara@sanger.ac.uk>

SpelmanC Atlanta ProbabilisticGeneNetworkModeling

Postdoc Position in Quantitative Biology

Probabilistic Gene Network Modeling of Cellular Aging

Advisor: Hong Qin, hqin@spelman.edu,

Associate Professor of Biology, Spelman College

Location: Atlanta, Georgia, USA

Funding Source: NSF CAREER award 2015-2020 to Qin.

A postdoc position is available to conduct quantitative modeling of cellular aging using probabilistic gene networks, a novel research direction funded Prof Hong Qin's NSF CARERR award. Candidates should have an inter-disciplinary training background, strong quantitative and computational skills, and be proficient of R or MATLAB.

Potential research topics include understanding lifespan extension effect of dietary restriction, understanding lifespan as a quantitative trait using gene networks and the problem of missing heritability, and develop quantitative methods for lifespan data analysis. This computational position will collaborate with both computational and experimental biologists.

This position offers competitive salary and benefit. Candidates should complete Ph.D. training before starting this position. The starting date can be as early as Oct 1, 2015.

Spelman College is a private four-year liberal arts college located in Atlanta, GA, and ranked one of the top 100 liberal arts colleges by the US News.

Please email a copy of curriculum vitae, a research statement, names and contact information of at least three individuals familiar with your research to Prof. Hong Qin through hqin@spelman.edu.

For background information on the probabilistic gene network modeling of cellular aging, see http://arxiv.org/abs/1305.5784 and http://tinyurl.com/o4gtrtx .

Hong Qin Associate Professor of Biology MAIL: Hong Qin 350 Spelman Ln SW, Box 1183, Department of Biology, Spelman College, Atlanta, GA 30314-4399 LOCATIONS Office: AFM Science Center 270; Lab: AFM Science Center 246 Phone: 404-270-5757 (office) 404-270-5561 (lab); Fax: 404-270-5725 Email: hqin@spelman.edu OR qinstat@gmail.com Twitter: @hongqin YouTube: http://www.youtube.com/-qinstat/ Google Scholar: http://tinyurl.com/-qgxad36 Blog: http://hongqinlab.blogspot.com/ GitHub: https://github.com/hongqin LinkedIn: http://tinyurl.com/mdylvxz Lab URL: http://-sunrays.spelman.edu/ Hong Qin <hqin@spelman.edu>

StockholmU BehaviourEvolution

Postdoctoral position in Ethology at the Department of Zoology at Stockholm University. Closing date 1 October 2015.

Project description

A fully funded 2-year post-doctoral position is available at the Zoology Department (Ethology) at Stockholm University. The candidate can chose to work within either or both of two potential projects. For the first project, developed in collaboration with Dr Björn Rogell at Stockholm University, we are looking for a person with demonstrated experience in experiments using fish as model system. This project involves work on the effects of lifestyle on life history and behaviour using killifish as a model system. Killifish are an excellent model system because of their strong contrasts in lifestyle: some species live in temporary water bodies which completely dry out and only the eggs survive by going into diapause (annual species), whereas other species live in permanent water bodies and do not present diapause. The different species thus present marked differences in longevity and other life history traits. We currently have stocks of several annual and non-annual killifish species in the lab allowing the postdoctoral researcher to develop diverse experiments analyzing the influence of lifestyle on life history and behaviour. There is ample freedom to develop projects which match the chosen candidate's interests.

The second project involves macro-evolutionary analyses of morphology and behaviour in relation to diversification patterns in the most important Caribbean amphibian radiation, the family Eleutherodactylus. For this project the candidate must demonstrate experience in the use of modern phylogenetic comparative methods. Potential projects can involve rate of phenotypic evolution, analyses of diversification, community phylogenetics, song evolution, etc.

The position will most likely involve research stays at the Universidad Nacional Autónoma de México, particularly for candidates working on the second project.

The Department of Zoology was founded in 1880, it is divided into five sub-departments: ecology, ethology, functional morphology, population genetics and systematics and evolution and there is much integration and collaboration among sub-departments. Current research in the Department of Zoology is focused on animal evolution, ecology and behaviour, with a broad spectrum from nervous system to ecosystem involving model organisms from fruit flies and butterflies to fishes, birds and large mammals. The Department offers an international and stimulating work environment.

Applicants must provide a written report about previous scientific activity and experience and how they comply with the requirements of the project applicants are interested in.

Eligibility and selection criteria

The applicant must have a doctoral degree from an accredited college/university in Biology or a similar field of studies. For the postdoctoral position, the PhD degree should have been received no more than three years before the deadline for applications. Among qualified applicants selection is made according to scientific merits, quality of the PhD thesis, the applicantÂs documented knowledge in subjects of relevance for the research area, ability to master English language (both spoken and written), analytical ability, initiative, independence and ability to cooperate. In filling the position, particular weight will be given to research proficiency, experience with an experimental approach to tackle evolutionary questions and experience keeping fish stocks in a laboratory environment. The working language in Stockholm University is English, and even everyday life in Stockholm is very simple with English.

Stockholm University strives to be a workplace free from discrimination and with equal opportunities for all.

Employment conditions.

The position is for two years, full time. The starting date is negoatiable but preference will be given for candidates who can begin work in 2015.

Application

Applications must include a CV, list of publications and a cover letter describing research interests, qualifications and reasons for the application. The letter should also contain possible starting dates and contact information of three references.

Please follow the instructions available here : http://www.su.se/english/about/vacancies/vacancies-new-list?cache=%2Fstudy-information%2Fstudent-and-teacher-exchange%2Fincoming-students-to-stockholm-university For more information please contact Alejandro Gonzalez Voyer: a.gonzalezvoyer@zoologi.su.se

Dr Alejandro Gonzalez Voyer

Department of Zoology (Ethology) Svante Arrhenius väg 18B Stockholm University SE-106 91 Stockholm Sweden

Tel: + 46 8 16 40 86

— / —

TempleU ComputationalGenomics

–001a11336e5a3001aa051bdc97eb Content-Type: text/plain; charset=UTF-8

Postdoc/RAP in Computational Genomics/Population Genetics

Multi-year NIH-funded support is available for either an early stage postdoctoral researcher, or an experienced postdoctoral researcher who would serve as Research Assistant Professor (non-tenure track). Experience in evolutionary or population genetic theory, particularly as a programmer or in the mathematical or statistical aspects of analyzing population genomic data, is desired. The successful candidate will become a member of both the Center for Computational Genetics and Genomics (CCGG) and the Institute for Genomic and Evolutionary Medicine (iGEM). CCGG and iGEM are new centers of excellence in Temple University.

http://ccgg.temple.edu/ http://igem.temple.edu/ For the position of Research Assistant Professor, a key goal is developing research independence by writing and obtaining grant applications. The position also carries opportunities for teaching, both in the classroom and in the laboratory.

Applicants should submit their detailed curriculum vitae and a summary of current and future research interests to ccgg@temple.edu or to Jody Hey, hey@temple.edu .

Temple University is located in the heart of historic Philadelphia and is the sixth largest provider of graduate

school education in the USA. Situated in close proximity to New York City and Washington DC, Philadelphia is the birthplace of America and home to many academic and research institutions.

Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community (AA, EOE, m/f/d/v).

–001a11336e5a3001aa051bdc97eb

TempleU PlantReproductiveEcolEvolution

A Postdoctoral Fellow position is available in the Spigler lab in the Department of Biology at Temple University. The Postdoc will be involved in an ongoing project on variation in plant-pollinator interactions and phenotypic selection on floral traits across a fragmented landscape and in the design and implementation of new field, greenhouse, or population genetic/genomic studies. There are also numerous opportunities to mentor undergraduates in research and to participate in outreach efforts. Additional information about the Spigler lab can be found at http://rachelspigler.weebly.com . Candidates must have a PhD in Ecology, Evolutionary Biology, Botany, or related field; experience designing, conducting, and managing field and greenhouse studies; and strong quantitative skills. A demonstrated track record of publications, excellent interpersonal, communication, and time-management skills, a strong work ethic, and attention to detail are also essential. Additional preferred qualifications include standard molecular skills (e.g., DNA extraction, PCR, microsatellite genotyping) and related statistical experience.

The position is available immediately and to last for one year, with the possibility of extension based on satisfactory progress and funding. Salary is commensurate with experience, and benefits are provided. Interested applicants should send the following as a SINGLE PDF file by email to Rachel Spigler (rachel.spigler@temple.edu): 1) a short statement (1-2 pages) on research interests, previous experience, and motivation for applying, 2) your curriculum vitae, and 3) contact information for three references. Informal inquiries about the position are welcome. Review of applications will begin immediately and continue until the position is filled.

About the Biology Department at Temple University

Temple University is a large, comprehensive public research university in Philadelphia, PA, with more than 37,000 undergraduate, graduate, and professional students enrolled in over 400 academic degrees. The Biology Department at Temple (https://bio.cst.temple.edu/) represents an active research community with strengths in ecology, genomics, conservation, and evolutionary biology and is home to the newly formed Center for Biodiversity (http://cst.temple.edu/research/-centers-and-institutes/center-biodiversity), Center for Computational Genetics and Genomics (https://-bio.cst.temple.edu/ ˜ hey/CCGG/), and Institute for Genomics and Evolutionary Medicine (http://-igem.temple.edu/).

“tuf10949@temple.edu” <tuf10949@temple.edu>

TempleU PlantReproductiveEcologyEvolution

TrentU ConservationGenomics

Post-Doctoral Fellow (PDF) in Conservation Genomics

A collaborative research program on caribou conservation is seeking a researcher with strong quantitative skills to complement a research team assessing the conservation of Canadian boreal caribou. This project is a partnership between academic, federal and provincial government agencies and the private sector and builds on a national multi-year dataset. Researchers with experience in conservation genetics, molecular ecology, landscape genetics, molecular biology and/or bioinformatics will be considered. Specific projects the PDF will be involved in range from assessing the relationships among sub-species and ecotypes in the reconstruction of caribou population histories across Canada to characterizing the spatial genetic structure and landscape/environmental variables influencing caribou populations, ecotypes and associated subspecies. Projects will build on neutral genetic markers and expand into genome-wide surveys to identify single nucleotide polymorphisms (SNP) analyses, functional genes and mitogenomics for larger-scale population genomic profiling. The PDF will be expected to take a leadership role in coordinating a team of graduate and undergraduate students and liaise with project

partners. The salary is $40,000/year and the position will be filled as soon as a suitable candidate is found. Applicants should submit a CV, a statement of research interests, and the names and contact information for three references.

Please submit applications to:

Dr. Paul J. Wilson Canada Research Chair in DNA Profiling, Forensics & Functional Genomics Trent University, 1600 West Bank Drive, Peterborough, ON, K9J7B8 Phone 705.748.1011 ext. 7259 Website: www.wilsoncrcresearch.ca pawilson@trentu.ca

"jillianlalor@trentu.ca" <jillianlalor@trentu.ca>

UAntwerp EvolEcol Rodent Virus Landscape

POSTDOC POSITION FOR THREE YEARS - The Evolutionary Ecology Group at University of Antwerp (www.uantwerpen.be/eveco) has an open position for a postdoc for three years, in a project "Landscape heterogeneity as a driver of evolutionary divergence in two rodent-borne RNA-viruses: a multi-scale approach."

Evolutionary divergence of directly transmitted virus lineages is often thought to occur either via codivergence with their hosts or due to the micro-evolutionary processes related to isolation by distance. Yet, in case of rapidly evolving RNA viruses with reservoir hosts that have distinct habitat preferences, landscape heterogeneity may be an important factor in virus divergence. Unpreferred host habitat is, through its effect on host density, expected to pose a barrier for virus gene flow, even in the absence of genetic isolation in the host. This is a consequence of host density thresholds for successful viral transmission. This project aims to investigate the role of multi-scale landscape patterns in shaping spatiotemporal patterns of viral divergence in two distinct rodent-borne RNA viruses: Puumala hantavirus in bank voles Myodes glareolus in Europe and Mopeia arenavirus in multimammate mice Mastomys natalensis in Eastern Africa. On a short-term and regional scale, we will study how local land use patterns affect viral clustering through space. On a long term and continental scale we will investigate how virus success in different genetic host groups has led to the types of particular distribution patterns of these viruses currently present in these rodents and the extent to which historic landscape changes has differentially influenced host and virus genetic structures. The project involves both fieldwork and analyses of existing long-term data and samples.

Applicants should have a strong cv with documented experience in population genetics, landscape ecology and/or ecology of viruses and other parasites. Required skills include molecular lab techniques, sequence analysis, phylogenetics and phylogeography (preferably of both viruses and vertebrates). Experience in NGS techniques (especially for whole-genome sequencing of uncultured viruses) and subsequent bioinformatics analyses would be a bonus.

The successful applicant will take the daily lead of the project, develop the scientific questions and study design in collaboration with the project leader and take responsibilities in supervising M.Sc. and Ph.D. students working on the project. He/she will be expected to become involved in the general activities of the research group, which may also involve a limited amount (max. 30h) of teaching. Under a tax exemption scheme to attract foreign scientists to Belgium, especially from outside EU, the funding allows a 3 year full-time postdoc position. With the available funds, scientists with current or recent residence in Belgium, and thus without tax exemption, can only be employed part-time. The position can be taken up from 1 October 2015 or soonest thereafter.

If you are interested, send a cv and short motivation letter before August 15 to:

herwig.leirs@uantwerpen.be

Prof. dr. Herwig Leirs Department of Biology, Evolutionary Biology Group Groenenborgerlaan 171 - 2020 Antwerpen - Belgium T Lab: +32 3 265 34 62 https://www.uantwerpen.be/-herwig-leirs "herwig.leirs@uantwerpen.be" <herwig.leirs@uantwerpen.be>

UBirmingham VertebrateDiversification

Dear colleagues,

A postdoctoral research position in diversification patterns of fossil vertebrates is now available based within our research group.

The successful applicant will be employed as part of a European Research Council-funded team focused on

testing the spatial and temporal patterns and abiotic and biotic drivers of the diversification of terrestrial tetrapods over the last 370 million years. The researcher will play a key role in the development of spatially and temporally comprehensive datasets of fossil vertebrate taxonomy and occurrences. Utilising these and other existing data they will conduct quantitative analyses to document major temporal and spatial patterns in species-richness over long geological timescales, and test relationships with potential drivers. The researcher will be expected to disseminate research results through outstanding publications in leading journals, conference presentations and outreach activities. Further duties will involve co-supervision of undergraduate student projects, and contributing to the training and mentoring of doctoral researchers and research assistants. Funding will be available for the researcher to undertake relevant training courses and attend both national and international conferences.

The post is full-time for three years, with a starting salary of Â£28,695 to Â£37,394. I am looking for someone with a first degree in a relevant area such as Geology, Zoology, Biology, Ecology or Palaeontology and a PhD in Palaeontology, Evolutionary Biology or other relevant field. The candidate should have excellent quantitative and analytical skills, including demonstrable experience of using and programming in the statistical language R, a track record of high-quality scientific publications, and clear experience in disseminating research results via conference presentations. Desirable skills include: an understanding of and ability to interpret and work with published stratigraphic and taxonomic information; previous experience working with fossil vertebrates and/or deep time diversity patterns; experience in disseminating research results to the public through public engagement and media activities; and experience in supervising or co-supervising research work by undergraduate and/or graduate students.

Our research group is highly active and growing, and currently includes three PhD students as well as undergraduate researchers. At least two further PhD students and a research assistant will also be joining the group later this year. We are part of a broader palaeobiological research group at the University of Birmingham that includes additional vertebrate palaeontologists, palaeobotanists, micropalaeontologists, and palaeoclimatologists. We have a historic departmental museum, the Lapworth Museum of Geology, which is currently undergoing a major redevelopment, and which will provide outstanding possibilities for outreach activities. Birmingham is the UK's second city, centrally located with excellent transport links, and is very affordable with excellent cultural facilities and a resurgent city centre. Rough Guides recently voted Birmingham one of the world's top 10 cities to visit in 2015. The University of Birmingham is located on a highly attractive campus in the leafy southern suburbs of the city.

The full job specification and application are available through the University of Birmingham jobs website, where the position is "ERC Research Fellow", reference 55212. Please ensure that you include a full academic CV as part of your application. Information is also available on our research group website: http://www.archosauromorpha.com/news/-postdoctoralposition The deadline for applications is 29th July 2015, with a preferred (but negotiable) start date of late 2015.

For more details, or if you have any queries, please contact me.

Thanks

Richard

Dr Richard J. Butler Senior Birmingham Fellow Academic Keeper of the Lapworth Museum of Geology School of Geography, Earth and Environmental Sciences University of Birmingham Edgbaston Birmingham, B15 2TT +44 (0)121 414 5539

r.butler.1@bham.ac.uk butler.richard.j@gmail.com http://www.birmingham.ac.uk/staff/-profiles/gees/butler-richard.aspx http:/-/www.archosauromorpha.com/ http:/-/scholar.google.com/citations?user=-3DqM_a54cAAAAJ&hl=3Den Learn more about the redevelopment of the Lapworth Museum of Geology here: http://www.birmingham.ac.uk/facilities/-lapworth-museum/museum-redevelopment/index.aspx butler.richard.j@gmail.com

UCalifornia Davis EvolutionarySpecialization

Post-doctoral position in Plant Evolutionary Ecology

A two-year post-doctoral position is available in the Strauss lab at UC Davis in the Department of Evolution and Ecology . Post-doc will work on an NSF-funded project using a clade of Streptanthus spp. (Brassicaceae) in a common garden set-up. We will focus on ancestral reconstruction of plasticity in relation to ecological specialization.

Familiarity with comparative methods preferred, but

not necessary.

Post-doc must be willing to conduct greenhouse experiments with some undergraduate help, and must be able to travel to remote field sites on week-long field trips.

Post-doc is expected to: conduct and coordinate research, 2) interact with and mentor talented undergraduate and graduate students in Strauss lab, including co-mentor Howard University summer session research projects, 3) participate in lab meetings, and 4) write up results from experiments for publication in a timely manner.

UC Davis houses a world class program in Ecology and Evolution; post-doc can participate in seminars, and will receive professional mentoring on job applications, interview strategies, CV preparation, and additional professional development.

Start date is flexible, ideally before January 1, 2016.

For full consideration, please send application materials by August 20, 2015.

Salary commensurate with experience, starting at approximately $42,840 with generous benefits.

Interested candidates should submit - a cover letter stating research interests, - CV - a short (1-2 page) description of research accomplishments, - copies of two publications, - email addresses and phone numbers of three references to Sharon Strauss at systrauss@ucdavis.edu.

Please feel free to contact me at the above email address with questions.

I will be attending ESA in Baltimore in August, if you would like to meet in person.

The University of California at Davis is an affirmative action/ equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff. UC Davis is a smoke and tobacco free campus effective January 1, 2014.

Sharon Y. Strauss Professor and Chair, Evolution and Ecology Director, REACH IGERT: Responding to Rapid Environmental Change. http://-reach.ucdavis.edu/ 2320 Storer Hall, One Shields Ave., Davis, CA 95616

Sharon Strauss <systrauss@ucdavis.edu>

UFreiburg 4PDF 5PhD EvolutionAging

We invite applications for 5 PhD and 4 postdoc positions within the framework of the new Research Unit

Sociality and the reversal of the fecundity/longevity trade-off (FOR 2281)

funded by the German Research Foundation (DFG)

Why do organisms age? The genetic underpinnings of ageing seem to be highly conserved from nematode worms to humans. Across animals, ageing is characterized by a trade-off between fecundity and longevity, with an increase in fecundity commonly associated with accelerated senescence and a drop in lifespan. A major exception to this pattern is found within the social insects. Some social insect queens are record holders with respect to longevity whereas their sterile workers are short-lived. The aim of the Research Unit is to explore, in a highly integrative and interdisciplinary fashion, the ultimate and proximate reasons for the apparent reversal in the fecundity/longevity trade-off associated with sociality by using all major clades of social insects, with Drosophila melanogaster as model non-social organism. Projects will apply a broad range of approaches from experimental manipulation, field-based studies and molecular genetic studies (e.g. qRT PCR, NGS) to theoretical evolutionary modelling and bioinformatics analysis.

PhD positions will be available on the following topics:

- The physiological and metabolic basis of the fecundity/longevity trade-off in Drosophila (Prof. Dr. Thomas Flatt, University of Lausanne; thomas.flatt@unil.ch)

- The fecundity/longevity trade-off in an orchid bee at the cusp of sociality (Prof. Dr. Robert Paxton, University of Halle; robert.paxton@zoologie.uni-halle.de)

- The genomic tool box to transform a short-lived social bee into a long-lived parasite (Prof. Dr. Robin Moritz, University of Halle; r.moritz@zoologie.uni-halle.de)

- Fecundity/longevity reversal in a social insect with alternative reproductive strategies (Prof. Dr. Susanne Foitzik /Dr. Barbara Feldmeyer, University of Mainz; foitzik@uni-mainz.de, feldmeye@uni-mainz.de)

- Remoulding of the fecundity/longevity trade-off in a

fungus-growing termite (Prof. Dr. Judith Korb, University of Freiburg; Judith.Korb@biologie.uni-freiburg.de)

Postdocs will work on:

- The fecundity/longevity trade-off in a clonal ant (Prof. Dr. JÃ ¼rgen Heinze, University of Regensburg; Juergen.Heinze@biologie.uni-regensburg.de)

- Towards a quantitative evolutionary theory of caste specific ageing (Prof. Dr. Ido Pen/Prof. Dr. Franjo Weissing/Dr. Sander van Doorn, University of Groningen; i.r.pen@rug.nl)

- Comparative evolutionary analysis of the fecundity/longevity trade-off in social insects (Prof. Dr. Erich Bornberg Bauer, University of MÃ ¼nster; ebb@wwu.de)

- Comparative cross-taxon transcriptome analysis of the fecundity/longevity trade-off in social insects (Prof. Dr. Judith Korb, University of Freiburg; Judith.Korb@biologie.uni-freiburg.de)

All applicants should have a strong background in evolutionary biology and, depending on the project, in bioinformatics and/or modelling. For further details of specific projects, email the relevant contact person listed above. Within your application, please state your preferred project, in ranked order from 1 (most preferred) to 3. The research consortium will jointly select candidates for the positions. Skype/phone interviews are scheduled for the 2nd & 3rd week of August.

Start of Position is anticipated to be 1. Oct 2015

Interested candidates should send their applications (incl. CV, letter of motivation, and contact details of two academic references) as single file pdf by 3. Aug 2015 to:

Judith.Korb@biologie.uni-freiburg.de

For further information please contact:

Prof. Dr. Judith Korb

Zoology : Evolutionary Biology & Ecology

University of Freiburg

Hauptstrasse 1

D-79104 Freiburg

Germany

Judith.Korb@biologie.uni-freiburg.de

Deadline for applications: 3. Aug 2015

Florentine Schaub <florentine.schaub@biologie.uni-freiburg.de>

UHawaii Manoa FruitFlyGenetics

Aloha! The USDA-ARS Pacific Basin Agricultural Research Center (Geib Lab) and University of Hawaii Manoa (Rubinoff Lab) have funding for a Junior Researcher (Postdoc) to work on genetics of pest fruit flies.

The research project is focused on utilizing genomic approaches for improving detection and identification of pest Tephritid fruit flies. Most of the work involves analyzing populations of Tephritid fruit fly species using genome-wide analysis techniques towards marker discovery and developing assays for determination of source populations. In addition, position would including assisting in ongoing experiments on quantitative genetics of fruit flies to identify causative loci for traits of interest. The applicant will be expected to work independently and supervise technical staff and students, as well as work well as part of a larger research team. Experience in wet-lab molecular biology, genetics, as well as computational analysis of high-throughput sequence data is required. Specific background in population genetics/genomics and knowledge of linux/unix, scripting, etc. as well as performing NGS approaches (RAD-Seq, GBS (genotyping by sequencing), RNA-seq, WGS) are desired. We have advanced computing resources in-house, automated laboratory instrumentation, and a very active research program.

Salary is ~$~61,000/yr, hired through University of Hawaii Manoa, and the job will be stationed at the USDA-ARS Pacific Basin Agricultural Research Center in Hilo, HI (on the Big Island of Hawaii). Minimum PhD in genetics, biology, entomology, or similar is required. If interested, please contact Dr. Scott Geib at scott.geib@ars.usda.gov and submit CV and contact for at least 3 references.

Scott.Geib@ARS.USDA.GOV

UIceland CompensatoryRegulatoryEvol

A postdoc position is open at the University of Iceland - Compensatory regulatory evolution and transcriptional cooption

Which principles influence the rewiring and tuning of gene regulatory networks? How do those network react to genetic perturbations? We are seeking a post-doc to tackle those and related questions in project utilizing populations of Drosophila (fruit flies) that have undergone compensatory adaptation using experimental evolution and artificial selection. The project involves the analysis of tissue specific RNA-seq and numerical analyses. The ideal candidate is strong in evolutionary genetics, statistical and bioinformatic analyses and with capable hands for molecular biology. Excellent communication skills, main focus on writing, are required, as is a solid publication record. The candidate will be encouraged (and given time) to develop their own research program.

The project is a collaboration between University of Iceland and McMaster University, mostly conducted in Iceland. Those interested are asked to send a cover letter detailing research interests and experience, a current CV, and contact details for three professional references by July 31th. Anticipated start date is Fall 2015, but this is flexible. The position is funded by the Icelandic Research fund (for 3 years), salary commensurate with qualifications.

The University of Iceland is the leading research institute in the country, and groups at the Institute of biology (luvs.hi.is/institute-biology) and Biomedical Center (lifvisindi.hi.is) study genomics, evolutionary, developmental, cellular and molecular biology. The shared facilities include High throughput sequencers, various specialized molecular biology equipment and computer clusters. The University is an equal opportunity workplace with strong combination of international and domestic scientists.

Learn more about the work in the Palsson (uni.hi.is/apalsson) and Dworkin (www.msu.edu/~idworkin/) labs.

Please send applications and/or inquiries to apalsson@hi.is.

– Arnar Palsson - Associate Professor in Bioinformatics

Faculty of Life and Environmental Sciences University of Iceland Sturlugata 7, 101 Reykjavik, Iceland Tel: +(354) 525 4265 Fax: +(354) 525 4632 E-mail: apalsson@hi.is uni.hi.is/apalsson/en/

apalsson@hi.is

UIllinois PlantPhylogeography PopGenomicsPaleo

Department of Plant Biology Department of Geology University of Illinois at Urbana-Champaign

Position Description

A Postdoctoral position is available in Feng Sheng Hu's interdisciplinary research group at the University of Illinois. Current research in the group focuses on the Quaternary population dynamics of boreal and temperate plants based on genomics, paleoecology, and niche modeling; novel disturbances (fire and thermoerosion) and biogeochemical cycling in arcto-boreal ecosystems based on lake-sediment and soil analyses; and C4 plant ecology and evolution based on single-pollen isotope analysis. The successful candidate will work on one or more of these projects in collaboration with a large group of ecologists, geneticists, remote sensing experts, ecosystem and species-niche modelers, geochemists, and statisticians. She/he will also be encouraged to pursue new research directions, and will help manage the lab and interact with graduate and undergraduate students. More information on the lab group is available via http://www.life.illinois.edu/hu/ . Application Procedures

Applications should include a cover letter explaining your research interests and accomplishments, and your qualifications for the position; a curriculum vita; and names and contact information (including email addresses) for three professional references. Full consideration will be given to complete applications received by the closing date of July 10, 2015. To apply for this position, please send the required documents in a single PDF file to Rayme Dorsey at rdorsey@illinois.edu. For additional information regarding this position, please contact Dr. Feng Sheng Hu, fshu@life.illinois.edu.

Salary and Appointment Information

The initial term of appointment is one year, renewable for two additional years contingent upon satisfactory progress. Salary is competitive and commensurate with previous experience. The expected start date is August 15, 2015. Applicants may be interviewed before the

closing date; however, no hiring decision will be made until after the closing date.

Illinois is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, sexual orientation, gender identity, age, status as a protected veteran, or status as a qualified individual with a disability. Illinois welcomes individuals with diverse backgrounds, experiences, and ideas who embrace and value diversity and inclusivity. (www.inclusiveillinois.illinois.edu).

–

Feng Sheng Hu

Interim Associate Dean Biological, Chemical, Physical, and Mathematical Sciences College of Liberal Arts and Sciences

Professor, Department of Plant Biology Ralph E. Grim Professor, Department of Geology Professor, Program in Ecology, Evolution, and Conservation Biology

Mailing Address: 265 Morrill Hall University of Illinois 505 South Goodwin Avenue Urbana, IL 61801

Voice: (217)244-2982 FAX: (217)244-7246 fshu@life.illinois.edu

www.life.illinois.edu/hu www.las.illinois.edu www.life.illinois.edu/plantbio www.geology.illinois.edu www.sib.illinois.edu/peec Katy Heath <kheath@life.illinois.edu>

ULiverpool UK ImmunologicalVariation

A 4yr+ post-doc is available in Steve Paterson's group in the University of Liverpool to use wild rodents as a model to study the genetic and ecological drivers of immunological variation in natural populations, and the consequences of this variation for susceptibility and tolerance to infectious disease. Closing date is 29th July. Further details and applications through the UoLiverpool site below:

http://tinyurl.com/q4w2g77 Blurb: You will play a key part in an exciting, multidisciplinary programme that will investigate immunological variation among individuals. The project will use wild rodents as a novel model where immunological measures, leveraged from laboratory mice, can be placed within an ecological setting to examine how immune responses are shaped by nutrition, previous pathogen exposure and other ecological factors. You will be responsible for computational and genetic analyses of this dataset. A PhD in biology and relevant experience is required. The post is available until 31 December 2019.

Relevant papers: http://dx.doi.org/10.1371/-journal.pbio.1001901 http://dx.doi.org/-10.1111/pim.12036 http://dx.doi.org/10.1371/-journal.pgen.1002343 – Prof Steve Paterson Institute of Integrative Biology University of Liverpool Liverpool, L69 7ZB, UK Tel +44 151 795 4521 Fax +44 151 795 4408 Mob +44 797 024 7668 s.paterson@liv.ac.uk http://www.liv.ac.uk/genomic-research/ Twitter: @scottishwormboy

"Paterson, Steve" <S.Paterson@liverpool.ac.uk>

UManchester ViromeVirusDiscovery

Postdoc position available in Prof David Robertson's research lab at the University of Manchester.

The project's aim is to develop and implement assembly software for high-throughput virome sequencing projects. The research will involve exploring methods from digital signal processing and time series analysis for assembling next generation sequencing reads from mixed virus and bacteria populations with focus on virus discovery. You will join a research team focussed on viral and molecular evolution, genomics and disease: http://www.bioinf.manchester.ac.uk/robertson, based in the Computational and Evolutionary Biology grouping: www.manchester.ac.uk/ceb. The research will be computer-based and is part of a Horizon 2020 project Virogenesis, a consortium of computational biologists, statisticians, epidemiological modellers, clinical and molecular virologists, from Belgium, The Netherlands, France, the United Kingdom, the Republic of South Africa and the United States of America.

You should have (or expect to hold) a relevant PhD. Experience of computer science/mathematics or bioinformatics/computational biology research is required and experience in any of digital signal processing, time series, machine learning or metagenomics an advantage. More details are on the University of Manchester's website: https://www.jobs.manchester.ac.uk/-displayjob.aspx?jobid=3D10132. Enquiries to : david.robertson@manchester.ac.uk. Closing date : 19/08/2015.

– David L. Robertson, PhD Michael Smith Blding, Faculty of Life Sciences, Univ. of Manchester. Tel:+44 (0)161 275 5089, http://www.manchester.ac.uk/ceb david.robertson@manchester.ac.uk

UMiami ScienceEducation

Science Education Postdoctoral Opportunity at the University of Miami

The Office of Undergraduate Research and Community Outreach is seeking a Postdoctoral Fellow to work with our Howard Hughes Medical Institute (HHMI) Undergraduate Science Education program grant. One of the main goals of our grant is to provide early authentic research experiences for students at Miami Dade College (MDC) and University of Miami (UM) freshmen through an introductory integrated biology and chemistry laboratory course series. This fall our successful HHMI authentic research course piloted at UM spring 2015 is being exported to MDC. The postdoc will work directly on this introductory lab course series at both UM and MDC.

To learn more about the office and our programs, please visit our website: http://www.miami.edu/index.php/-undergraduate_research_and_community_outreach /

University of Miami HHMI Postdoctoral Associate

General Job Description

The postdoc will report directly to the University of Miami (UM) Howard Hughes Medical Institute (HHMI) program director. She/he will work with the UM HHMI program director and the management team which includes the co-director, science educator and the dean of the school of science at Miami Dade College (MDC) on all activities related to UMÂ¹s HHMI Science Education Grant. She/he will help coordinate and provide administrative support for the new Integrated Biology & Chemistry Authentic Research Labs at MDC and UM. She/he will work closely with the science educator on evaluation of the Authentic Research Labs at both MDC and UM.

The postdoc will work with the management team on the HHMI MDC/UM Undergraduate and Teacher Partnership program. She/he will assist with recruiting teachers from Miami-Dade County High Schools, UM undergraduates, and MDC students and ensure that program requirements are met by the undergraduate and college student participants. The postdoc will handle administrative duties related to this program.

The postdoc will be responsible for leading the HHMI High School Scholars Summer Research Program.

She/he will support HHMI program evaluation and assessment by collecting and tabulating evaluation data regarding participant performance in all grant-funded activities. She/he will take primary responsibility in preparing program reports to HHMI with guidance from the program director.

The postdoc will take initiative in meeting established timelines and deadlines set by the program director without reminders. She/he must be well-organized and able to prioritize competing tasks and must have strong communication (verbal and written) and social skills. Experience working with personnel from diverse backgrounds is desirable. Must be available to work occasional evenings and weekends. Duties include:

Program activities administration: o Provide programmatic support as needed to the management team. o Use existing mentor database to place High School Scholars in summer research positions based on studentsÂ¹ research interests. o Assist with coordination and facilitation of the Integrated Biology & Chemistry Authentic Research Labs at MDC. o Organize meetings. o Oversee the timely disbursement of participant stipends, reimbursements, etc.

As required by grant project: o Meet with UM undergraduates and MDC students on a regular basis to ensure the undergraduate teacher partnership program goals are met (check classroom hours, lesson plan development, and mileage reimbursements). o Arbitrate problems among high school teachers, UM undergraduate, and MDC students. o Collect and tabulate evaluation data regarding participant performance and other relevant information for annual reports and grant applications; maintain relevant databases and archival files of evaluation instruments. o Assist with recruitment of teachers from Miami-Dade County High Schools, UM undergraduates, and MDC students for program. o Assist in the development of programmatic materials for participants. o Assist the program director with preparation of reports to grant agencies and with grant proposal preparation. o Development and overall upkeep of program webpages. o Evaluate the deliverables of the student research programs, which include honors theses, research papers, and PowerPoint presentations, and give feedback to the students. o Lead professional development meetings (e.g. responsible conduct in research, college/graduate school application process, scientific presentations, publication process) for HHMI high school students and undergraduates participating in UM research programs.

Other duties as assigned.

Qualifications Education: PhD in a STEM field (a background in biochemistry or chemistry is preferred) and a strong interest in science education. She/he must have strong communication (verbal and written) and excellent

— / —

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

UMissouri StLouis PlantMolecularPhylogenetics 2

Re-posting:

I am looking for a postdoctoral researcher to join my lab at the University of Missouri V St. Louis. The project involves constructing a species-level phylogeny for the Neotropical genus Burmeistera (Campanulaceae) using next-generation sequencing approaches (Hyb-Seq, targeting low-copy nuclear regions with enrichment probes and genome- skimming for plastomes). Results will be used to test the relative roles of pollinator-mediated reproductive isolation and gametic isolation (post-pollination yet prezygotic) in the diversification of Burmeistera. Candidates should have experience with plant molecular phylogenetics, including labwork and bioinformatics analysis of next-gen data, and an interest in plant speciation and/or pollination biology. Successful applicants will also be encouraged to also carry out his or her own research projects related to work done in the Muchhala Lab (see www.umsl.edu/˜muchhalan). The start date for the position is flexible, from August of 2015 to January 2016. Funding is available for one year with renewal for a second year given satisfactory progress. St. Louis is a vibrant Midwestern city that boasts an exceptional quality of life, combining a low cost of living with a variety of cultural attractions including parks, museums, and lively music and art scenes. The University of Missouri V St. Louis has strong local ties with the Missouri Botanical Garden, the Saint Louis Zoo, Washington University, St. Louis University, and the Donald Danforth Plant Science Center, and annual retreats (sleec.weebly.com) bring together ecologists and evolutionary biologists from these and other local institutions. The Department also houses the Whitney R. Harris World Ecology Center, established to promote international research, particularly in tropical regions. Review of applications will begin on July 15th. Informal inquiries should be emailed to muchhalan@umsl.edu (I will also be at Evolution 2015 in Brazil if you want to discuss in person). Submission online at http://www.umsl.jobs. Applicants must combine application materials, including 1) a short statement (one to two pages) on previous experience, research interest, and motivation for applying, and 2) a curriculum vitae, into a single PDF or Microsoft Word document and upload as a resume attachment. Additionally, have three recommendation letters sent to muchhalan@umsl.edu. For questions about how to apply, please call (314) 516-5258, or if you are experiencing technical problems, please email pshrsupport@umsystem.edu. UMSL is an Equal Opportunity/Access/Affirmative Action/Pro Disabled & Veteran Employer

– Nathan Muchhala, Ph.D. Assistant Professor Department of Biology University of Missouri -St Louis One University Blvd, R428 Research Hall St Louis, Missouri 63121 (314) 516-6672 http://www.umsl.edu/ ˜ muchhalan/ "Muchhala, Nathan" <muchhalan@umsl.edu>

UNeuchatel EvolutionaryModelsCooperation

1 postdoc position in theoretical biology opening at the behavioural ecology group at the University of NeuchÃtel

Application deadline: 14th of August 2015. Please send full CV, motivation letter (1 page max) and 2 names for potential reference letters to redouan.bshary@unine.ch

Starting date: as early as 1.9.2015 or at a later date of mutual agreement. The funding is initially for 20 month and can be prolonged for up to another 24 month. Salary is 100% Swiss Science Foundation post doc, i.e. ˜89'000 CHF (84'000 â¬)$peryearbeforetaxes$.

The successful candidate will integrate mechanisms into evolutionary models of cooperation. The project involves an international collaboration between Redouan Bshary (host at NeuchÃtel), John McNamara (Bristol) and Olof Leimar (Stockholm) for the mathematical aspects, and Arnon Lotem (Tel Aviv) for the mechanistic aspects of learning. It is expected that the post doc will visit these colleagues for direct discussions.

The study is integrated into a grant provided by the Swiss Science Foundation with the title “How proximate factors underlying decision making may affect the evolution of cooperation” (grant holder: Redouan Bshary). Large parts of this project are empirical in nature, with marine cleaning mutualism as a model system. Cleaner fish remove ectoparasites from other âclient' reef fish, but a conflict of interest exists as the cleaners prefer to eat client mucus. This conflict apparently promoted the evolution of sophisticated decision rules in cleaners, enabling them to adjust service quality to various factors like client strategic options, the presence of bystanders, the co-inspection by the partner, level of satiation, etc. While studying more and more both cognition and physiology underlying variation in cooperation, we recently found that individual cleaners from rather marginal habitats employ simple rules-of-thumb rather than precise decision rules. These data should be seen as an inspiration for the modelling part. We aim to develop models that explicitly link parameters affecting social complexity with costs and benefits of more or less sophisticated decision rules, i.e. rules that use different amounts of information about the social environment. Our variables of interest will affect the efficiency of different updating rules that would lead to more or less knowledgeable / cognitively enabled individuals. The updating rules should take into account likely learning mechanisms used by animals, like reinforcement learning. We will explore the effects of social complexity and learning on both ecological and evolutionary time scales. The powerful combination of modelling and empirical data, especially the explicit links between mechanisms and function, should provide us with novel insights concerning the conditions promoting stable cooperation.â

The successful candidate should have a PhD, proven evidence of modelling skills in the form of peer reviewed publications, and a strong motivation to make a career in research. In addition, the social competence of the successful candidate will be a key priority. The behavioural ecology group at NeuchÃtel comprises 3 post docs, 6 PhD students and various Master students. We have strong links with other research groups within the university and within Switzerland (never more than 2h away). For more information, please check our website http://www2.unine.ch/ethol/page-5880_fr.html or send an email to redouan.bshary@unine.ch. The position is 100% dedicated to research; if of interest teaching opportunities can be arranged.

We are looking forward to receiving your application!

BSHARY Redouan <redouan.bshary@unine.ch>

UOulu EvolutionaryResponseRadiation

Postdoctoral position to study evolutionary response to environmental radiation

The University of Oulu is an international scientific community, with 16 000 students and approximately 3 000 employees. The strenghts of the University are wide multidisciplinary study/research interests and modern research and study environment and good cooperation with international educational and research institutes. More information http://www.oulu.fi/english/ The following job is open in the University of Oulu:

Post-doctoral researcher, Department of Genetics and Physiology

A postdoctoral position for three years is available at the University of Oulu, Finland to work with Dr Phill Watts' research group (https://wiki.oulu.fi/display/~pwatts/-Phill+Watts). The project will examine the genetic and genomic consequences of exposure to ionizing radiation in small rodents (principally bank voles, Myodes glareolus) that inhabit the area surrounding Chernobyl reactor 4, Ukraine. The project's emphasis is to determine the role of DNA protection and repair pathways. While we have many samples available for analysis, there are opportunities to visit Chernobyl site to collect more samples and to conduct field experiments to assess fitness of animals with different phenotypes. The successful applicant will contribute to future design of experiments and be part of an international team who are using their diverse skills and expertise to examine the eco-evolutionary consequences of exposure to environmental radioactivity. Members of the team include: Drs Zbyszek Boratynski, Eva Kallio and Tapio Mappes and Prof Heikki Penttilä (University of Jyväskylä, Finland), Prof JiÅí Fajkus (Masaryk University, Czech Republic), Prof Tim Mousseau (University of South Carolina, USA) and Prof Anders MÃller (Université Paris-Sud XI, France). The project is funded by the Academy of Finland.

Candidate should be highly motivated and have proven molecular-genetic expertise (e.g. DNA & RNA extraction, PCR, qPCR, RT-PCR, Western blotting) and be prepared to contribute to fieldwork, and handle and collect samples from small mammals. Experience of analysis of high-throughput sequencing data is an ad-

vantage.

The salary depends on the competence of the applicant, but likely will be level 5 of the national salary scale for teaching and research staff of Finnish universities. In addition, a supplementary remuneration will be given for personal achievement and performance, the sum rising to a maximum of 46.3 % of the salary scale. (The salary is expected to be around 3,400 euro/month). The position will be filled as soon as possible. The starting date is negotiable, but preferred to be by January 2016.

Applications should consist of (1) a letter of motivation (maximum 2 pages) and (2) a CV that includes a list of publications and the contact details of at least two referees. Applications should be submitted in English using the electronic application form by August 10, 2015.

For further information please contact Phill Watts (phillip.watts[at]oulu.fi).

"P.C.Watts@liverpool.ac.uk"
<P.C.Watts@liverpool.ac.uk>

URochester EvoDevo

Postdoctoral position in evolution and development at the University of Rochester

A postdoc position is available in Jenn Brisson's lab in the Department of Biology at the University of Rochester. The project's aim is to investigate the molecular mechanisms underlying control of the wing polyphenism in pea aphids. Techniques used will include gene expression analysis (RNA-Seq and/or qRT-PCR), gene knockdown, hormone assays, and pharmacological manipulations. The postdoc will be expected to coordinate and conduct research, mentor undergraduate students, and write up results for publication. Additionally, the successful applicant will have the opportunity to develop new research directions.

Appointment for this position will initially be for 12 months, with renewal for up to three years, contingent on sufficient progress. The start date is flexible, as early as October or as late as February. Salary is commensurate with experience, and benefits are included. Experience in endocrine and/or gene expression studies is strongly preferred.

More information about the lab can be found here: http://www.rochester.edu/College/BIO/labs/-BrissonLab/Brisson_Lab/Home.html . Applications should include a cover letter with a short description of research interests and accomplishments (~1 page), a CV, and names and email addresses of three references. Please email these materials to Jennifer.brisson@rochester.edu with POSTDOC APPLICATION in the subject line. Screening begins immediately and continues until a suitable candidate is found. Also feel free to email me at Jennifer.brisson@rochester.edu with any questions prior to applying!

jbrisso3@UR.Rochester.edu

USheffield SparrowSenescence

You will assist in a project on trans-generational senescence using a world-class study population: a long-term dataset on house sparrows on Lundy Island, UK. You should have a PhD (or equivalent experience) in evolutionary biology or evolutionary physiology, and have experience of advanced statistical methods. Analytical methods include mixed modelling, among others, and programming for individual-based simulations. The study offers multiple opportunities for hypothesis testing, with the exact priorities will be agreed so as to match the strengths of the appointee.

The deadline is Thursday 30th July. Start date: 1/09/2015 for 12 months.

To apply, visit the University of Sheffield recruitment section, the position reference number is 011148.

Link to the advert and more information are available on: https://jobs.shef.ac.uk/sap/bc/-webdynpro/sap/hrrcf_a_posting_apply?PARAM=-cG9zdF9pbnN0X2d1aWQ9NTVBNTI5RDIzODg2NjM4QUUxMDAwM
client=400&sap-language=EN&sap-accessibility=X&sap-ep-themeroot=-%2fSAP%2fPUBLIC%2fBC%2fUR%2fuos# For informal enquiries about this job and department, contact Professor Terry Burke on t.a.burke@sheffield.ac.uk or 0114 222 0096.

– Céline Pagnier

Secretary, NERC Biomolecular Analysis Facility (NBAF) & Personal Assistant to Professor Terry Burke

Dept of Animal & Plant Sciences University of Sheffield Sheffield,S10 2TN UK

Tel +44 (0)114 222 4314

Voted number one for student experience Times Higher

Education Student Experience Survey 2014-2015

Please note that I do not work on Wednesdays.

Celine pagnier <c.pagnier@sheffield.ac.uk>

USheffield TransgenerationalSenescence

You will assist in a project on trans-generational senescence using a world-class study population: a long-term dataset on house sparrows on Lundy Island, UK.

You should have a PhD (or equivalent experience) in evolutionary biology or evolutionary physiology, and have experience of advanced statistical methods. Analytical methods include mixed modelling, among others, and programming for individual-based simulations. The study offers multiple opportunities for hypothesis testing, with the exact priorities will be agreed so as to match the strengths of the appointee.

The deadline is Thursday 30th July. Start date: 1/09/2015 for 12 months.

To apply, visit the University of Sheffield recruitment section, the position reference number is 011148.

Link to the advert and more information are available on: https://jobs.shef.ac.uk/sap/bc/-webdynpro/sap/hrrcf_a_posting_apply?PARAM=-cG9zdF9pbnN0X2d1aWQ9NTVBNTI5RDIzODg2NjM4Q[illegible]VYVA%3d%3 client=400&sap-language=EN&sap-accessibility=X&sap-ep-themeroot=-%2fSAP%2fPUBLIC%2fBC%2fUR%2fuos# For informal enquiries about this job and department, contact Professor Terry Burke on t.a.burke@sheffield.ac.uk or 0114 222 0096.

Céline Pagnier, Secretary, NERC Biomolecular Analysis Facility (NBAF) on behalf of:

Professor Terry Burke Director, NERC Biomolecular Analysis Facility

Dept of Animal & Plant Sciences Univ of Sheffield Sheffield S10 2TN UK

Tel +44 (0)114 222 0096/ 4314 NERC Biomolecular Analysis Facility http://nbaf.nerc.ac.uk/ Terry Burke <t.a.burke@sheffield.ac.uk>

UToronto EvolutionaryBiol

The department of Ecology & Evolutionary Biology at the University of Toronto invites applications for the prestigious Banting Postdoctoral Fellowship. These awards include a $70,000 annual stipend for 2 years and are available to excellent junior scientists from any country to conduct postdoctoral research in Canada.

The University of Toronto is a leading academic institution in Canada with over 60 faculty members specializing in ecology and evolution. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Centre for Global Change, the School of the Environment, and the Faculty of Forestry. The University owns a nearby field station dedicated to ecological research (the Koffler Scientific Reserve, www.ksr.utoronto.ca). The department also has a partnership with the Ontario Ministry of Natural Resources that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park (www.harkness.ca), funding, and long-term data sets. Genomic analyses are supported by the Centre for the Analysis of Genome Evolution and Function (www.cagef.utoronto.ca).

To apply, applicants should first contact and obtain the agreement of a faculty advisor (or co-advisors) who is a member of EEB's graduate faculty; the faculty member(s) must agree to support the application. Please see this list for eligible faculty members: http://www.eeb.utoronto.ca/people/-G-faculty.htm Applications are due to the EEB department by July 16, 2015, with further details of the application process available on the EEB department website: http://www.eeb.utoronto.ca/about-us/-employment/postdocs/eebbanting.htm For full information on the Banting Postdoctoral Fellowships, including eligibility, please see this website: http://-banting.fellowships-bourses.gc.ca –

Asher D. Cutter Associate Professor and Canada Research Chair in Evolutionary Genomics Department of Ecology and Evolutionary Biology University of Toronto 25 Willcocks St. Toronto, ON, M5S 3B2

tel: 416-978-4602 email: asher.cutter@utoronto.ca http://labs.eeb.utoronto.ca/cutter
"asher.cutter@utoronto.ca" <asher.cutter@utoronto.ca>

UUtah SolanaceaeSystematics

Post-doc in Solanaceae Systematics. A NSF-funded postdoctoral position at the University of Utah in Salt Lake City is available in the area of plant systematics. The project focuses on the systematics and phylogeny of the genera Capsicum and Lycianthes in the Solanaceae. Capsicum is a New World genus of about 40 species that includes the bell, chili, and paprika peppers. Lycianthes is its sister genus, with ca. 200 species distributed in Asia and throughout the Neotropics. The project will examine the species level taxonomy of these genera and distribute monographic information on our Solanaceae Source webpage (solanaceaesource.org). We will also use next-generation sequencing techniques to generate phylogenies for the group and its component clades. This project will provide opportunities for field work, student mentoring, public outreach, and collaboration with our partner institution at the University of California-Davis.

Candidates should have a Ph.D. and experience in plant systematics; experience with Solanaceae is preferred but not required. Expertise in molecular phylogenetics and data analysis is also required and familiarity with next-gen methods is a plus. Funding is available for 2 years beginning in fall, 2015. The initial appointment is for one year, renewable for a second year upon mutual agreement.

Applicants should submit a statement of interest and description of past experience, a CV, and contact information of three references to Lynn Bohs (bohs@biology.utah.edu).

Information on the Biology Department at the University of Utah is available at www.biology.utah.edu The University of Utah is an Equal Opportunity Employer.

Lynn Bohs <bohs@biology.utah.edu>

UWisconsin Milwaukee PopulationGenomics

A postdoctoral position in population genomics is available in the laboratory of Emily Latch at the University of Wisconsin-Milwaukee. The primary aim of this position will be to investigate mechanisms of adaptive divergence and differentiation in a highly mobile species, mule deer. This includes 1) using next-generation sequence data to explore patterns of introgression across a complex mule deer x black-tailed deer hybrid zone, 2) relate spatial patterns of adaptive and neutral variation relative to selective pressures, and 3) integrate genetic and genomic data in an ecological context to assess broad-scale differentiation in deer.

A PhD in evolution, population genetics, genomics, bioinformatics or similar field is required. Applicants should have a strong publication record, demonstrable experience in analysis of genomic data, and solid skills in at least one major scripting language. Applicants with ArcGIS experience are preferred. Annual salary is $35,000 - $40,000/year plus benefits. Position is for one year initially, with the second year contingent upon satisfactory performance and availability of funds.

Informal inquiries about the project are encouraged. Applicants should submit a single pdf document that includes: 1) cover letter describing previous experience and fit to the position, 2) CV containing contact information for 3 references, and 3) relevant publications. For more information about the Latch lab see: http://-www.uwm.edu/~latch/ .UW-Milwaukee has an active group of researchers studying molecular ecology and behavior:

http://www.preferencefunctions.org/behavioral-molecular-ecology.html .UWM is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce. Applicants from groups traditionally underrepresented in science are especially encouraged to apply.

Applications and all queries should be sent to Emily Latch at latch@uwm.edu. Review of applications will begin July 20 and will continue until the position is filled. The position is negotiable, but available to start as early as Sept. 1.

Emily K. Latch Associate Professor Dept. of Biological Sciences University of Wisconsin - Milwaukee 3209 N. Maryland Ave. Milwaukee, WI 53211

Email: latch@uwm.edu Tel: 414-229-4245 Web: http://www.uwm.edu/ ~ latch Emily K Latch <latch@uwm.edu>

WorkshopsCourses

AveiroU AmphibianConservation Sep14-18

I am contacting asking for the divulgation of the Amphibian Husbandry and Conservation Course at the Biology Department of Aveiro University, Portugal. We invited, Amphibian Ark to give us the pleasure of their partnership.

The 1st Course on Amphibian Husbandry and Conservation (AHC) is an interesting and intensive course to researchers, technical staff working with amphibians or anyone looking for more complete basis on Amphibian Husbandry and Conservation. The course will be held from 14th to 18th September 2015.

Registrations for this edition already available

(http://ach2015.wix.com/ach2015).

The course explores the principles of amphibians' husbandry, nutrition and dietary needs, captive reproduction, population management, veterinary aspects (diseases, pathology, and necropsy), biosecurity and quarantine, conservation, threats and global action. Hands on demonstrations, practical and group exercises are also included (enclosure demonstrations: tank drilling, false bottoms and plumbing, filters).

Speakers:

* Luis Carrillo, University of Mexico City, AArk * Michael Bungard, Wjitley Wildlife Conservation Trust (Paignton Zoo) * Arturo Munoz Saraiva, Coordinator of the Bolivian amphibian initiative and PhD in Ghent University * Isabel Lopes, University of Aveiro, CESAM

Important note: the course will not start if a minimum of 10 participants will not be reached; similarly the maximum number of participants is 15.

Inscription fees include: attending at the course and the use of all the materials provided by University of Aveiro and the AArk.

Fees:

AHC Course Early registration (31st July)

General: 280 euros

Student: 180 eurosÂ

AHC Course

General: 350 euros

Student: 250 euros

Applications should be sent to: emanuele.fasola@ua.pt and sara_d_a_costa@hotmail.com till the 15ˆth of August 2015.

Instructions for payment will be notified to participants no later than 48h after. The payment proof must be sent to us for the registration to be valid.

Sara

Sara Costa <sara_d_a_costa@hotmail.com>

Barcelona HumanGenomicDataAnalysis Feb1-5

Dear Colleagues,

Registration is open for the course "Introduction to Genomic data analysis using HapMap and 1000 genomes projects" 5th edition"; February 1-5, 2016.

Instructors: Dr. Marc Via (University of Barcelona, Spain) and Dr. Robert Carreras-Torres (International Agency for Research on Cancer, France).

Site: Premises of Sabadell of the Institut Catalá de Paleontologia Miquel Crusafont (Bercelona, Spain).

In this course you will get familiar with the data arising from The HapMap and the 1000 Genomes Projects and learn how to use it alone or in combination with other datasets to answer genetic, demographic and evolutionary questions.

The course will alternate theory with practical computer exercises but it will focus on hands-on training. Although examples will be based on single-nucleotide polymorphism (SNP) data in human individuals, most topics covered in this course can be extended to other types of markers and organisms.

More information: http://-www.transmittingscience.org/courses/gen/hapmap/ This course will be held in the Sabadell facilities of the Institut Català de Paleontologia (Barcelona, Spain) and is co-organized by Transmitting Science and the Institut Catalá de Paleontologia M. Crusafont.

Please feel free to distribute this information between your colleagues if you consider it appropriate.

With best regards

Soledad De Esteban-Trivigno, PhD

soledad.esteban@transmittingscience.org

Barcelona PhylogeneticAnalysisR Jan25-29

Dear Colleague,

Registration is open for the course "AN INTRODUCTION TO PHYLOGENETICS ANALYSIS USING R - 3rd Edition".

INSTRUCTORS: Dr. Emmanuel Paradis (Institut de Recherche pour le DÂÂveloppement, France) and Dr. Klaus Schliep (University of Massachusetts, USA).

More information: http://-www.transmittingscience.org/courses/phylo/phylogeny-with-r/ or wrtiting to courses@transmittingscience.org .

This course is for biologists dealing with the analysis of multiple molecular sequences at several levels: Populations, species, clades, communities. These biologists address questions relative to the evolutionary relationships among these sequences, as well as the evolutionary forces structuring biodiversity at different scales. The objectives are: (i) to learn the theorical bases phylogenetic analysis, (ii) to know how to choose a strategy of molecular data analysis at the interÂ©\ or intraspecific levels, (iii) to be able to initiate a phylogenetic analysis starting from the files of molecular sequences until the interpretation of the results and the graphics.The software used for this course will be centered on the R language for statistics. This will include the use of specialized packages particularly ape, phangorn, and adegenet.

Prior knowledge of R is required for taking the course.

PLACE: Facilities of the Centre of RestauraciÂÂ i InterpretaciÂÂ Paleontologica, Els Hostalets de Pierola, Barcelona (Spain).

Organized by: Transmitting Science, the Institut CatalÂÂ de Paleontologia M. Crusafont and the Centre de RestauraciÂÂ i InterpretaciÂÂ Paleontologica de Els 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 soledad.esteban@transmittingscience.org Transmitting Science www.transmittingscience.org soledad.esteban@transmittingscience.org

FrenchAlps PopGen Sep7-11

Dear colleagues,

It is still possible to register to the summer school SSMPG 2015 (Software and Statistical Methods for Population Genetics). The summer school will take place in Aussois (Savoie, France) from September 7 to September 11, 2015.

The aim of the summer school is to provide a comprehensive overview on software and statistical methods for detecting genes involved in local adaptation. Lecture notes and software demos will be given during the summer school. In addition to software demos, we plan to set up a contest to promote learning. Participants will work in groups and will be asked to analyze simulated datasets.

More details about the summer school including the preliminary program can be found online: http://-ssmpg2015.imag.fr/ If you are interested in the summer school, please send an email to Michael.blum@imag.fr before July 29, 2015.

Michael Blum

mblum <michael.blum@imag.fr>

Glasgow AppliedBayesianModelling Oct26-31

Statistics course - Applied Bayesian modelling for ecologists and epidemiologists

This course is being delivered by Dr. Matt Derwood and Prof. Jason Matthiopouus.

This extensive 6 day course will be held at SCENE (Scottish Centre for Ecology and the Natural Environment), Glasgow, United Kingdom from 26th - 31dt October 2015.

Course Aims: This application-driven course will provide a founding in the basic theory and practice of Bayesian statistics, with a focus on MCMC modeling for ecological and epidemiological problems. Starting from a refresher on probability and likelihood, the course will take students all the way to cutting-edge applications such as state-space population modeling and spatial point-process modeling. Most importantly you should have a keen interest in ecology or epidemiology (or both) and come prepared to discuss your own research problems with the instructors.

Overview This course provides a general introduction to Bayesian statistics, including theory and practical implementation of MCMC methods. By the end of the week, you should be able to understand the key practical and philosophical differences between Bayesian and Frequentist statistics, have a basic understanding of how common MCMC samplers work and how to program them, and have practical experience with the BUGS language for common ecological and epidemiological models. The experience gained will be a sufficient foundation enabling you to understand current papers using Bayesian methods, carry out simple Bayesian analyses on your own data and springboard into more elaborate applications such as dynamical, spatial and hierarchical modeling. The main focus of the week is on practical application of these methods, so a large proportion of the time will be spent doing exercises in R. The underlying statistical theory and an overview of more advanced concepts will be discussed where appropriate.

Intended Learning Outcomes By the end of this course you will be able to: 1. Do calculations with conditional, joint and total probability. 2. Understand the key philosophical differences between Bayesian and Frequentist statistics and be in a position to decide which approach is likely to be most useful for particular research questions. 3. Use prior information along with likelihood information to form a Bayesian posterior in simple examples 4. The concept of Markov chain Monte Carlo (MCMC) and how this is used in practice 5. Critically discuss the role of autocorrelation and cross- correlation in model identifiability and Monte Carlo error 6. Write regression models (GLMs, GLMMs) in WinBUGS / JAGS and fit these to data 7. Use biological first principle or independent information to choose and implement both informative and minimally informative priors 8. Identify when a model has converged and when sufficient Monte Carlo samples have been obtained 9. Conduct model selection and comparisons using DIC. Understand the motivation and advantages of alternative model selection methods. 10. Understand and customize more complex models for ecological populations in space and time Outline

Each day will consist of both taught material with discussion, and guided computer practical sessions with assistance on hand. These will be interspersed evenly to ensure that all of the concepts discussed are reinforced with practical exercises. The planned content for each

day is as follows:

Day 1 Revision of likelihoods, using full likelihood profiles, and introduction to the theory of Bayesian statistics.

Probability and likelihood Introduction to Bayesian statistics

Day 2 An introduction to the workings of MCMC, and the potential dangers of MCMC inference. Participants will program their own (basic) MCMC sampler to illustrate the concepts and fully understand the strengths and weaknesses of the general approach. The day will end with an introduction to the BUGS language.

Introduction to MCMC Markov chains, autocorrelation and convergence Introduction to BUGS and running simple models in JAGS

Day 3 This day will focus on the common models for which JAGS/BUGS would be used in practice, with examples given for different types of model code. All aspects of writing, running, assessing and interpreting these models will be extensively discussed so that participants are able and confident to run similar models on their own. There will be a particularly heavy focus on practical sessions during this day. The day will finish with a discussion of how to assess the fit of MCMC models using the Deviance Information Criterion (DIC) and other methods.

Using JAGS for common problems in biology Essential fitting tips and model selection

Day 4 The fourth day will focus on the flexibility of MCMC, and precautions required for using MCMC to model commonly encountered datasets.

— / —

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

Greifswald Germany PhenotypicPlasticity Sep14-18

On behalf of our research training group GRK 2010 RESPONSE - Biological Responses to Novel and Changing Environments (www.uni-greifswald.de/response/) I would like to anounce that we will organise a Summer School on Phenotypic Plasticity from 14th to 18th September, 2015 at the Ernst-Moritz-Arndt University of Greifswald, Germany.

The summer school is open to a limited number of external graduate / PhD students.

Michael G. Schöner M.A. Coordinator GRK 2010 RESPONSE Zoological Institute and Museum Johann-Sebastian-Bach-Str. 11/12 D - 17489 Greifswald

Tel.: +49 (0)3834 86-4273 Fax.: +49 (0)3834 86-4252

schoenerm@uni-greifswald.de

Safe trees - think twice before printing

Michael Schöner <schoenerm@uni-greifswald.de>

LeidenUniv SintEustatius TropicalFieldCourse Sep21-Oct18

LeidenUniv_SintEustatius.TropicalFieldCourse.Sept21-Oct18

MSc Course Tropical Biodiversity and Field Methods St. Eustatius, Dutch Caribbean (6ECTS) 21 September-18 October

Activities:

Inventory and analyze 12 different vegetation plots and collect data on birds, spiders, butterflies & other insects, vascular plants, mosses, local uses.

Data collection methods: variety of trapping techniques, night collection, bryophyte survey, botanical vouchers, local uses of plants, bird watching.

Practice all field and data analysis methods, possibility to focus on your favorite group. Possibilities to extend with internship projects.

Why? Experience tropical ecosystems on a beautiful Caribbean island and contribute to fundamental and applied biodiversity research and nature conservation.

When? Starting date Monday 21 September 2015 ??? week 39???40: lectures, self-study and exam, Leiden, Netherlands ??? week 41???42: fieldwork on St. Eustatius

How to apply? Send motivation letter and CV to hanneke.dewolf@naturalis.nl

Participants must be collaborative, dedicated, and willing to do tough fieldwork! Maximum of 16 students.

Costs: Course fee of ??? 1050, plus air travel. Funding

opportunities available.

Talk to your advisers about how to apply credits from Leiden University to your program.

More information: E-studyguide, Leiden University

https://studiegids.leidenuniv.nl/courses/show/-47241 http://www.naturalis.nl/nl/over-ons/nieuws/-Sint_Eustatius_field_course_ 2015/cursus-tropical-biodiversity-op-statia/

Thank you, Jeremy Miller

T 071-5687652, M Darwinweg 2 - 2333 CR Leiden E Jeremy.Miller@naturalis.nl I , www.naturalis.nl Jeremy Miller <jeremy.miller@naturalis.nl>

LundU RADSeqAnalyses Oct5-9

Dear All,

We are happy to announce an "Advanced course in RADSeq analyses and data interpretation±, 5-9 October 2015, Lund University (Sweden).

Course leaders: Julian Catchen (University of Illinois) William Cresko (University of Oregon) Dag Ahrn (Lund University)

More info and application form: http://www.geneco.se/-Courses/Autumn-2015/RAD-tag-sequencing Please spread among colleagues and PhDs!

Best regards,

GENECO Research School http://www.geneco.se/ Bengt Hansson (PhD, Associate Professor)

Department of Biology, Lund University

Ecology Building, SE-22362 Lund, Sweden

Bengt Hansson <bengt.hansson@biol.lu.se>

LundU Sweden AnimalMigration Nov2-13

This November we hold our biannual PhD course on the Ecology of Animal Migration. PhD students working on animal migration and related animal movement topics are encouraged to apply.

Ecology of Animal Migration

International PhD Course, November 2nd - 13th, 2015

Lund University, Sweden.

Animals move across different spatial and temporal scales either as part of their daily life or as part of seasonal migrations to exploit resources in the environment. Well known examples are the global scale seasonal migrations in birds, sea turtles, fish and mammals, such as whales and wildebeests. Also movements at smaller scales occur, such as the vertical movements in plankton, the dispersal in soil collembolans and movements of pollinating insects. But what are the ecological causes and evolutionary consequences of animal movements?

During this two-week course you will get insight in a number of different methods and approaches to study the migration of birds, insects, fish, amphibians and mammals, ranging from experimental studies in the laboratory to tracking long-distance migration in wild animals. Lectures will be given by international authorities in the field as well as by researchers in the CAnMove Group at Lund University.

For further details and to apply for the course visit: http://canmove.lu.se/courses-workshops/courses/-ecology-of-animal-migration-2015 /Tom Evans - tom.evans@biol.lu.se - Student coordinator

Tom Evans <thomas.jude.evans@gmail.com>

Manchester Morphometrics Nov2-Dec11

Dear colleagues

I am pleased to announce this year's morphometrics course from the University of Manchester. This year's course will run in the six weeks from 2 November to 11 December 2015.

The course information can be found on the following we site: http://www.flywings.org.uk/MorphoCourse Course content: * Data acquisition: the kinds of data and the equipment used to collect them. * Definitions of size and shape * Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) * Statistics of variation, scatter plots, basic multivariate statistics * Principal component analysis * Measurement error and outliers * Shape transformations and 'warping' – the thin plate spline * Analysis of outline shapes * Distinguishing between groups

(taxonomy, clinical diagnosis, etc.) * Allometry and size correction * Influence of external factors on shape (ecomorphology, dose-response studies) * Symmetric forms and measurement of asymmetry. * Morphometric inferences on developmental processes * Morphological integration and modularity * Genetics of shape: analyses of resemblance between relatives, QTL analyses. * Phylogeny: reconstructing the evolution of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software (http://www.flywings.org.uk/-MorphoJ_page.htm). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

The fee for the course is GBP 330.00.

All prospective participants need to pre-register for the course. The deadline for this is the *30 September 2015*.

For further details and the pre-registration form, see the course web page: http://www.flywings.org.uk/-MorphoCourse Best wishes, Chris

Christian Peter Klingenberg Faculty of Life Sciences The University of Manchester Michael Smith Building Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275 5082 E-mail: cpk@manchester.ac.uk Web: http://-www.flywings.org.uk Skype: chris_klingenberg

"cpk@manchester.ac.uk" <cpk@manchester.ac.uk>

Manchester Morphometrics Nov2-Dec11 Changes

Dear colleagues

After some discussion with our administrators, we decided to change the registration procedure for this year's online course on morphometrics. The new procedure is simpler, because there is only a single step for registration and payment. This also enables us to have a deadline that is quite a bit later than it was under the old procedure.

The new registration procedure uses the university's e-store, which can process automatic *payments by credit card or debit card*. The deadline for registration via this site is the *23 October 2015*.

If you cannot pay by credit or debit card, or *if you require a formal invoice* (e.g. for reimbursement by your institution), you need to contact the Short Course Office in our faculty via this E-mail: FLS-shortcourses@manchester.ac.uk If you need to use this option, please do so as soon as possible, but definitely *well before October*.

Further information on the course and a link to the registration page can be found on the following we site: http://www.flywings.org.uk/MorphoCourse This year's course will run in the six weeks from 2 November to 11 December 2015.

Course content: * Data acquisition: the kinds of data and the equipment used to collect them. * Definitions of size and shape * Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) * Statistics of variation, scatter plots, basic multivariate statistics * Principal component analysis * Measurement error and outliers * Shape transformations and 'warping' – the thin plate spline * Analysis of outline shapes * Distinguishing between groups (taxonomy, clinical diagnosis, etc.) * Allometry and size correction * Influence of external factors on shape (ecomorphology, dose- response studies) * Symmetric forms and measurement of asymmetry. * Morphometric inferences on developmental processes * Morphological integration and modularity * Genetics of shape: analyses of resemblance between relatives, QTL analyses. * Phylogeny: reconstructing the evolution of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software (http://www.flywings.org.uk/-MorphoJ_page.htm). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with

morphometric methods.

The fee for the course is GBP 330.00.

For further details and a link to the registration page, see the course web page: http://www.flywings.org.uk/-MorphoCourse Best wishes, Chris

Christian Peter Klingenberg Faculty of Life Sciences The University of Manchester Michael Smith Building Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275 5082 E-mail: cpk@manchester.ac.uk Web: http://-www.flywings.org.uk Skype: chris_klingenberg

Chris Klingenberg <cpk@manchester.ac.uk>

Paris ExperimentalEvolution Nov9-13

First announcement

The International Graduate Program in Life Sciences and the Interdisciplinary Master in Life Sciences (IMaLis) are now accepting applications for the course "Experimental evolution: theory and current practices", to be held at the Institute of Biology of the Ãcole Normale Supérieure (IBENS), in Paris, November 9-13, 2015.

The course will introduce Master and PhD students in Evolutionary Biology to the experimental approaches employed to test theory. It will bring together world-renowned researchers to lecture on topics including the historical development of experimental evolution, experimental design, the evolution of sexuality, origin of multicellularity and sociality, the genetic basis of adaptation to novel environments, etc. Lectures will be complemented with computer projects on the analysis of population genomics data.

The course will be restricted to a maximum of 10 students. Meal and accommodation costs will be covered and there is no registration fee. Upon successful completion of the course, European students will be awarded 6 ECTS.

Faculty: Charlie Baer (University of Florida U.S.A.); Ivo Chelo (Instituto Gulbenkian de Ciência Portugal) ; Antony Dean (University of Minnesota U.S.A.); Marie-Anne Félix (IBENS) ; Regis Ferrière (IBENS); Duncan Greig (Max Planck Institute for Evolutionary Biology Germany), Thiago Guzella (IBENS); Philippe Nghe (ESPCI France); Paul Rainey (Institute for Advanced Study New Zealand); Christian Schlötterer (Institut für Populationsgenetik Austria); Olivier Tenaillon (Université Paris 7 France); Henrique Teotónio (IBENS); Arjan de Visser (Wageningen UR The Netherlands).

Sponsoring and partner graduate programs: Centre National de la Recherche Scientifique, ENS, Paris Sciences et Lettres, Partner University Fund - French American Cultural Exchange, Vienna Graduate School of Population Genetics.

We will receive applications until October 5, 2015. Applicants should send a letter of motivation and CV as a PDF file to: teotonio@biologie.ens.fr.

We also welcome participants at any stage of their careers to attend the lectures. Meals and accommodation costs will not be covered in this case. Registration is required by sending an email to: teotonio@biologie.fr. We will accept applications on a first come first serve basis, to a maximum of 35.

Further information and updates can be found at http://www.gradprog.biologie.ens.fr/ . teotonio@biologie.ens.fr

Rovereto Italy InsectBehaviour

"Workshop: Rovereto(Italy). Insect models of Behaviour. Sep4"

First announcement: We are happy to announce the programme of the Workshop "Insect models of Behaviour: ecology, genetics, evolution, pest management" that will take place in Rovereto (Italy) on 4th September. Beside talks of the invited speakers we will host a poster session with a prize for the best poster presented by a young investigator (up to postdoc level). The meeting is free to attend but a registration is required. We will communicate soon the details of the website for the registration, in the meantime enjoy the programme and for further questions please write to elisabetta.versace@unitn.it :

When: 4th September 2015 Where: Fondazione Museo Civico, Borgo Santa Caterina 41, Rovereto (Trento), Italy. Organizing committee: Elisabetta Versace, Anna Eriksson (University of Trento); Gianfranco Anfora (Fondazione Edmund Mach, San Michele all'Adige); Gionata Stancher (Fondazione Museo Civico Rovereto) Programme Workshop "Insect Models of Behaviour: Ecology, genetics, evolution, pest management"

9:00-9:15 Opening 9:15-10:15 Benjamin Prud'homme (Centre national de la recherche scientifique, Marseille, France) The evolution of egg laying behavior in Drosophila suzukii. 10:15-11:00 Paul Becher (Swedish University of Agricultural sciences, Alnarp, Sweden) Chemical stimuli, basic drives and behavioural responses: understanding some aspects of Drosophila chemical ecology

11:00-11:20 Coffee break

11:20-12:00 Donato Grasso (University of Parma, Italy) Ants as mutualists: from basic to applied science 12:00-12:40 Anna Eriksson, Elisabetta Versace (University of Trento, Italy): Olfactory responses in Drosophila melanogaster and Drosophila suzukii: studies on ecological specialization

12:45 Final remarks on the morning session

12:45-2:30 Lunch break

2:30-4:30 Poster session. The best poster presented by a young investigator (up to postdoc level), as judged by the Organizing committee and Invited speakers, will be announced at 4 pm.

We look forward seeing you in Rovereto.

Elisabetta Versace, PhD

Center for Mind/Brain Sciences University of Trento ACN lab - Animal Cognition and Neuroscience Laboratory Piazza della Manifattura 1, 38068 Rovereto (TN), Italy Phone: +39 0464 808658 Mobile: +39 349 8744279

@so_evolutionary

"Elisabetta.Versace@unitn.it" <Elisabetta.Versace@unitn.it>

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.