E v o l D i r

January 1, 2013

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

Foreword

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

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

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

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Conferences

Galveston Texas QuantGeneticsGenomics Feb16-22

Gordon Research Conference in Quantitative Genetics and Genomics, Hotel Galvez, Galveston, TX February 17-22, 2013

Many diseases that affect humans, animals, and plants are so-called complex traits, in that variation in susceptibility between individuals is affected by multiple genetic and environmental factors. Thus, strategies to understand and utilize the genetic basis and genetic architecture of these traits rely on the application of quantitative genetics. Traditionally built upon statistical abstractions of genetic effects, the field of quantitative genetics is now rapidly advancing by making use of the extensive and rapid developments in genetic and genomic technologies to reveal explicit links between genes and complex phenotypes. The field of quantitative genetics, therefore, serves as a focal point for bringing together many existing and emerging areas of genetics, genomics, physiology, epidemiology, statistics, and computational biology. The strength and aim of the Gordon Research Conference on "Quantitative Genetics & Genomics" is that it brings leaders in the fields of human genetics, plant and animal breeding and genetics, and evolutionary genetics together in a unique format that promotes an open exchange of ideas and presentation of unpublished results on cutting edge developments in the field. In 2013, the Gordon Research CONFERENCE will be preceded by a Gordon Research SEMINAR, which will allow an unparalleled opportunity for up and coming students and postdoctoral researchers to exchange ideas on the most cutting edge science, gain experience presenting their work in a high-profile setting, and interact with leaders in their field. The 2013 Conference and Seminar will focus on many cutting-edge developments in the field of quantitative genetics but with specific emphasis on the genetics of complex disease, including whole genome and next generation sequencing approaches to understanding and exploiting genetic variation, to identify causal genes and pathways, genome architecture and regulation, systems genetics, host-pathogen interaction and co-evolution, non-traditional forms of inheritance, and

statistical genetics and genomics.

Applications for the Gordon Research Conference must be submitted by January 20, 2013.

********Gordon Research Seminar will be held February 16-17, 2013********

The Gordon Research Seminar is designed to provide a stimulating venue for students and post-docs to discuss cutting-edge science and critical background information in the area of quantitative genetics and genomics. It is an ideal venue for presenting your work and interacting with peers and leaders in the field. At the Gordon Research Seminar, we have space for 10 speakers and a total of 50 participants who will present posters. Speakers will be chosen from submitted abstracts. We are encouraging individuals interested in speaking at the GRS to submit their abstracts by December 8. The formal deadline to submit an application to the conference is January 19, 2013.

We have some funds to cover registration and travel expenses. Please apply early to eligible for these funds.

Check: http://www.grc.org/programs.aspx?year=-2013&program=quantgen for updates and upcoming program details on the Gordon Research Conference and http://www.grc.org/programs.aspx?year=-2013&program=grs_quant for details on the Gordon Research Seminar for graduate students and post-doctoral fellows.

Jack Dekkers, Conference Chair Michel Georges, Conference Vice Chair Suzanne McGaugh, Seminar Chair James Koltes, Seminar Associate Chair

Suzanne McGaugh <suzanne.mcgaugh@duke.edu>

Glasgow PopGroup46 Dec18-21

Reminder: Final registration for the Population Genetics Group meeting to be held in Glasgow Dec. 18-21 is due on Dec. 6. Please also submit abstracts for posters by this time; the talk schedule is nearly full but there is still plenty of room for posters. A draft programme and logistical details about the conference can be found on the conference website: http://www.populationgeneticsgroup.org/. The programme and book of abstracts can be found on the Programme page.

The conference ends at noon on December 21st and we are investigating whether there is interest in a post-conference excursion that afternoon. The University has a field station situated on stunning Loch Lomond, combining freshwater and terrestrial, lowland and upland, and agricultural and natural habitats in close proximity. The research facilities were renovated in 2006 and the teaching facilities are currently under renovation. The research facilities include flume tanks, controlled environment rooms and facilities for keeping fish, amphibians and birds, as well as nest boxes situated in several woodland areas. This is an ideal centre for research and we welcome collaborative projects from outside users. We will also welcome field courses, after completion of the new phase in 2014.

http://www.gla.ac.uk/researchinstitutes/bahcm/-researchfacilitiesgroups/scene/ If you are interested in a field trip to Loch Lomond, please fill out the form that you can find at the bottom of the Social Events page on the website.

For arrival information, please check the transportation information, which you can find under Travel, including a link to a campus map. On December 18, the opening reception (18:00-23:00) will be held at the Jurys Inn in Central Glasgow (http://-glasgowhotels.jurysinns.com/), with a finger food buffet available between 19:00-21:00. This will be preceded by an information session by the NERC Biomolecular Analysis Facility (NBAF), which all are welcome to attend (17:00). Registration will be available from 16:00-23:00 at the Jurys Inn. The conference will be held at the University of Glasgow, Gilmore hill campus (i.e. the main campus in the west end). Registration will be open from 8:30 am in the Wolfson Medical School building and the plenary lectures will start at 9:00 am, in the Boyd Orr Building, Lecture theatre 2. Contributed sessions will start at 10:30 am each day (following a coffee break), in the Wolfson Medical School Building. The conference will end at 1 2:00 on December 21st, with a buffet lunch available until 13:30.

The conference dinner will have a set menu (please see the Social Events page to see the full menu); one for those who indicated vegetarian or no fish on the registration page and one for those who didn't indicate restrictions. Special menus will be available for those who indicated food allergies. The non vegetarian option will be cullen skink (smoked haddock chowder–a Scottish classic), followed by duck; if you would prefer the vegetarian meal instead, please email pgg@populationgeneticsgroup.org by Dec. 6.

Details about posters and oral presentations can be found on the Talks and Posters page.

We have arranged for wireless to be included with your room if staying at the Jurys Inn; please ask at the desk

for a password (make sure to tell them you are part of the conference). Although we will be setting up a Glasgow guest access password for wireless access for the conference at the University, we would recommend that you use EduRoam, if possible. It is less restrictive than the Glasgow University system, which uses a proxy that can cause difficulties. You should be able to obtain a username and password from your home institution, before attempting to access wireless at Glasgow.

If you are sharing accommodation at the Jurys Inn (see the Accommodation page), the first person to arrive should have a credit card available to swipe but you can pay separately on check-out so that each person can receive their own receipt.

We hope to see you soon in Glasgow!!

Barbara Mable Anna Muir Jame Buckley

barbara.mable@glasgow.ac.uk

Innsbruck Austria AntEvolution Sep5-8

Dear evoldir member,

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

The most important CEWM facts in a nutshell:

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

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

- Timeline: 5-8 September 2013.

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

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

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

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

Looking forward to seeing you in Innsbruck,

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

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

5th CEWM - Central European Workshop of Myrmecology

Organising Committee

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

Irvine California BrainEvolution Jan11-12

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

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

http://www.nasonline.org/programs/-sackler-colloquia/upcoming-colloquia/ILE-Human_Mental_Machinery.html Registration Fee:

$150.00

Reduced Registration Fee for Graduate Students and Postdocs: $100.00

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

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

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

Lodging and Transportation

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

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

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

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

Lisbon ESEB2013 Aug19-24 Coevolution

Dear Colleagues,

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

We are happy to announce the symposium:

Genetics and genomics of host-'parasite coevolution

Invited speaker: Francis Jiggins (http://-www.gen.cam.ac.uk/research/Jiggins/)

Description: Host'-parasite coevolution often leads to fast evolutionary changes. It thus represents an ideal model for studying processes of rapid adaptation. Key to these studies is an understanding of the underlying genetics and genomics, because they help us identify the specific traits under selection and also the type of selective processes involved. Our symposium focuses on current advances in this field, taking advantage of recent innovations in high throughput sequencing technology.

Organisers: Joachim Kurtz (http://ieb.uni-muenster.de/animalevolecol) Hinrich Schulenburg (http://www.uni-kiel.de/zoologie/evoecogen/)

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

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

Joachim Kurtz and Hinrich Schulenburg

Prof. Dr. Joachim Kurtz

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Lisbon ESEB2013 Aug19-24 ColourPolymorphisms

Dear Colleagues,

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

The evolution and maintenance of heritable colour polymorphisms: from ecology to genomes

Invited speakers:

Rosemary G. Gillespie < http://nature.berkeley.edu/-%7Egillespie/Home.html >

Jon Slate < http://www.jon-slate.staff.shef.ac.uk/ >

Details of the symposium are below, and we will be accepting abstract submissions until the 28th February 2013.

Description:

Polymorphisms are found in a wide range of taxa but the why and how genetic polymorphisms persist over time remains a classic problem in biology. In humans for example, 5-15% of the examined genes are polymorphic, and in many cases alternative alleles can profoundly alter fitness. The relatively simple genetic basis of many colour polymorphisms (one or a few loci) makes them well-suited to study evolutionary processes, even in non-model organisms. This is part of the reason why colour polymorphic systems have become popular when studying the early stages of speciation and mechanisms facilitating or constraining reproductive isolation. <#_ENREF_2>

In the past, work on heritable colour polymorphisms has concentrated on the ecology and morph-frequency differences between populations and generations using the framework of classical population genetics. In this sense, studies of heritable colour polymorphisms were used as counterparts to classical *Drosophila* studies, in which marker phenotypes have been used to study genetic dynamics in laboratory evolution assays. Temporal and spatial differences in morph frequencies were then attributed to the action of well-recognized evolutionary forces such as genetic drift, natural selection and sexual selection.

The field on polymorphism research is currently progressing rapidly because of advances in genomic technologies, especially high-throughput DNA sequencing. We have now become capable of scanning large parts of the genome at a cost that evolutionary biologists working on wild populations can afford. The application of these genomic tools to ecological model species means that we can start addressing some of the questions that have puzzled ecological geneticists for decades such as: How many genes are involved in adaptation? What types of genetic variation are responsible for adaptation? Does adaptation utilize standing genetic variation or does it require new mutations to arise following an environmental change?

This symposium seeks to provide a platform for scientists that are working towards the integration of ecology and genomics in the study of colour polymorphic systems.

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

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

Organizers: Maren Wellenreuther < http://www4.lu.se/meel/people/postdocs/maren-wellenreuther > and Bengt Hansson < http://www.zoo.ekol.lu.se/molekol/medarbetare/bengt.html >, Lund University, Sweden

Maren.wellenreuther@biol.lu.se

Maren Wellenreuther

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*http://marenwellenreuther.com/index.html http://www.lu.se/meel/people/postdocs/maren-wellenreuther < http://www.lu.se/o.o.i.s/26164 >

maren.wellenreuther@gmail.com

Lisbon ESEB2013 Aug19-24 Epigenetics

Dear Colleagues,

As a part of the XIV Congress of the European Society for Evolutionary Biology (Lisbon, 19-24 August 2013) we are pleased to announce the symposium "EVOLUTIONARY SIGNIFICANCE OF EPIGENETIC VARIATION". To register and submit your abstract for this symposium, please follow the instructions on the congress website (https://eseb2013.com/). Deadline for abstract submission is 28 February 2013.

Invited speakers: - Frank Johannes (University of Groningen, Netherlands) http://www.johanneslab.org - Carlos Herrera (Estación Biológica de Doñana, Sevilla, Spain) http://ebd06.ebd.csic.es/ Organizers: - Oliver Bossdorf (University of Bern, Switzerland) - Koen Verhoeven (Netherlands Institute of Ecology, Wageningen, Netherlands)

Description: Epigenetic mechanisms can have long-lasting effects on phenotypes, but what role do they play in evolution? Recent research provides evidence that epigenetic mechanisms can create heritable trait variation, and that epigenetic variation can be heritably altered by the environment. Moreover, studies in natural populations suggest an epigenetic role in adaptation. This symposium presents the current status of the growing research field of ecological and evolutionary epigenetics.

We hope to see you in Lisbon!

Oliver Bossdorf (bossdorf@ips.unibe.ch) & Koen Ver-

hoeven (k.verhoeven@nioo.knaw.nl)

Dr. Koen Verhoeven Netherlands Institute of Ecology (NIOO-KNAW) Dept. Terrestrial Ecology tel: +31 (0)317 473624 email: k.verhoeven@nioo.knaw.nl web: www.nioo.knaw.nl/users/kverhoeven "Verhoeven, Koen" <K.Verhoeven@nioo.knaw.nl>

Lisbon ESEB2013 Aug19-24 ExperimentalEvolGenomics

Dear Colleagues

Registration for the ESEB Congress in Lisbon (19-24 August 2013) is now open, and we are inviting submissions of contributed talks and posters to two symposia addressing the genomic basis of experimental evolution. The first emphasizes detecting candidate genes and molecular mechanisms of experimental evolutionary changes, the second studying interactions between these genes to uncover the shape of fitness landscapes. Register and submit your abstracts through the congress website: https://www.eseb2013.com/ GENOMICS AND EXPERIMENTAL EVOLUTION Invited speakers: Rees Kassen and Thomas Flatt Organisers: Tadeusz J. Kawecki and Michael G.Ritchie This symposium will focus on the application of whole genome resequencing and other high-throughput omics techniques (RNAseq, metabolomics) to experimental evolution, in a broad range of experimental systems. It will facilitate the exchange of information about the questions addressed, techniques adopted and result obtained by different research groups, but also encourage the spread of best practice concerning design and statistical approaches, which are being actively developed in this emerging field.

EXPERIMENTAL EVOLUTION ON EMPIRICAL FITNESS LANDSCAPES Invited speakers: Tim Cooper and Joachim Krug Organisers: J. Arjan G.M. de Visser and Santiago F. Elena To arrive at a quantitative understanding of adaptation, we need to identify the factors that determine its dynamics and understand how they do so quantitatively. A prominent recent development is to consider the structure of the fitness landscape and how this determines the outcome of adaptation. Microbial experimental evolution contributes to this development by exploring the structure of real fitness landscapes, either by constructing mutants carrying combinations of observed beneficial mutations, or by studying the contingency of evolution on particular genotypes and conditions. The aim of this symposium is to highlight diverse examples of the empirical study of fitness landscapes using microbial experimental evolution and their contribution to quantitative models of adaptation.

We are looking forward to see you in Lisbon.

Arjan de Visser, Mike Richie, Santiago Elena & Tadeusz Kawecki

Tadeusz Kawecki <tadeusz.kawecki@unil.ch>

Lisbon ESEB2013 Aug19-24 GenomicIslands

Dear Colleagues,

As a part of the XIV Congress of the European Society for Evolutionary Biology, which will be held in Lisbon from the 19th to 24th August 2013, we are pleased to announce a symposium on "Genomic Islands: their role in adaptation and speciation". Details of the symposium are below, and we will be accepting abstract submissions until the 28th February 2013.

Genomic Islands: their role in adaptation and speciation

Keynote Speakers: Jeffery Feder (http://-federlab.nd.edu/) Mark Kirkpatrick (http://-www.sbs.utexas.edu/kirkpatrick_lab/K/home.html) Patrik Nosil (http://nosil-lab.group.shef.ac.uk/)

Summary: Genome-wide data offers a unique opportunity to gain an insight into the genomic architecture involved in the adaptive divergence found in heterogeneous environments which can lead to local adaptation, reproductive isolation and ultimately speciation. By considering a range of species and approaches, this symposium will explore the interactions of diversifying selection and homogenizing gene flow to identify trends in genomic evolution which accompany adaptation and ecological speciation. The symposium will focus on both theory and empirical data to assess the importance (or otherwise) of genomic islands of divergence.

We are particularly keen to cover the whole of this process within the symposium, and so want to highlight that the symposium doesn't just focus on speciation, but also the genomic architecture of local adaptation.

To register and submit your abstract for this symposium, please follow the instructions on the congress

website (https://eseb2013.com/).

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

Organising committee: Rui Faria, Sarah Helyar, Chris Jiggins, Gary Carvalho, Arcadi Navarro, Carole Smadja

Kær kveja / Best regards

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Lisbon ESEB2013 Aug19-24 HostParasite

Dear Colleagues,

Registration is now open for XIV Congress of the European Society for Evolutionary Biology, to be held in Lisbon from the 19th to 24th August 2013. We are happy to announce we will be accepting abstract submissions until the 28 of February 2013, for the symposium:

ATTACK AND DEFENSE: EVOLUTIONARY AND ECOLOGICAL CONSEQUENCES OF INDIVIDUAL VARIATION

Invited speakers: Meghan Duffy, Michigan State (http://www.lsa.umich.edu/eeb/directory/faculty/-duffymeg/default.asp) Marcel Salathé, CIDD, Penn State (http://www.salathegroup.com/)

Description: Antagonistic interactions are widespread in nature, most notably in the context of infectious disease, where hosts and pathogens play out an ongoing and ever-escalating battle for survival. Understanding how genetic and environmental factors influence the spread of disease and the evolution of host and pathogen traits is a topic that unifies ecologists, evolutionary biologists, and epidemiologists. Accurate predictions about both the ecology and evolution of infection are notoriously difficult, and an important contributing factor is that individuals vary, often substantially, in their responses to infection: genetic variation for infection success and within host resistance and tolerance are well described; environmental conditions often interact with genetics to produce variable, and unpredictable, infection outcomes; males and females frequently show distinct responses to infection, with implications for both the spread and evolution of disease; individual variation in host behaviour and contact networks repeatedly result in disease outbreaks that would not be predicted from the average behaviour of the population. The current challenge lies in incorporating empirically observed variation into theoretical models dealing with the ecology and evolution of disease, and to go further, and link these predictions to disease spread and evolution in the wild. With this synthesis in mind, this symposium will bring together theoretical and empirical approaches across a broad range of biological systems, to embrace individual level variation in host-pathogen interactions, and its population-level consequences. We are especially excited about work linking both theoretical and experimental approaches in disease evolution, and those that extend laboratory studies of infection to disease spread and evolution in natural populations.

To register and submit your abstract for this symposium, please follow the instructions on the congress website (https://eseb2013.com/). We hope to see you there!

Organizers: Anna-Liisa Laine, University of Helsinki Pedro Vale, Centre for Immunity, Infection and Evolution, University of Edinburgh.

Anna-Liisa Laine <anna-liisa.laine@helsinki.fi>

Lisbon ESEB2013 Aug19-24 LearningEvolution

Dear Colleagues,

Registration is now open for XIV Congress of the European Society for Evolutionary Biology, to be held in Lisbon from the 19th to 24th August 2013. We are happy to announce we will be accepting abstract submissions until the 28 of February 2013, for the symposium *Actively learning evolution: methods and resources.*

* *

Invited speaker:

*Tom Meagher, *University of St Andrews, UK, and Chair SSE Education & Outreach Committee.

http://www.st-andrews.ac.uk/profile/trm3 Sympo-

sium description:

It has been shown that the best way of learning science is doing science.The symposium "*Actively learning evolution: methods and resources", *integrated in the XIV Congress of the European Society for Evolutionary Biology,aims to explore and discuss methods and resources available to promote a more effective learning of evolution that engage students through enquiry and realistic scientific investigations. If you have been working on/with such methods we invite you to submit an abstract for a discussion round in the format of hands-on activities that allows participants to explore the presented resources. Priority will be given to those resources that can be explored at different depths and used to teach evolution in both high schools and university grades. To register and submit your abstract for this symposium, please follow the instructions on the congress website (https://eseb2013.com/). We hope to see you there!

Organizers: Alexandra Isabel Sá Pinto, Centro de Investigação em Biodiversidade e Recursos Genéticos, University of Porto (CIBIO.UP).

Rita Campos, CIBIO.UP

Kristin Jenkins, Education and Outreach Program, National Evolutionary Synthesis Center

xanasapinto@gmail.com

Lisbon ESEB2013 Aug19-24 MolEvolInnovations

We are pleased to invite you to the symposium "*MOLECULAR EVOLUTIONARY INNOVATIONS*" that will be held at the XIV congress of the European Society of Evolutionary Biology 2013 from 19 to 24 August in Lisbon, Portugal, and would be honored to receive your abstract submission.

* * *Symposium summary:*

Evolutionary innovations, including evolution of new functions, bear the hallmarks of genome plasticity. The comparison of ever-increasing number of sequenced genomes in different species has expanded our ability to discover molecular evolutionary novelties, to study their origin, their dynamics and long-term fates in genomes. In this symposium we will address the evolution of these events, focusing in particular in studies that discovered and traced them down (from whole genome duplications to single gene duplications), mechanisms involved in their advent (exon shuffling, gene fusion, or fission, domestication of transposable elements, exaption of coding or noncoding sequences and lateral gene transfer...), the dynamics and fate of novelties (contribution to the neofunctionalization or subfunctionalization events, gene repertoires preferentially retained, patterns of gene family expansion, mode of evolution they followed for their maintenance), as well as the tools allowing their retrieval and/or the comparison of such genes at the genomic level. We will also put emphasis on those detailing changes at the molecular and cellular levels, up to those showing behavioural impact.

Invited speakers:

Vaishali Katju http://biology.unm.edu/katju/-Katju_Lab_Website/Home.html *Cédric Feschotte* http://www.bioscience.utah.edu/faculty/molecular-biology-faculty/feschotte/index.php We would be extremely grateful if you could help us to convey this call beyond the evoldir community.

With our best regards,

Frédéric Brunet (frederic.brunet@ens-lyon.fr) Rita Ponce (arponce@fc.ul.pt)

More information and registration at: *http://-www.eseb2013.com* DEADLINE FOR ABSTRACT SUBMISSION: *February 28th 2013*

anaritaponce@gmail.com

Lisbon ESEB2013 Aug19-24 MultigeneFamilyEvol

Dear Colleagues,

As a part of the XIV Congress of the European Society for Evolutionary Biology, taking place in Lisbon 19-24 August 2013, we are pleased to announce a symposium on * MULTIGENE FAMILY EVOLUTION IN THE POST-GENOMIC ERA: Towards a population genomic approach to MHC evolution *. Please see below for further details. Abstract submissions will be accepted until 28th of February 2013.

Keynote Speakers: *JIM KAUFMAN* (http://www.immunology.cam.ac.uk/directory/-profile.php?jfk31)

JACEK RADWAN (http://www.eko.uj.edu.pl/-molecol/index.php?option=com_content&view=-

article&id=51&Itemid=32)

Description: Multigene families, like the MHC, encode central components in pathways involved in individual fitness and are key to important adaptations. Elucidating the molecular processes involved in their evolution is an important issue to further our understanding of the genetic basis of biological diversification. With this symposium we aim at bringing together researchers studying the functional genomics, evolutionary ecology and population genomics of MHC to discuss the most recent developments in each of the fields and develop new ideas and future research directions that integrate the different branches of MHC evolution in particular and multigene family evolution in general. Contributions presenting an integrative approach or findings with significant relevance to such will be given priority. We explicitly encourage also submissions presenting integrative research on multigene families other than MHC.

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

We hope to see you in Lisbon! Reto Burri & Robert Ekblom

RETO BURRI

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Lisbon ESEB2013 Aug19-24 NonGeneticInheritance

Dear colleagues,

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

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

Looking forward to receive your abstracts.

Best wishes from the organizers of the NGI session

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

More details on the session here:

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

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

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

Lisbon ESEB2013 Aug19-24 Paleobiology

Dear Colleagues,

We would like to invite you to send abstracts to our symposium on “Unifying paleobiological and comparative perspectives on character evolution” for the 14th ESEB congress in Lisbon taking place 19-24th of August 2013.

Organizers: Lee Hsiang Liow & Thomas F. Hansen. University of Oslo, Department of Biology, CEES.

Emails: l.h.liow@bio.uio.no & thomas.hansen@bio.uio.no

Invited speakers: Gene Hunt and Folmer Bokma.

Summary: It is no longer debated that the fossil record is necessary to inform us about the history of life, yet the integration of data and perspectives using fossils and comparative data in understanding evolution is far from mature. This symposium gathers researchers straddling the realms of the extinct and the extant to explore how we can better understand evolutionary processes especially on time scales common to palaeobiological and phylogenetic comparative studies, using character evolution as a focal point.

Link: https://www.eseb2013.com/symposia Deadline for submission 28 February 2013.

Abstracts will be selected by the organizers for either oral or poster presentation. When submitting your abstract please state your preference for talk or poster. Talks will be assigned time slots of 15 minutes and selected based on relevance for the symposium. Sincerely,

Lee Hsiang & Thomas

Thomas F Hansen <t.f.hansen@bio.uio.no>

Lisbon ESEB2013 Aug19-24 PhenotypicPlasticity

Dear Colleagues,

Registration is now open for the XIV Congress of the European Society for Evolutionary Biology, to be held in Lisbon (Portugal), August 19-24 2013: https://www.eseb2013.com/ We are happy to announce that we will be accepting abstract submissions until February 28th 2013, for the symposium "PHENOTYPIC PLASTICITY: MECHANISMS, ECOLOGY, AND EVOLUTION"

INVITED SPEAKERS: * Jacintha Ellers (Vrije Universiteit Amsterdam, The Netherlands) * Fred Nijhout (Duke University, USA) * Anthony Zera (University of Nebraska-Lincoln, USA)

ORGANIZERS: * Patricia Gibert (Université Lyon1, France) * Patrícia Beldade Instituto Gulbenkian de Ciencia, Portugal)

DESCRIPTION: Phenotypic plasticity refers to the ability of a genotype to produce different phenotypes in different environments. Its study integrates multiple disciplines and analyses at all levels of biological organization; from the molecular regulation of changes in organismal development, to variation in phenotypes and fitness in natural populations. The symposium welcomes work searching to understand how changes in external environment affect (or not) phenotype, how alternative phenotype perform in distinct environmental conditions, and how that weighs into account for the evolution of plasticity.

Patricia Gibert (patricia.gibert@univ-lyon1.fr) Patrícia Beldade (pbeldade@igc.gulbenkian.pt)

pbeldade@igc.gulbenkian.pt

Lisbon ESEB2013 Aug19-24 RapidEvol

Dear Colleagues:

Registration is now open for XIV Congress of the European Society for Evolutionary Biology (https://www.eseb2013.com), to be held in Lisbon from the 19th to 24th August 2013. We would like to invite abstract submissions for oral and poster presentations until the 28 of February 2013,for the symposium entitled:

RAPID EVOLUTION AND POPULATION GENETICS

Description: The traditional view is that evolution is too slow to be affected by ecological dynamics. A growing body of evidence suggests that this assumption is actually unwarranted and ecological and evolutionary processes can occur on the same time scale. On the other hand, evolutionary effects, changes in trait mean and variance of phenotypes, have largely been ignored in the study of ecological processes. With this proposed symposium, our goal is to promote the integration of evolutionary biology and ecology by exploring how rapid evolution and population and community dynamics interact. Furthermore, we believe that the integration of rapid, contemporary evolution into studies of population genetics is very important but has largely been ignored. With this proposed symposium, we hope to start a rapid growing discussion on how to combine population genetics and rapid evolution.

Invited speakers: Nelson G. Hairston, Cornell University Hildegard Uecker & Joachim Hermisson, University of Vienna Richard Neher, Max-Planck Institute for Developmental Biology

Organizer: Teppo Hiltunen, University of Helsinki (http://teppo-hiltunen.blogspot.fi) Lutz Becks, Max-Planck Institute for Evolutionary Biology (http://www.evolbio.mpg.de/comdyn)

We look forward to hearing from you, and hope to see you in Lisbon.

Lutz and Teppo

Lutz Becks <lbecks@evolbio.mpg.de>

alexandre.courtiol@gmail.com

Lisbon ESEB2013 Aug19-24 RecentHumanEvolution

Dear colleagues,

Registration for the *ESEB Congress in Lisbon (19-24 August 2013)* is now open, and we are inviting submissions of contributed talks and posters to a symposium addressing advances in quantitative approaches to recent evolutionary change in humans

Register and submit your abstracts through the congress website: https://www.eseb2013.com/ *DEAD LINE for submission is February 28th, 2012!!!*

*ADVANCES IN QUANTITATIVE APPROACHES TO RECENT EVOLUTIONARY CHANGE IN HUMANS *

Description: Applying a rigorous evolutionary framework to understand human biology and behaviour present numerous challenges. However, many recent advances have brought this field to a point where resolution of past difficulties may be achieved. The goal of this symposium is to provide a diverse overview of the state-of-the-art in quantitative approaches to investigate human evolution at different levels of biological organisation (from genes or genomes to societies) . While we expect most contributions to focus on selective evolutionary processes, we also very much welcome works assessing the importance of other processes in human evolution (e.g. drift). We decided to limit the scope of this symposium to recent evolutionary change (specifically from from the end of Pleistocene - 10,000 years ago - to present day). This restriction is aimed at counterbalancing the view predominant in some fields that recent changes are of little consequence for understanding human biology. Indeed, not only do we disagree, we think that this focus may more reflect methodological limitation than genuine scientific import.

Invited speaker: Stephen Stearns (Yale), Mark Thomas (UC London) and Jean-Baptiste Michel (Harvard).

Organisers: Alexandre Courtiol (Berlin) https://sites.google.com/site/alexandrecourtiol/home Ian Rickard (Durham) http://www.dur.ac.uk/anthropology/research/earg/earg_members/earg_profiles/?mode=staff&id=10886 We look forward to hearing from you, and hope to see you in warm Lisbon next year! Merry Xmas.

Lisbon ESEB2013 Aug19-24 Registration

ESEB 2013 - REGISTRATION AND ABSTRACT SUBMISSION

www.eseb2013.com Registration and abstract submission for the 14th Congress of the European Society for Evolutionary Biology, Lisbon, Portugal, 19-24 August 2013 is now open.

You are invited to submit your contribution to one of 29 topical symposia and 4 wide scope sessions. The deadline for the abstract submission is 28 of February 2013.

We recommend that you register and book your accommodation as soon as possible. This is because the number of attendants is limited to 1300 and Lisbon is a popular destination during August.

Online registration, online abstract submission and accommodation booking are three different steps that can be done at different times.

All relevant information can be found online.

Looking forward to seeing you in Lisbon!

Follow us on twitter @eseb2013

Octávio S. Paulo Assistant Professor Computational Biology and Population Genomics Group Centro de Biologia Ambiental Departamento de Biologia Animal Faculdade de Ciências da Universidade de Lisboa P-1749-016 Lisboa Portugal

Tel: 00 351 217500614 direct Tel: 00 351 217500000 ext22359 Fax: 00 351 217500028 email: octavio.paulo@fc.ul.pt skype: octaviopaulocobiggroup url: http://webpages.fc.ul.pt/ ~ ofpaulo/ url: http://cobig2.fc.ul.pt/ url: http://bbc.fc.ul.pt/ Octavio Paulo <octavio.paulo@fc.ul.pt>

Lisbon ESEB2013 Aug19-24 Segregation

ESEB Symposium on 'Early germ-soma segregation'

Dear Colleagues:

We would like to invite you to attend and contribute to the ESEB-sponsored symposium "Evolutionary consequences of an early germ-soma segregation", to take place at the 14th Congress of the European Society for Evolutionary Biology (ESEB), in Lisbon, Portugal, 19 - 24 August 2013.

Invited Speakers: Norman Arnheim (University of Southern California, USA) 'Germline selection and the paternal-age effect in humans.'

Andrew Bourke (University of East Anglia, UK) 'Early germline segregation and social group transformation'

Organisers Duur K. Aanen (Wageningen University) Rick Michod (University of Arizona)

Summary: It has been 25 years since Leo Buss first proposed that an early segregation of a germ line from the rest of the body is an adaptation to limit the scope for selfish cell lineages. A number of recent discoveries make it timely to reevaluate this hypothesis. This symposium explores the evolutionary stability of multicellularity in organisms with and without an early germline sequestration, to discuss the relative importance of this characteristic for conflict resolution, in multicellular growth and, more generally, in other major transitions such as the transition to eusociality.

Description Most animals segregate, early in development, a small number of germ cells that are destined to give rise to reproductive cells, from somatic cells. Only a few cell divisions separate the germ cell from the gamete stage and germ-cell division is strictly regulated. It has been nearly 25 years since Leo Buss proposed that these individual-level adaptations reduce the scope for within-individual selection, at which level selection often will be deleterious for individual fitness. The early germ-soma segregation thus prevents conflict between selection at the level of the individual and selection at the level of the cell. There is much empirical support for this hypothesis. However, it has been argued that the regular single-cell bottleneck observed in most life cycles in combination with a low mutation rate is sufficient to limit intra-individual genetic variation required for among-cell selection. Furthermore, recently some cases have been identified that show that the germ-soma segregation does not provide perfect protection against lower-level selection. First, contagious cancers, transmitted horizontally from one individual to another, circumvent the germ line. Second, recently a mechanism has been discovered by which inherited diseases, caused by de novo mutations in the father's germ line, are positively selected. Normally, male germ cells divide asymmetrically, with one daughter cell becoming the new germ cell, and the other giving rise to multiple gametes. However, some mutations increase the frequency of symmetrical division of the germ cells, thus increasing the number of germ cells with this mutation. This explains an observation, already made in the early 1900's, that the incidence of some inherited diseases increases with the age of the father. On the occasion of these new discoveries, this symposium will discuss the importance of germ-soma differentiation for resolution of the potential conflict between the levels of selection in a multicellular individual. This symposium will bring together students working on the evolution of multicellularity and conflict resolution, both in organisms with and organisms without an early germ-soma differentiation, such as fungi. It will discuss the importance of an early germ-soma differentiation for conflict resolution relative to other stabilising factors, especially high among-cell genetic relatedness, seen in most multicellular organisms.

"Aanen, Duur" <duur.aanen@wur.nl>

Lisbon ESEB2013 Aug19-24 Symbiosis

Conference: ESEB2013.Lisbon, Aug19-24.SYMBIOTIC INTERACTIONS

Dear Colleagues:

Registration is now open for XIV Congress of the European Society for Evolutionary Biology (https://-www.eseb2013.com), to be held in Lisbon from the 19th to 24th August 2013. We would like to invite abstract submissions for oral and poster presentations until the 28 of February 2013,for the symposium entitled:

EVOLUTION OF SYMBIOTIC INTERACTIONS IN COMMUNITIES: NOVEL APPROACHES.

Description: Biological interactions within communities shape the evolution of individual species. These relationships (obligate/facultative, beneficial/detrimental) force the emergence of innovative traits. The most exciting research on these topics now combines comparative ?omics? approaches with concepts from evolutionary and behavioural ecology. The symposium will highlight recent progress in this interdisciplinary field and will discuss the interplay between communities and evolutionary biology: how do species interactions within a community affect evolution?

Invited speakers: Christoph Vorburger, ETH, Zurich Jacobus J. Boomsma, University of Copenhagen, Denmark

For submission of abstracts follow the instructions on the website at https://www.eseb2013.com Organisers: Kayla King, Kayla King, PhD. University of Liverpool, Institute of Integrative Biology, UK. Mario X. Ruiz-González, Institute of Molecular and Cellular Biology of Plants (C.S.I.C. - U.P.V.), Valencia, Spain. Jérôme Orivel, CNRS, UMR Ecologie des Forêts de Guyane. Justyna Wolinska, Ludwig-Maximilians-Universität München, Germany.

We hope to meet you there!

Mario X. Ruiz-González <maruigon@upvnet.up.es>

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Mario X. Ruiz-González, Ph.D., M.Sc. Department of Abiotic Stress, Lab 1.07 Institute of Molecular and Cellular Biology of Plants - I.B.M.C.P. (C.S.I.C. - U.P.V.) Integrative Systems Biology Group C/ Ingeniero Fausto Elio s/n. 46022 Valencia, Spain

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"Mario X. Ruiz-González" <maruigon@upvnet.upv.es>

Lisbon ESEB2013 Aug19-24 TradeOffs

ESEB Symposium on Mechanisms of TRADE-OFFs

Dear Colleagues:

We would like to invite you to attend and contribute to the ESEB-sponsored symposium "Mechanisms of Trade-offs", to take place at the 14th Congress of the European Society for Evolutionary Biology (ESEB), in Lisbon, Portugal, 19 - 24 August 2013.

Invited Speakers: *Stephen C. Stearns (Yale University)

*Joost Keurentjes (Wageningen University)

Organizers: *Bas Zwaan (Wageningen University) *Thomas Flatt (University of Lausanne)

Description:

Trade-offs are of major importance in evolutionary theory, in particular in life history theory, since they are thought to impose constraints upon the response to selection: trade-offs occur when an evolutionary change in a trait that increases fitness is coupled to an evolutionary change in another trait that decreases fitness. Because organisms are often restricted in terms of resource acquisition, one of the major physiological explanations for the existence of trade-offs is differential resource allocation between competing functions/traits. Recently, however, molecular data have challenged the validity of this view, even though both views may be compatible with each other. Unfortunately, up-to-date, trade-offs have either mostly been approached from a purely phenotypic perspective without much attention to the underlying physiological and genetic mechanisms, or conclusions about trade-offs have been drawn from molecular studies without sufficient consideration of the functional/organismal phenotype. In this symposium we aim to bridge these views by linking our current knowledge of the molecular and physiological pathways with what has been learned about quantitative genetic and phenotypic correlations among traits. Understanding the mechanisms underlying trade-offs and their evolutionary consequences will require an integrative approach, and it is the major aim of our symposium to help foster such an integration.

Website:

https://www.eseb2013.com/symposia < https://www.ESEB2013.com/symposia >

The site for registration for the ESEB meeting and for abstract submission for this symposium is now open at: www.eseb2013.com Deadline for abstract submission: 28 February 2013.

Abstracts will be evaluated by the symposium organizers and will be selected for either oral or poster presentation in late February. When submitting your abstract please state your preference (talk, poster) during the submission process. Talks in the symposium will be 15 minutes long, with 2 minutes for discussion.

We are looking forward to seeing you in Lisbon!

Bas and Thomas

Bas Zwaan

Laboratory of Genetics Plant Research Group Wageningen University and Research Centre Droevendaalsesteeg 1 6708 PB Wageningen The Netherlands

E-mail: bas.zwaan@wur.nl

Thomas Flatt

Department of Ecology and Evolution University of Lausanne UNIL Sorge Le Biophore CH-1015 Lausanne Switzerland

E-mail: Thomas.Flatt@unil.ch

Book: Mechanisms of Life History Evolution

http://ukcatalogue.oup.com/product/-9780199568772.do flatt.thomas@gmail.com

Lisbon EvolutionaryPatterns May27-29 CallAbstracts 2

2ND CALL FOR ABSTRACTS: INTERNATIONAL CONFERENCE ON EVOLUTIONARY PATTERNS Horizontal and Vertical Transmission and Micro- and Macroevolutionary Patterns of Biological and Sociocultural Evolution

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

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

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

PLENARY AND INVITED SPEAKERS

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

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

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

CALL FOR ABSTRACTS

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

POSSIBLE FORMATS

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

IMPORTANT DATES

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

REGISTRATION FEES

Professors: 300 euro | PhD and post-docs: 250 euro | Audience: 100 euro | Students: 50 euro

DOWNLOAD OUR POSTER

http://evolutionarypatterns.fc.ul.pt/docs/patterns.pdf SUBSCRIBE TO OUR MAILINGLIST

http://eepurl.com/n2DTL FURTHER INFORMATION

http://evolutionarypatterns.fc.ul.pt; http://appeel.fc.ul.pt

AppEEL Announcements <appeelannouncements@fc.ul.pt>

Montpellier MathCompEvolutionaryBiol May27-31

MCEB conference: Mathematical and Computational Evolutionary Biology

Webpage:http://www.lirmm.fr/mceb2013/ Pre-

registration deadline: January 20

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

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

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

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

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

Olivier gascuel <gascuel@lirmm.fr>

Oeiras Portugal Evolution Dec21 Deadline

Dear colleagues of the evolution community,

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

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

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

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

The ENBE organizing committee

Lilia Perfeito <lilia.perfeito@gmail.com>

lilia.perfeito@gmail.com

Paris MicrobialEvolution Oct2-5

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

The ability of microbes - bacteria, viruses, fungi and parasites - to mutate rapidly, disseminate and adapt to new hosts and environments, forces us to increase our capabilities for the early recognition of novel strains of pathogens, and to understand the factors that contribute to their diversity, evolution and dissemination. IMMEM-10 will address a variety of topics related to pathogen emergence, population-level diversity, evolution of virulence and antibiotic resistance, strain tracking, typing networks, public health and surveillance, novel typing approaches, high-throughput sequencing, genomics, and molecular epidemiology of infectious diseases. The meeting will take place at Institut Pasteur, in the heart of Paris.

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

INVITED SPEAKERS Andrea Ammon, European Center for Disease Control, Stockholm, Sweden Siv Andersson, Uppsala University, Sweden Alessandra Carattoli, Institute of Public Health, Rome, Italy Stewart Cole, Global Health Institute, Lausanne, Switzerland Alex Friedrich, University Medical Center Groningen, Netherlands Peter Gerner-Smidt, CDC, Atlanta, USA Matthew Gilmour, Public Health Agency of Canada, Winnipeg, Canada Hajo Grundmann, RIVM, Bilthoven, Netherlands Joerg Hacker, German Academy of Sciences Leopoldina, Berlin, Germany

Dag Harmsen, Universitätsklinikum Münster, Germany René Hendriksen, DTU, Denmark Keith Jolley, Oxford, UK Philippe Lemey, Leuven, Belgium Martin Maiden, Oxford University, UK Claudine Médigue, CEA-Genoscope, Evry, France Julian Parkhill, Wellcome Trust Sanger Institute, Hinxton, UK Laurent Poirel, Univ. Paris Sud, Kremlin-Bicêtre, France Marc Struelens, eCDC, Stockholm, Sweden Anne-Mieke Vandamme, Katholieke Universiteit Leuven, Belgium

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

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

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

Sylvain BRISSE <sylvain.brisse@pasteur.fr>

Portugal OligochaeteTaxonomy Apr22-25

6th IOTM

Dear Friends and Colleagues,

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

Oligochaeta (few-bristled worms) is an extremely important taxonomic group in aquatic and terrestrial ecosystems. In spite of the importance of oligochaetes, there are presently some serious deficiencies in the knowledge about their taxonomy, distribution, biology and ecology, in comparison with mammals, birds, lizards and other organismal groups. One way to bridge this gap is to bring together scientists working on the subject with the aim to speed up information about the progress in their work, exchange ideas and encourage them to cooperate. This is the basic idea behind the organization of the International Oligochaeta Taxonomy Meetings (IOTM). So far, five successful meetings took place. Traditionally, the meetings concentrate mainly on Oligochaete taxonomy and phylogeny, but also discuss different aspects from other scientific fields, e.g. earthworm ecology, faunistics and phylogeography as well as new methods of their study. The 6th International Oligochaete Taxonomy Meeting will continue in the best tradition of the previous four meetings and will take place in Palmeira de Faro in Portugal, from April 22th to April 25th, 2013. An optional field excursion will be organised on April 26th.

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

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

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

Cordially yours,

Dr Tomas Pavlicek (Convenor of the 6th IOTM)

Patricia Cardet (Secretary and webmaster)

6thiotm.tomas-pavlicek-biologie.net contact@patricia-cardet.net contact@tomas-pavlicek-biologie.net Skype: patriciacardet

“contact@patricia-cardet.net”

PrincetonU OriginOfLife Jan21-24

Princeton Origin of Life Conference NAI and SMBE Satellite Workshop on the Origin of Life 21-24 January 2013 Princeton University

http://www.pctp.princeton.edu/pcts/-Originoflife2013/Originoflife2013.html Organizers: Laura Landweber and Aaron Goldman

The last few decades have witnessed the burgeoning of many highly productive lines of investigation into

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

Registration is free, but space is limited. The Nassau Inn is the only hotel in walking distance from the venue. Please make hotel reservations ASAP to guarantee a room at the Nassau Inn, 1-609-921-7500, www.nassauinn.com, group name "Origins of Life-PCTS". The cost is a total of $151.20 per night (tax included). Cancellations or changes to reservations must be made in writing by 3 pm, 24 hours prior to the day of arrival to avoid being charged for any unused nights.

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

Jointly sponsored by the NASA Astrobiology Institute (NAI), Society for Molecular Biology and Evolution (SMBE) and Princeton Center for Theoretical Science (PCTS)

Laura Landweber <lfl@princeton.edu>

UCalifornia Berkeley EvolutionaryBiology TheoryOfComputing Jan13-May16

The newly created Simons Institute for the Theory of Computing at UC Berkeley will host a semester-long program on "Evolutionary Biology and the Theory of Computing" (http://simons.berkeley.edu/-program_evolution2014.html), to be held from January 13, 2014 to May 16, 2014. There are fellowship opportunities for outstanding junior scientists (up to 6 years from PhD) to spend the semester at the Institute and participate in the program. Further information can be found below.

Simons-Berkeley Research Fellowships are intended for exceptional young scientists (within at most six years of the award of their Ph.D.). Applicants who already hold junior faculty or postdoctoral positions are welcome to apply. In particular, applicants who hold, or expect to hold, postdoctoral appointments at other institutions are encouraged to apply to spend one semester as a Simons-Berkeley Fellow subject to the approval of the postdoctoral institution.

The url for the fellowship applications is http://-simons.berkeley.edu/fellows.html Deadline for applications: 15 January, 2013.

Evolutionary Biology and the Theory of Computing

13 January to 16 May, 2014

Evolutionary biology is an intellectually rich field which has advanced remarkably through a synergistic interplay between deep understanding of biology and mathematical techniques, especially from probability and statistics. Over the past several decades, the role of computer science in studying biology has grown enormously, and computation has now become an indispensable part of the intellectual mix. Many current problems in evolutionary biology push the limits of computation, and new algorithmic insights are needed to make progress.

The objective of this program is to promote the interaction between theoretical computer scientists and researchers from evolutionary biology, physics, probability, and statistics. The participants of the program will collaborate to identify and tackle some of the most important theoretical and computational challenges arising from evolutionary biology. The major themes of the program will be sound mathematical modeling, rigorous methods for statistical estimation, and computational scalability.

Organizers: Yun S. Song (UC Berkeley; chair), Andrew G. Clark (Cornell), Rick Durrett (Duke), Charles H. Langley (UC Davis), Christos Papadimitriou (UC Berkeley), Leslie Valiant (Harvard).

Long-Term Participants (in addition to Organizers): Nick Barton (IST Austria), Graham Coop (UC Davis),

Costis Daskalakis (MIT), Alison Etheridge (Oxford), Steven Evans (UC Berkeley), Marc Feldman (Stanford), Vitaly Feldman (IBM Almaden), Daniel Fisher (Stanford), Dan Gusfield (UC Davis), Oskar Hallatschek (UC Berkeley), Eran Halperin (Tel Aviv), Joachim Hermisson (Vienna), John Huelsenbeck (UC Berkeley), Varun Kanade (UC Berkeley), Sampath Kannan (U Penn), Adi Livnat (Virginia Tech), Gerton Lunter (Wellcome Trust Centre for Human Genetics), Gil McVean (Oxford), Elchanan Mossel (UC Berkeley), Rasmus Nielsen (UC Berkeley), Lior Pachter (UC Berkeley), Nick Patterson (Broad Institute), Lea Popovic (Concordia), Satish Rao (UC Berkeley), Sebastien Roch (University of Wisconsin), Eric Siggia (Rockefeller), Montgomery Slatkin (UC Berkeley), Wolfgang Stephan (LMU Munich), Greg Valiant (Stanford), Paul Valiant (Brown), Nisheeth Vishnoi (Microsoft Research India).

Workshops: During the semester there will be three workshops spanning the topics of the program. These are planned as follows:

Workshop 1 : "Computation-Intensive Probabilistic and Statistical Methods for Large-Scale Population Genomics." Organizers: Andrew G. Clark (Cornell), Rasmus Nielsen (UC Berkeley), Yun S. Song (UC Berkeley).

Workshop 2: "Computational Theories of Evolution." Organizers: Christos Papadimitriou (UC Berkeley), Leslie Valiant (Harvard).

Workshop 3 : "New Directions in Probabilistic Models of Evolution." Organizers: Rick Durrett (Duke), Steven Evans (UC Berkeley).

yss@eecs.berkeley.edu

UColorado Denver ProteinEvolution Feb7-9 2

SMBE Satellite Meeting on Mechanisms of Protein Evolution II

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

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

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

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

David Pollock, James McInerney, and David Liberles

David Liberles <liberles@uwyo.edu>

UMichigan Macroevolution FossilsPhylogenies

NINTH ANNUAL UNIVERSITY OF MICHIGAN EARLY CAREER SCIENTISTS SYMPOSIUM

MACROEVOLUTION: FOSSILS, FRAMEWORKS AND PHYLOGENIES

The Department of Ecology and Evolutionary Biology at the University of Michigan invites nominations of outstanding scientists early in their careers to take part

in an exciting international symposium on the conceptual and methodological integration of paleontological and phylogenetic approaches to the study of macroevolution. The symposium events will take place from 15-17 March 2013, in Ann Arbor, Michigan.

Nine early-career scientists will be selected to present their work alongside two plenary speakers and participate in panel discussions. We welcome nominations of scientists who are studying any aspect of macroevolution using paleontological, molecular phylogenetic, or theoretical approaches. We are especially interested in scientists whose work recognizes the promises and/or challenges of developing a unified neontological and paleontological framework for understanding macroevolutionary patterns.

Early career scientists are defined as senior graduate students (who stand to receive their Ph.D. within one year), postdoctoral researchers, and first- or second-year faculty. A colleague or advisor must provide the nomination.

A nomination consists of a brief letter of recommendation addressing the nominees scientific promise and ability to give a good talk, the nominee's curriculum vitae, and a brief abstract of the proposed presentation (< 200 words, written by the nominee). Nominations may be sent electronically (in one file if possible) to eebecss-nomination@umich.edu using the nominee's name as the subject line (last name first, please). More information is available at http://sitemaker.umich.edu/ecss2013 . All nominations must be received by January 15, 2013.

Selected participants will be contacted by February 1, 2013 and will have all expenses covered (registration, travel and accommodation). An official announcement of the slate of speakers will be issued soon thereafter.

For more information, contact Cindy Carl at cacarl@umich.edu.

2013 Early Career Scientists Symposium organizing committee:

Lauren Sallan lsallan@umich.edu

Dan Rabosky drabosky@umich.edu

Yin-Long Qiu ylqiu@umich.edu

Joseph Brown josephwb@umich.edu

Valerie Syverson vsyverson@gmail.com

Qixin He heqixin@umich.edu

Michigan EEB website: http://www.lsa.umich.edu/eeb/

Lauren Sallan, PhD Assistant Professor, Ecology and Evolutionary Biology & Michigan Fellow, Michigan Society of Fellows University of Michigan Office: 1076 Ruthven Museums Bldg Phone: (734) 764-0477 Websites: www.lsa.umich.edu/directory/faculty/lsallan www.LaurenSallan.com Lauren Sallan <lsallan@umich.edu>

GradStudentPositions

ArizonaStateU TenebrionidBeetleSystematics

Graduate Research Assistantship - Tenebrionid Systematics, Arizona State University

An NSF-funded graduate research assistantship is available (on short notice!) to study tenebrionid systematics in the School of Life Sciences at Arizona State University. The application deadline is December 15, 2012, for entry into the Ph.D. program in Evolutionary Biology in the Fall of 2013. The research project will focus on the systematics of the darkling beetle genus *Eleodes* (Coleoptera: Tenebrionidae) - a diverse genus of flightless beetles endemic to western North America and commonly referred to as pinacate beetles or stink beetles.

The selected student will be mentored by Drs. Aaron Smith, Nico Franz, and Quentin Wheeler, and will concentrate on revising the *Eleodes* subgenera *Promus *and *Tricheleodes* using comparative morphological and molecular information. Additional tasks will include contributions to an emerging Coleoptera Anatomy Ontology, field work, and outreach. Academic excellence and a strong background in insect systematics are highly desirable.

Interested candidates should contact Nico Franz immediately at nico.franz@asu.edu with a brief statement of their interests and qualifications.

http://tenebrionidbase.org/public/site/-tenebrionidbase/home http://franz.lab.asu.edu/
nmfranz@asu.edu

BrighamYoungU DragonflyEvolution

The Bybee Lab at Brigham Young University in the Department of Biology is seeking highly motivated graduate students with an interest in evolutionary biology, insect phylogenetics and/or genomics. Our lab is currently funded by the National Science Foundation to produce a large-scale phylogeny of both fossil and extant Odonata.

Research Interests

The Bybee Lab is focused on the evolution of insects with a strong emphasis in dragonflies and damselflies (Odonata), particularly the evolution of their visual systems. Our research draws from molecular, morphological and fossil evidence to examine evolutionary relationships (phylogeny), morphological innovation, and molecular evolution. As part of this research we are developing novel methods to “direct” next-generation sequencing platforms to target genes or genomic regions of interest. Students interested in exploring such research topics are strongly encouraged to apply.

Qualifications

Applicants should have a background in evolutionary

biology. Experience with invertebrate zoology (extant and/or fossil), phylogenetics, systematics and/or next generation sequencing methods and quantitative skills (bioinformatics, computer programming) is a plus. The successful applicant will have excellent writing, communication, and interpersonal skills. Proficiency in English (both spoken and written) will be required. Research in the Bybee lab will also require physically demanding fieldwork from time to time. Salary and benefits are competitive.

Requirements

Ideally, 2 graduate students will be admitted to start in the Fall of 2013. Applicants looking to do a PhD are preferred but MS applicants will also be considered. Interested applicants should send a letter of interest outlining research interests, career goals and rationale for pursuing a graduate degree, along with a CV to seth.bybee@gmail.com.

BYU

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

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

Graduate students admitted to the program receive guaranteed funding from the department for up to 5 years. More information on the application process and Graduate School at BYU can be found here: http://-graduatestudies.byu.edu/ Application deadline is Jan 15th 2013.

Brigham Young University is affiliated with and sponsored by The Church of Jesus Christ of Latter-Day Saints. All students are required to abide by the university's honor code and dress and grooming standards: http://saas.byu.edu/catalog/2011-2012ucat/-GeneralInfo/HonorCode.php#HCOfficeInvovement .It is an equal opportunity employer, does not discriminate on the basis of race, color, gender, age, national origin, veteran status, or against qualified individuals with disabilities.

BYU is located in the heart of the Rocky Mountains in Provo Utah with world famous attractions (e.g., national parks, ski resorts, etc.) close by. Year round, outdoor activities such as Skiing, hiking and biking are all within a 20 minute drive of campus.

Contact Information

Seth Bybee, PhD

Assistant Professor

Department of Biology

401 WIDB

Provo, UT 84602

801-422-3152

Seth.bybee@gmail.com

seth.bybee@gmail.com

BrighamYoungU EvolutionaryBiol

GRADUATE POSITIONS IN THE DEPARTMENT OF BIOLOGY AT BRIGHAM YOUNG UNIVERSITY

The Department of Biology at Brigham Young University (BYU) welcomes applications from highly motivated students interested in joining our MS or PhD program in the Fall of 2013. The department (http:/-/biology.byu.edu) comprises a large and dynamic faculty spanning a diverse array of research areas including informal and collaborative research groups in Ecology, Evolutionary Ecology, Molecular Systematics, Bioinformatics, Conservation Biology, and Biological Science Education.

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

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

the evolution of genetic and infectious diseases.

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

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

Each of the focal groups in our department maintain strong collaborative ties with each other, as well as other departments on campus, including Plant and Wildlife Sciences, Microbiology and Molecular Biology, Statistics, Computer Science, and the McKay School of Education.

Exceptional facilities and resources for carrying out research are available through the Monte L. Bean Life ScienceMuseum (http://mlbean.byu.edu), Lytle Ranch Preserve (http://mlbean.byu.edu/-LytlePreserve/AbouttheLytle.aspx), the DNA Sequencing Center (http://dnasc.byu.edu/Default.aspx), the Research Instrumentation Core Facility (http:/-/ricfacility.byu.edu), the Microscopy Lab (http://-microscopy.byu.edu) and the Fulton Supercomputing Lab (https://marylou.byu.edu). We will be moving into a new Life Sciences building in 2014 (http://-news.byu.edu/archive11-nov-lifesciencesbuilding.aspx).

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

For full consideration, complete applications should be received by January 30, 2013. We strongly encourage prospective applicants to contact faculty members as soon as possible to discuss their research interests. Financial support for graduate students is competitive and comes from a variety of sources, including teaching assistantships, research assistantships, fellowships, and external research funds. Faculty Profiles can be accessed here: http://biology.byu.edu/DepartmentInfo/-OurPeople/FacultyStaff.aspx Byron Adams

Brigham Young University Department of Biology 401 WIDB Provo, UT 84602

801 422 3132 (office) 801 422 8723 (lab) 801 422 2582 (dept. office) 801 422 0090 (fax)

byron_adams@byu.edu

CUNY MarineMolecularEvolution

Multiple PhD Positions in Marine Molecular Ecology at the City University of New York

The newly established marine molecular ecology laboratory at Brooklyn College is recruiting 2-3 PhD students for September 2013 admission to the Ecology, Evolutionary Biology and Behavior program (EEB) at the CUNY Graduate Center in New York City (http://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives /Doctoral-Programs/Biology/Subprograms/Ecology,-Evolutionary-Biology,-and-Be havior). The EEB incorporates a diverse group of 66 faculty from 8 colleges of the City University of New York, as well as the American Museum of Natural History.

The research of our lab focuses primarily on the study of the evolution of reproductive complexity in aquatic environments. The exceptional reproductive diversity of aquatic animals provides opportunities to explore central tenets of sexual selection theory. We study a number of different freshwater and marine model systems (e.g. seahorses and cichlid fishes, marine amphipods, freshwater snails), using a combination of field, laboratory and experimental approaches to investigate how selective pressures contribute to the evolution of reproductive diversity across space and time. Molecular methods are an integral component of this research, and recent advances in high-throughput functional genomics are providing unique insights into the early development of complex reproductive systems.

Graduate students will be encouraged to develop independent research projects in collaboration with the lab PI, and young researchers interested in understanding the evolution of nearshore marine communities are particularly encouraged to apply. Successful applicants will have access to modern molecular and laboratory infrastructure at Brooklyn College and the opportunity to carry out extended field and experimental research projects in Jamaica Bay and the Aquatic Research and Environmental Assessment Center in Brooklyn (http://www.brooklyn.cuny.edu/web/-academics/centers/areac.php).

Brooklyn College is a senior college of the CUNY system, located on a leafy 26-acre campus in Brooklyn, New York, one of the most culturally diverse areas of the city, with a dynamic arts and music scene. Reg-

ularly cited as one of the top urban environments in the US, Brooklyn is located at the southern tip of Long Island, offering ready access to both the seashore and the city.

Formal application to the graduate program in EEB must be made directly to the CUNY GC before January 1, 2013 for September admission http://www.gc.cuny.edu/Page-Elements/Academics-Research-Centers-Initiatives/ Doctoral-Programs/Biology/Subprograms/Ecology,-Evolutionary-Biology,-and-Beh avior/Admissions). Informal enquiries concerning graduate opportunities in the lab can be made directly to Tony Wilson (tony.wilson@ieu.uzh.ch).

Tony Wilson Assistant Professor, Evolution and Biodiversity Institute of Evolutionary Biology and Environmental Studies

University of Zurich Room Y44J55 Winterthurerstrasse 190 CH 8057 Zurich Switzerland Tel: 41 44 635 4790 Fax: 41 44 635 4780 http://www.ieu.uzh.ch/agwilson tony.wilson@ieu.uzh.ch

DurhamU HolocenePopDynamics

Competitive PhD studentship available at Durham University, UK on:

"Holocene population dynamics and connectivity of top predator species in the context of environmental change"

The study will use ancient DNA derived from bones available from museum collections for the northern lynx (and including comparator species such as the wolf as possible and appropriate) to address hypotheses about the impact of environmental change on the distribution of diversity, patterns of connectivity and the historical population dynamics of top predators in Europe during the Holocene.

Molecular genetic methods (especially associated with mtDNA amplification and coalescent-based analyses) will be used to assess patterns of historical connectivity and population dynamics, and published environmental data including palaeoecological evidence from sediment cores (well represented across the study area) will be used for comparison against data from ancient DNA. When possible, shifts in diet will be tracked using stable isotope analyses. The relative importance of key environmental factors will be assessed using generalised linear model (GLM) and multiple regression analyses.â

For more information contact Prof. Rus Hoelzel at Durham University (a.r.hoelzel@dur.ac.uk).

Applications including a cover letter, a c.v., undergraduate and postgraduate (as applicable) grade transcripts, and two letters of reference (sent independently) should reach a.r.hoelzel@dur.ac.uk by 7 February 2013 at the latest.

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

ErasmusMundus EvolutionaryBiol

Erasmus Mundus Joint Master in Evolutionary Biology (MEME) is a 2-year research oriented master programme for talented and motivated European and non-European students who are interested in understanding evolution in all its facets.

Deadline to apply: 4 January 2013 for EU and non-EU students and scholars.

The MEME programme will address the driving forces of evolution at all levels of organismal organization (from cells and individuals to populations and ecosystems), and it will allow students to study all kinds of organisms (microorganisms, plants, animals) in all kindsof habitats (marine as well as terrestrial) with a diversity of approaches (field, lab, theory). The focus of the programme is not only on how evolution shaped life on our planet in the past, but also on how understanding the principles underlying evolution can provide new insights and help to cope with present-day challenges in a variety of fields, including ecology, epidemiology, physiology, immunology, genetics/genomics, bioinformatics, economics and the social sciences. Only few universities in the world would be able to offer a programme of suchbroad scope without compromising scientific quality. For this reason, four European universities (University of Groningen (Netherlands), University of Montpellier II (France), Ludwig Maximilians University of Munich (Germany), Uppsala University (Sweden)) have joined forces with Harvard University (USA). Together, this consortium is able to put together an attractive multidisciplinary programme that meets highest standards. All students have to study at at least two partner universities, and they will receive either a joint MSc degree from the whole consortium or double degrees from two partner universities.

Being financed by theEuropean Community,MEME has

to satisfy the high quality standardsimposed the prestigiousErasmus Mundus Programme. Full scholarships are availablefor EU and non-EU Students and Scholars (as visiting scientists). Scholarships will be awarded after a selective procedure.

Application deadline: 4 January 2013 Starting date master programme: September 2013 Who for? European and non-European students and scholars

More information and how to apply for EU and non-EU students on: www.evobio.eu Questions about the application procedure and requirements: Dr Irma Knevel (i.c.knevel@rug.nl) Questions about the contents of the programme: Prof dr Franjo Weissing (f.j.weissing@rug.nl)

i.c.knevel@rug.nl

KAUST SaudiArabia CoralReefBiodiversity

Subject: KAUST PhD and MSc Fellowships

Dear Colleagues,

We are now considering applications for full fellowships to commence MSc and PhD studies in the Reef Ecology Lab at the King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. One PhD fellowship is associated with the "Biodiversity of Saudi Arabian Coral Reefs" project at KAUST.

Please see below for further information.

Thanks, Michael Berumen and Joseph DiBattista

Ph.D. and MSc Student Fellowships - Reef Ecology

Application Deadline: 15 January 2013

Starting Date: August 2013

We seek to enlist a Ph.D. student in the Marine Science program at KAUST with a background in marine ecology, statistics, database management, and strong computational skills. Significant research and field experience, as well as experience with phylogenetics and/or phylogeography is preferred. The successful candidate will join the 'Reef Ecology' group of PI Michael Berumen within the Red Sea Research Center in KAUST. The group is collaborating in an international framework to catalogue biodiversity of coral reefs along Saudi Arabia's extensive coastline. Potential projects include taxonomic survey/revision of a focal group, phylogenetics or phylogeography of Red Sea organisms, large-scale demographic studies, and other projects aligning with the goals of the biodiversity study. The position will involve diving, labwork, and field trip participation. Potential MSc students with strong backgrounds relevant to any current projects conducted in the Reef Ecology Lab (reefecology.kaust.edu.sa) are welcome to apply. The KAUST Marine Science MSc requires that all students complete a research-based thesis. External co-supervision is encouraged, representing an opportunity for international collaboration with fieldwork based in the Red Sea.

KAUST is a dynamic, new, coeducational international university campus and community. Opened in September 2009, the campus is located directly on the Red Sea shore just north of Jeddah and is ideally equipped for marine biology research. High throughput, Next-Gen sequencing facilities are on-site as are marine operations facilities (including several boats dedicated for research activities). All student fellowship packages includes full fellowship support for the duration of the degree (1.5 years for MS, 3 years for PhD), providing a highly competitive stipend (US$20,000-30,000 annually) as well as full tuition awards, housing, health insurance, etc.

For full consideration for these fellowships, applicants must submit a complete application via the KAUST website (www.kaust.edu.sa) by the January 15th deadline. To discuss areas of mutual research interest relevant to your application, you may send a brief summary of qualifications and area of research interest via email. Due to the volume of emails received, general inquiries which do not specify areas of research overlap may not be answered. Please also include a current curriculum vitae. All applicants should be aware that a final determination of suitability for admission to the Marine Science program cannot be made without receipt of a complete application via the KAUST Admissions website and review by the Admissions Committee.

Michael L. Berumen Assistant Professor of Marine Science and Engineering PI Reef Ecology Lab Red Sea Research Center King Abdullah University for Science and Technology (www.kaust.edu.sa) Work phone: (+966) 547700019 Mobile Phone: (+966) 28082376 Web: http://reefecology.kaust.edu.sa/ michael.berumen@kaust.edu.sa

josephdibattista@hotmail.com

LeibnizInst Germany PlantSexEvol

Dear colleagues,

I have a PhD position which I'd like to fill as soon as possible in my group. The position is for 3 years, which is the normal time required to complete a doctoral degree in Germany.

The student would join a rapidly advancing program in my group in which we have identified two candidate factors which are highly correlated with apomixis (asexual seed formation) in the genus Boechera. The work would involve relatively heavy molecular genetic analyses, and hence previous experience in a molecular lab would be very beneficial (e.g. cloning, sequencing, plant transformation, siRNA, etc.).

The student would receive their PhD from any German University (to be decided together with the student), and would join running PhD graduate student programs both here in our institute as well as at the IMPRS in Jena (see links below).

If you are interested, please send me a CV and letters of recommendation, not to mention you can contact me if you have any questions.

Best wishes Tim

Dr. Tim Sharbel (sharbel@ipk-gatersleben.de) Apomixis Research Group Leader Dept. of Cytogenetics and Genome Analysis Leibniz Institute of Plant Genetics and Crop Plant Research (IPK) Corrensstraße 3, D-06466 Gatersleben Germany

NOTE NEW WEBPAGE: http://www.ipk-gatersleben.de/en/dept-cytogenetics-and-genome-analysis/apomixis/ Adaptomics (DFG funded project): http://www.ruhr-uni-bochum.de/dfg-spp1529/Seiten/PG_Sharbel_SH337_7-1.html International Max Planck Research School (IMPRS) faculty member: http://imprs.ice.mpg.de/ext/faculty-members.html IPK Webpage www.ipk-gatersleben.de

tel: +049 (0)39482 5608 fax: +049 (0)39482 5137

sharbel@ipk-gatersleben.de

Leipzig 6 Biodiversity

6 PhD Positions at the German Centre for Integrative Biodiversity Research - iDiv in Leipzig, Germany

iDiv is one of the seven National Research Centres funded by the German Research Foundation (DFG). It is located in the city of Leipzig and jointly hosted by the Martin Luther University Halle-Wittenberg (MLU),the Friedrich Schiller University Jena (FSU), the University of Leipzig (UL), and the Helmholtz Centre for Environmental Research (UFZ).It is supported by the Max Planck Society, the Leibniz Association, the Klaus Tschira Foundation and the Free State of Saxony.

One of the central missions of the German Centre for Integrative Biodiversity Research is the promotion of theory-driven synthesis and data-driven theory in biodiversity sciences. The concept of iDiv encompasses the detection of biodiversity, understanding its emergence, exploring its consequences for ecosystem functions and services, and developing strategies to safeguard biodiversity under global change.

Outstanding students of all nationalities are invited to apply for doctoral fellowships on:

- Importance of mutualistic interactions for current and future patterns of plant and bird diversity in the tropical Andes - Ecological Modelling of Genetic Diversity in Plant Communities - Apiculture and the pollinator decline: A model for pathogen driven biodiversity risks - Mapping genetic and species diversity of pollinators to the ecosystem service of pollination across changing landscapes - Accelerated Evolution in Chromosomal Rearrangements and Speciation in Lacertid Lizards - Plant Physiology/Biospectroscopy

In the active research environment of iDiv, PhD students will be embedded in the Young Biodiversity Research Training Group (yDiv). The goal of yDiv is to educate a new generation of scientists in transdisciplinary biodiversity research, who will have gained expertise both in experimental as well as theoretical fields of research.

Fellows will attend lectures and seminars on a broad range of topics in the field of biodiversity science and conduct their research in a modern, international and integrative working environment. The working language is English. Each doctoral fellow receives individual supervision and mentoring and is guided in her/his

research work by a PhD advisory committee.

Application: We promote a research environment free of gender bias. Severely disabled persons are encouraged to apply and are preferred in the case of equal suitability. Applicants should hold a MSc or equivalent degree in biology or a related discipline. Applications are in English and should be sent before January 18, 2013. A detailed description of each position and the respective application address can be found under www.idiv-biodiversity.de – Dr. Jula Zimmermann Coordinator of the graduate school yDiv

German Centre for Integrative Biodiversity Research (iDiv) Phone: +49(0)341-97-31261 Fax: +49(0)341-97-31264 Email: jula.zimmermann@idiv-biodiversity.de

University of Leipzig German Centre for Integrative Biodiversity Research (iDiv) Deutscher Platz 5d 04103 Leipzig Germany

Jula Zimmermann <jula.zimmermann@idiv-biodiversity.de>

Leipzig Biodiversity

6 PhD Positions at the German Centre for Integrative Biodiversity Research - iDiv in Leipzig, Germany

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Marten Winter <marten.winter@ufz.de>

LeipzigMPI ChimpanzeeMHC

PhD Position: MHC Variation in Wild Chimpanzees

A PhD position is available within the molecular genetics group (http://www.eva.mpg.de/primat/files/-genetics.htm) in the Primatology Department at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. This project will use next generation sequencing of DNA from noninvasive samples to characterize variation at multiple loci of the major histocompatibility complex (MHC) in wild chimpanzees. The degree of functional diversity in individuals will be assessed and compared among communities, populations, and subspecies. This project does not involve field research, but will incorporate use of data and fecal samples from wild chimpanzees that are the subjects of long term observation by collaborators in the field.

This position falls within the Leipzig School of Human Origins (http://imprs.eva.mpg.de/start.html), a joint graduate program of the University of Leipzig (Germany) and the Max Planck Institute for Evolutionary Anthropology. This program provides interdisciplinary training and research opportunities for university graduates who wish to work towards a Ph.D. in anthropology, biology, evolutionary genetics, primatology, paleoanthropology and related fields. Our graduate school is conducted in English, open for international students and designed as a 3-year-program with a research focus and a limited amount of formal classwork.

Qualifications/Experience: We invite applications from all countries. Applicants should have a Master's degree before the start of the program. Candidates should be fluent in written and spoken English. Knowledge of German is not required but international students have the opportunity to take free German courses. For this project a background and keen interest in molecular biology laboratory analyses is an advantage and knowledge of primates is helpful but not necessary.

Salary/funding: Ph.D. students are supported for the duration of their PhD by tax-free stipends of approximately 15,000 Euro per year. There are no tuition fees, and low cost health insurance is available. Leipzig is an attractive city with readily available housing and a relatively low cost of living.

Start Date and Applicaton process: Applicants should follow the application process described at http://www.leipzig-school.eva.mpg.de/index.html and indicate interest in this project. The application deadline is January 31, 2012, and the planned starting date is September 2, 2013.

Contact Information: Dr. Linda Vigilant vigilant@eva.mpg.de Deutscher Platz 6 Leipzig, Saxony 04103 Germany

vigilant@eva.mpg.de

LouisianaStateU PhylogeneticsMolecularEvolution

Ph.D. Students - Lab of Jeremy M. Brown - Louisiana State University

Phylogenetics, Phylogeography, and Molecular Evolution

Applications for doctoral students in the lab of Dr. Jeremy M. Brown at Louisiana State University (LSU) are now being accepted for Fall 2013 admission. Research in the Brown lab is broadly centered on the use of a phylogenetic perspective to understand organismal history and molecular evolution. We work on both empirical and methodological questions, often involving the development of novel statistical and computational approaches. Recent and ongoing empirical work includes large-scale studies of vertebrate phylogeny, the use of phylogenies as forensic tools in criminal cases of HIV transmission, and investigations into somatic diversification during tumor development. Recent and ongoing methodological work focuses on the development and testing of statistical approaches for phylogenomics and the interpretation/visualization of phylogenetic information in massive sets of trees. Extensive opportunities exist for collaboration with other outstanding evolutionary genetics labs at LSU (including those of Robb Brumfield, Mike Hellberg, Chris Austin, Dave Foltz, and Prosanta Chakrabarty among others). An interest in programming, computation, and/or statistics is encouraged, but no specific prior background is required. Incoming students will join a highly collaborative and interactive group of researchers: http://www.phyleaux1.lsu.edu/?q=node/8 . Accepted students are guaranteed funding through a mixture of research and teaching assistantships. Some excellent fellowship opportunities are also available for highly qualified applicants through the Louisiana Board of Regents (http://web.laregents.org/programs/borsf-programs/graduate-fellows/).

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

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

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

For more information on applying, see: http://www.biology.lsu.edu/cos/biosci/GraduateProgram/ProspectiveStudents/item39623.html https://app.applyyourself.com/?id=3Dgradlsu For more

information on the Brown lab, visit us on the web at: http://www.phyleauxgenetics.org/ For more information on LSU's Dept. of Biological Sciences, visit: http://www.biology.lsu.edu/ jembrown@lsu.edu

MNS LouisianaStateU Malaria

GREEN BLOOD AND MALARIA PhD RESEARCH

Lab of Chris Austin - Louisiana State University

Department of Biological Sciences &

Museum of Natural Science

Lab Web page: http://www.museum.lsu.edu/Austin/-Lab.html Ph.D. Student Wanted: I am currently seeking a highly motivated student to pursue his/her PhD working on a recently funded collaborative NSF grant examining one of the world's most enigmatic vertebrate physiologies (green blood). This project is in collaboration with Dr. Susan Perkins, American Museum of Natural History. Applications for doctoral students in the lab of Dr. Chris Austin at Louisiana State University (LSU) are now being accepted for Fall 2013 admission.

The Project: The scincid lizards of New Guinea are a diverse, complex and unique assemblage of lizards, representing over 70% of the lizard fauna on this "megadiverse" island. Several species of New Guinea skinks have evolved an unusual physiology - lime-green blood and tissues, a result of accumulation of biliverdin, a bile pigment. The adaptive significance of hyperbiliverdism is unknown, but two alternative hypotheses (distastefulness and crypsis) have already been ruled out. Bile pigments have been shown to be toxic to malaria parasites (Plasmodium), thus an anti-parasitic adaptation is possible. Preliminary data collected by the PI's show a trend towards reduced levels of Plasmodium infection (and other blood parasites) in green-blooded lizards, but an improved phylogeny of the hosts and more intensive sampling of the prevalence and parasitemia of the malaria parasites are needed to more conclusively test this hypothesis. Thus, the goals of this project are to conduct fieldwork in Papua New Guinea and use a large number of tissues and blood samples already in hand to obtain better estimates of the diversity of skinks and their malaria parasites, to describe any new species of skinks and malaria parasites, to resolve the phylogeny of the Melanesian species group and improve the diagnoses of both genera and species in this clade and then to test for patterns of parasitism in relation to the phylogeny and the physiology of these hosts. In addition we will use new high throughput next-generation DNA sequencing methods to sequence the genomes of lizards with green blood and closely related lizards with normal red blood in order to assess biomedical important genomic and proteomic innovations related to hyperbiliverdinism. The research looks at the evolution of one of the world's most exceptional vertebrate physiologies in order to explore the connections between genetic variation, molecular function, and disease. Understanding the genetic and proteomic adaptations of hyperbiliverdinism will provide an expansive multidisciplinary view of bile pigment physiology and will lead to new ways to think about bile pigments and jaundice and in doing so contribute to biomedicine and improve human health and economic development.

The Graduate Program: Accepted students are funded through a mixture of research, teaching, and curatorial assistantships. Some excellent fellowship opportunities are also available for highly qualified applicants through the Louisiana Board of Regents (http://web.laregents.org/programs/borsf-programs/graduate-fellows/). LSU's Dept. of Biological Sciences has a particular strength in systematics, ecology, evolution, and computational evolutionary genetics and outstanding resources are available through the Center for Computation and Technology (http://-www.cct.lsu.edu/home) and the Louisiana Optical Network Initiative (http://www.loni.org/).

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

For more information on applying, see:

http://www.biology.lsu.edu/cos/biosci/-GraduateProgram/ProspectiveStudents/-item39623.html https://app.applyyourself.com/-?id=3Dgradlsu For more information on LSU's Dept. of Biological Sciences, visit:

http://www.biology.lsu.edu/ If you are potentially interested, please contact me:

Christopher Austin, Ph.D. Associate Professor, Department of Biological Sciences Head Curator of Amphibians & Reptiles, Museum of Natural Science 119 Foster Hall Louisiana State University Baton Rouge, LA 70803-3216

e-mail: ccaustin@lsu.edu

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

MasseyU NZ BacterialEvolution

*PhD project opportunity available to investigate the genetics and evolution of cell shape in bacteria. *

Seeking at least one PhD student with interests in genetics, evolution, and microbiology to conduct research into the evolution of cell shape in bacteria.

*Project Description: *

The ancestral shape of extant bacterial lineages is rod-like and most well studied bacteria today maintain this shape or a variant of it. Rod-like cell shape optimizes a number of important parameters that contribute to DNA segregation, cell surface contact, surface to volume ratio and reproducibility. However, spherical bacteria have evolved and some of these are among our most worrying pathogens. This trait is conveyed primarily by a single protein, the actin homolog in bacteria, and loss of this protein is generally extremely deleterious or lethal. How then have these modern microbial lineages made the leap across this selective valley to become spherical?

We are embarking on a project to elucidate this evolutionary transition by recapitulating gene loss and subsequent recovery of fitness in a long term evolutionary experiment. In this way we can not only uncover important genes that contribute to adaptation to spherical shape but we can genetically elucidate otherwise concealed aspects of cell biology are contingent on cell shape.

The project emerges as a collaboration between Dr. Paul Rainey at the New Zealand Institute of Advanced Study and Dr. Heather Hendrickson at the New Institute of Natural and Mathematical Sciences, both at Massey University Albany < http://www.massey.ac.nz/massey/learning/-departments/institute-natural-sciences/staff/heather-hendrickson.cfm > .

The Ideal Candidate:

The ideal candidate will possess experience in molecular genetics, genomics, evolutionary genetics and microbiology. Past experience in fluorescent microscopy is helpful but not required. The successful candidate will be motivated and organised, with a demonstrated capacity to master the broad skill set necessary for the successful completion of a research project. He or she will be a competent laboratory worker, with experience of all routine molecular genetic techniques, should be computer literate and have excellent communication skills.

Minimum qualifications:

B.Sc. (Hons) and/or M.Sc. in Genetics, Genomics, Molecular Biology or Microbiology equivalent with an A average or better.

Scholarship Funding:

Financial support via Massey University Institute of Natural and Mathematical Sciences. This position is available immediately and lasts for three years. The studentship covers all university fees and an annual tax-exempt stipend of NZ$25,000. Students with exceptional undergraduate marks may be eligible for a University Scholarship which provides an increased stipend. Additional income may also be available from tutorial and laboratory supervision roles, although there is no formal teaching requirement.

Eligibility:

Open to all nationalities. However, overseas candidates for whom English is not a first language must satisfy the English Language Requirements of the University to be eligible for study. Other international eligibility criteria and details regarding entrance to the program can be found in the Massey University Doctoral Study Handbook < http://www.massey.ac.nz/massey/-postgraduate/doctoral-study/doctoralhandbook/-enter-programme.cfm > .

How to Apply:

Interested applicants are encouraged to make informal enquiries to Dr. Heather Hendrickson. Please send your Curriculum Vitae, a copy of your academic transcript, a sample of your written scientific work and the names of three referees with a covering letter to: H.hendrickson@massey.ac.nz

Applications will be accepted until the position is filled. It would be desirable if the successful applicant were able to start in mid 2013.

Dr. Heather Hendrickson Lecturer, Evolutionary Genetics New Zealand Institute for Advanced Study Massey University Private Bag 102 904 North Shore Mail Centre Auckland, New Zealand

W: (+64) (0)9 414 0800 xt. 41494

email: H.Hendrickson@massey.ac.nz skype: hhendrickson http://evolution.massey.ac.nz/-rainey/heather.shtml Heather Hendrickson <hhendrickson@gmail.com>

MaxPlanck HumanEvolution

Field assistant or PhD position

Title: Behavioral Ecology and Spatial Cognition in the Aka hunter-gatherers Hiring organization: Max Planck Institute for Evolutionary Anthropology (MPI EVAN)

Position Description: We are looking for a candidate for a project on the spatial cognition and knowledge of the Aka hunter-gatherers of the Central African Republic.

The project will be carried out in the broader frame of improving our understanding of the natural spatial skills requires for foraging in the tropical forest ecology of modern hunter-gatherers. This project is a joint collaborative project of Christophe Boesch with Barry Hewlett of Vancouver (USA). The candidate will be primary responsible of mapping food resources in the Aka territory and follow individuals during their daily forays in the forest.

Work Schedule: - Preparation: approximately 2 weeks at the MPI EVAN - Data collection: First field trip of 4 months in CAR is planned but is dependent upon the progress of the data collection. - Analysis at the MPI EVAN

Qualifications/Requirements: MSc (or comparable degree) in Behavioral Ecology or Anthropology. Sound field experience in the tropics, botanical knowledge, developed experience with GIS and GPS techniques will be favored. The field work requires good physical condition, the ability to work independently and under remote conditions. Good French speaking abilities are required. If the qualification is there and the first field experience is completed to satisfaction, a Ph.D. on spatial cognition in the Aka hunter-gatherer could be envisioned.

Salary/funding: The candidate will be supported by a stipend.

Terms of Appointment: Initially for 6 months

Comments: Applications including a cover letter stating research experience and interests, detailed curriculum vitae, and the names and e-mail addresses of two referees should be sent electronically. The evaluation process will start immediately and applications will be accepted until position is filled.

Contact Information: Christophe Boesch boesch@eva.mpg.de www.eva.mpg.de/primat - Assistant to Prof. Christophe Boesch -

Max-Planck-Institute for Evolutionary Anthropology Department of Primatology Deutscher Platz No 6 D-04103 Leipzig / Germany

e-mail nebel@eva.mpg.de phone ++49 (0) 341 3550 200 fax ++49 (0) 341 3550 299 Internet http://www.eva.mpg.de/primat/ Save the Great Apes! Sign mAn: http://www.apesmanifesto.org Wild Chimpanzee Foundation: www.wildchimps.org Bonobo Alive: www.bonobo-alive.org Orang Utans in Not: www.orang-utans-in-not.org Claudia Nebel <nebel@eva.mpg.de>

MichiganStateU BEACON

BEACON Center for the Study of Evolution in Action

BEACON Top-Up Fellowships for New Graduate Students

**BEACON is an NSF Science and Technology Center headquartered at Michigan State University with partners at North Carolina A&T State University, University of Idaho, University of Texas at Austin, and University of Washington. BEACON brings together biologists, computer scientists, and engineers to study evolutionary dynamics using biological and computational techniques and to apply evolutionary principles to engineering problems. We seek outstanding PhD students to pursue interdisciplinary research on evolution in action with BEACON faculty members, in the fields of biology, computer science, and/or engineering.

As part of BEACON's efforts to recruit a high quality, diverse graduate student population, we are offering top-up fellowships to doctoral students accepted at Michigan State University who are interested in participating in BEACON research. To be eligible for these fellowships, a student must be nominated by a prospective adviser who is a participating BEACON faculty member. Please see our website (http://www.beacon-center.org) for more information about the center and for a list of participating faculty members.

/Eligibility:/ Top-Up Recruiting Fellowships can be

used to support applicants to Ph.D. programs in all departments at MSU that conduct research in this area, with preference given to applicants who are citizens or permanent residents of the US. *Any applicant nominated for a Top-Up Recruiting Fellowship must be nominated by a BEACON faculty member. *In addition, the applicant must receive a 5-year support commitment from the faculty member and/or department or university. BEACON strongly encourages faculty to nominate women, students from underrepresented minorities, and persons with disabilities.

/Top-Up Recruiting Fellowship Details: /If an applicant is awarded a BEACON Top-Up Recruiting Fellowship, they will receive between $3,000 and $5,000 in additional fellowship funds for each year they participate in BEACON activities, for up to a maximum of five years. If the applicant receives an NSF or other similar fellowship already providing $30,000 or more in annual support, BEACON will offer a one-time fellowship supplement of $5,000 for the duration of that fellowship.

/Requirements:/ Students receiving this fellowship will be required to take two BEACON-related courses during their first year: one course on either evolutionary biology or computational evolution (whichever is not part of the student's background) during Fall Semester 2013, and one project course where students work in interdisciplinary groups during Spring Semester 2014. This requirement is to support BEACON's goal of encouraging students to pursue multi-disciplinary research. These courses are normally included in the student's academic program.

/To apply:/ Prospective students cannot apply directly for a fellowship and must be nominated by a faculty member. Prospective students should indicate their interest in participating in BEACON when applying to a graduate program at Michigan State University, and discuss their interest with a participating faculty member. Participating departments include: Zoology, Microbiology and Molecular Genetics, Computer Science and Engineering, Electrical and Computer Engineering, Mechanical Engineering, Plant Biology, Fisheries & Wildlife, and others.

– Danielle J. Whittaker, Ph.D. Managing Director BEACON Center for the Study of Evolution in Action 567 Wilson Road, Room 1441E Michigan State University East Lansing, MI 48824 (517) 884-2561 djwhitta@msu.edu http://beacon-center.org "Danielle J. Whittaker" <djwhitta@msu.edu>

Portland PlantEvolution

Graduate position: Landscape genetics of plants

We are looking to recruit graduate students (Ms or PhD) interested in plant ecological genetics and willing to participate in the development of methods in landscape genetics for the analysis of dispersal among plant populations.

*Why study landscape genetics? *

The development of methods for the analysis of population genetic differentiation in the context of landscape features has provided insights into ecological processes such as dispersal. Plant species present unique opportunities and challenges for landscape genetic analyses, as the behavior of their associated biotic and abiotic dispersal vectors as well as the distribution of suitable habitat may affect patterns of genetic variation. Understanding how landscape features may facilitate or limit the dispersal of plants is particularly critical as climate change affects the distribution of suitable habitat.

*What are we looking for? *

An ideal candidate will have experience with laboratory assays and data analyses for genetic markers, GIS analyses, and field ecological methods or some combination of the above; however, these are not strict requirements, and candidates with an interest in the topic and eagerness to learn are encouraged to apply.

*Interested? *

Please send a copy of your CV, as well as a letter of introduction to Cruzan@pdx.edu that includes a brief statement of your background, research interests and your academic record, including GPA and GRE scores (if available).

cruzan@pdx.edu

PortlandStateU EvolGeneticsPlants

Graduate position: Landscape genetics of plants

The development of methods for the analysis of population genetic differentiation in the context of land-

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

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

cruzan@pdx.edu

QueensU Belfast InsectImmunityEvolution

Competition funded PhD position at Queen's University Belfast

Mother knows best: transgenerational immunity in insects

Supervisors: Dr Sheena Cotter, Dr Nikki Clayton (Queen's University Belfast)

Dr Archie Murchie (AFBI)

Parasites and pathogens are ubiquitous, and the ability to fight off infection is key to an organism's fitness. However, in addition to this personal immunity, some immune responses are produced for the benefit of others (social immunity). One example of social immunity is the ability of a parent to transfer immunity to its offspring. This has long been known in mammals (e.g. antibodies in milk), but has recently been found also to occur in insects, which provide a much more tractable system for answering questions regarding the evolution of this trait. Burying beetles show elaborate parental care, which includes protecting the breeding resource for their offspring with antibacterial secretions - a form of social immunity. It is known that these secretions are costly (Cotter et al 2010) and that they trade-off with the personal immune response (Cotter et al, In Press), but whether these two types of immunity (personal and social) can be transferred to offspring, and under which environmental conditions this is likely to occur have yet to be investigated.

The aim of this PhD studentship is to understand under which circumstances either personal or social immune responses can be transmitted to offspring, and whether this occurs pre- or post-hatching. The student will combine field studies, to ascertain the parasites and pathogens affecting burying beetles in the wild, with lab manipulations of parasitism in parents, to determine the effects on offspring.

Training

The student will receive training in:

* Insect rearing, collection and pedigrees

* Parasite assays

* Immunity assays

* Statistical analysis

Applications

Application procedure:

Informal enquiries to Dr Sheena Cotter, Tel: 028 90972691, Email: s.cotter@qub.ac.uk

Application via Queen's applications portal: https://-dap.qub.ac.uk/portal/user/u_login.php Eligibility

The DEL studentship (equivalent to a NERC studentship) is available in full to UK students and on a fees-only basis to EU students. Students from outside the EU are not eligible for funding.

Please see http://go.qub.ac.uk/delterms for further information regarding eligibility.

Sheena Cotter NERC Fellow/Proleptic Lecturer in Ecology and Evolutionary Genetics

School of Biological Sciences Queen's University Belfast Medical Biology Centre 97 Lisburn Rd Belfast BT9 7BL

Tel: 028 9097 2691 Fax: 028 9097 5877 Email: s.cotter@qub.ac.uk Webpage: http://www.qub.ac.uk/-schools/SchoolofBiologicalSciences/Staff/-DrSCCotter/ Sheena Cotter <s.cotter@qub.ac.uk>

RutgersU ViralPhylogenetics

Rutgers University, Viral evolution/Phylogenetics

The Duffy lab (http://www.rci.rutgers.edu/~siobain/) at Rutgers University is recruiting a PhD student to work on an NSF-funded project aimed at assembling the tree of life for circular, eukaryotic single-stranded DNA viruses. This group of ssDNA viruses contains emergent crop and livestock pathogens, and has been historically undersampled in viral metagenomes.

The ideal candidate will be a motivated, curious scientist with a strong interest in phylogenetics, systematics and microbiology. Regardless of undergraduate major, s/he should have a background in evolution or microbiology, and have previous wet or dry laboratory experience. The student could matriculate through the graduate program in Ecology and Evolution, Microbial Biology, or Microbiology and Molecular Genetics. The student could start in the Fall of 2013 or in 2014.

Rutgers, the State University of New Jersey, is a leading national public research university. New Brunswick is within an hours drive of New York City and beaches on the Atlantic Ocean, and within a 90 minute drive of Philadelphia and the Appalachian Trail. New Jersey is one of the most ethnically diverse states, with over 20% of the population having immigrated to the US.

Any queries should be addressed to Siobain Duffy (duffy@aesop.rutgers.edu), and should include a current CV (as a .pdf). Candidates from all backgrounds are encouraged to apply.

Siobain Duffy <duffy@AESOP.Rutgers.edu>

SUNY Binghamton Evolutionary Genetics

SUNY_Binghamton.Evolutionary_Genetics

Graduate Student Position in Evolutionary Genetics of Insect Reproduction

A graduate student position (Ph.D.) is available in Anthony Fiumera's lab to study insect reproduction using the model genetic system, Drosophila melanogaster. We have two research projects ongoing. One project is focused on genetic interactions between males and females that influence pre-and post-copulatory sexual selection. Another project is aimed at studying the effects of environmental toxicants on insect reproduction and will focus on identifying genes that influence susceptibility to these toxicants.

I am looking for bright and dedicated students that want to join a vibrant research lab and learn a combination of skills in evolutionary genetics, molecular biology and/or computational biology. Financial aid may be available for highly qualified applicants through either Research Assistantships or Graduate Teaching Assistantships. Please visit my website for more information on the lab.

http://bingweb.binghamton.edu/~afiumera/-home.html Binghamton University is a doctoral granting campus in the SUNY (State University of New York) system and is consistently ranked as one of the top 50 public universities in the nation by U.S. News & World Reports. Located in the Southern Tier of upstate New York, Binghamton University offers quick access to a variety of outdoor activities yet is only a few hours away from both New York City and Philadelphia.

If you are interested please contact Anthony Fiumera: afiumera@binghamton.edu

afiumera@gmail.com

SanFranciscoStateU SalamanderEvolution

TITLE: SFSU graduate student (M.S.) positions in salamander behavior and disease ecology

CONTENT: Two graduate student (M.S.) positions are available, including two years of stipend and tuition remission, in the Department of Biology at San Francisco State University. These students will be co-advised by Andy Zink and Vance Vredenburg and work directly on a project investigating the relationships between communal nesting in Batrachoseps salamanders and the spread of fungal pathogens. Students will be expected to combine laboratory work (sampling museum specimens, quantitative PCR) with field work on salamander behavior and ecology throughout California. Interested students should email their CV, unofficial transcripts, and GRE scores to Andy Zink at <zink@sfsu.edu> with

SALAMANDER POSITION (MS) in the subject line of the email.

Andrew G. Zink Assistant Professor of Biology San Francisco State University

http://online.sfsu.edu/zink/ http://biology.sfsu.edu/-people/andrew-zink Andrew Zink <zink@sfsu.edu>

Spain PlantEvolutionaryEcology

The research group on Population Genetics and Evolution at INIA-CIFOR (Madrid, Spain) is searching highly motivated graduate students with interests in forest genetics and evolutionary biology. **

Erasmus Mundus scholarships have opened a call on Mediterranean Forestry and Natural Resources. The call is linked to a PhD program on Sustainable Forest Management at Valladolid University (location in Palencia, Spain) of the Sustainable Forest Management Research Institute.

Interested students should apply for a grant within this program,

http://www.medfor.eu/howtoapply/schollarships We offer at least one PhD thesis in the framework of a national-funding project and an EU project (Trees4Future).

The project is centered in the intra-specific variation and plasticity of life history traits in pines and trade-offs between reproduction and growth, defenses and stress tolerance. The ultimate target is to understand the evolutionary processes related to wild populations adaptation to varying stress (both abiotic and biotic) and perturbation regimes and inferring the possibilities to adapt to future environmental challenges by shifting resources between developmental processes.

The PhD student will be oriented by Dr. José Climent in close collaboration with Drs. R. Alía and JJ. Robledo-Arnuncio from INIA-CIFOR and Drs.Rafael Zas from MBG-CSIC and Jordi Voltas from Univ. of Lleida, (Univ of Lleida also participates in Erasmus Mundus Medfor). Further collaborations with top European scientists in forest genetics and evolution will be encouraged.

More info about the Sustainable Forest Management Research Institute

http://sostenible.palencia.uva.es/default.aspx Brief description of Jose Climent research activity:

http://wwwsp.inia.es/Investigacion/centros/-CIFOR/departamentos/ecofor/personalgenetica/-Documents/cv%20J%20CLIMENT.pdf or https://-sites.google.com/site/climentjm/ Students interested please send a CV and contact Jose Climent (climent@inia.es).

Deadline for applying Erasmus Mundus Medfor grants is Januray 15 2013.

Luis Santos <luisaemf@gmail.com>

StLouisU EvolutionaryGenomics

Ph.D. position in Evolutionary Genomics - Saint Louis University

A Ph.D. position is available in Claudio Casola's lab at Saint Louis University. We are mainly interested in understanding the evolution of genes and genomes in model and non-model eukaryotes using computational and statistic approaches. Current research interests in the lab include gene duplication and gene deletion, comparative and population genomics of allelic and interlocus gene conversion, and the origin of genomic novelties from transposable elements. More details on active projects in the lab are available online at https://sites.google.com/a/slu.edu/ccasola I am seeking bright and highly motivated students interested in learning a combination of skills in molecular evolution, computational biology and genomics. New students in the Department of Biology are generally supported on TAs, with funding priority to PhD students. Interested applicants are strongly encouraged to contact Claudio Casola (ccasola@slu.edu) as soon as possible: openings and funding are available through January 10. However, interested persons should contact me after this deadline to enquire for possible openings. For more information about the Biology Graduate Program please visit https://sites.google.com/a/slu.edu/-biology-graduate-program/home Saint Louis University is home to a vibrant community of scholars and a highly diverse student body, and is consistently ranked as one of the top 100 universities in the nation. Saint Louis combines an affordable life-style with an energetic community of students from four large universities. The city is experiencing a large-scale ongoing revitalization, and is renowned for the numerous parks and the variety of free attractions, including a world-class zoo and botanical garden, the Art and the History Museums,

and the Science Center.

Claudio Casola, Ph.D. St. Louis University Assistant Professor Department of Biology Macelwane Hall, Room 208 Phone: (314) 977-3909 Fax: (314) 977-3658 ccasola@slu.edu https://sites.google.com/a/slu.edu/ccasola/ ccasola@slu.edu

TexasTechU PlantEvolutionaryGenetics

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

Graduate student training positions supported by teaching and research assistantships are available to work in plant ecological genetics in the Olson lab at Texas Tech University (http://www.faculty.biol.ttu.edu/olson/Welcome.html). Students interested in applying experimental or molecular approaches to questions in any aspect of plant ecological genetics are invited to apply. Our lab is currently focused on understanding the genetic basis and evolutionary mechanisms governing local adaptation, especially in relation to the evolution of plant breeding systems and traits likely important for adaptation to climate regimes including drought, cold, and latitude. Interested students should contact Matt Olson directly at <matt.olson@ttu.edu> to discuss mutual interests and instructions on how to apply. Students applying before the end of January will be assured full consideration.

"Olson, Matt" <matt.olson@ttu.edu>

TrentU ConservationGenetics

MSc POSITION in conservation genetics in the Environmental and Life Sciences Graduate Program, Trent University, Canada.

Project description: Eastern flowering dogwood (Cornus florida L.) is a small understorey tree native to the Carolinian forests in southern Ontario. It provides a valuable food source for mammals, birds, and invertebrates, and plays an important role in nutrient cycling. Eastern flowering dogwood has been classified as endangered in Ontario, largely because populations are being decimated by anthracnose fungus. Using a combination of field and lab work, the objective of this project is to quantify population genetic parameters of this species (genetic diversity, inbreeding, gene flow), search for possible sources of resistant trees, and contribute to the ongoing mapping of infected trees. This project will be done in collaboration with personnel from the Ontario Ministry of Natural Resources.

Qualifications: BSc or similar degree. Previous experience in field work and genetic lab work an asset, but not essential.

How to apply: Application should include (1) a letter stating why the applicant should be considered a strong candidate for the position, (2) a CV, (3) names, with e-mail addresses and telephone numbers, of two referees, and (4) any other documents that the applicant deems relevant. Please send enquiries or applications to joannafreeland@trentu.ca .

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

TulaneU AvianSystematics

PhD student opportunity in avian systematics

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

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

The successful candidate will have a proven capacity

for writing and communication, excellent interpersonal skills, and strong quantitative skills (e.g. computer programming, bioinformatics). Salary and benefits are competitive.

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

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

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

ederrybe@tulane.edu

UAlberta EvolutionInfectiousDiseases

A graduate research position (MSc or PhD*) *is available in Dr. Lien Luongs research group (http:/-/www.biology.ualberta.ca/faculty/lien_luong/) at the University of Alberta. Students interested in the ecology and evolution of infectious diseases and/or parasite-host interactions are encouraged to apply.

Pathogenic organisms that are harmless under certain conditions can suddenly become extremely harmful under different circumstances. Indeed levels of parasitism vary continuously in nature, with some species shifting along a continuum from benign to pathogenic over ecological and evolutionary time. But even more fundamental to this issue is the process by which parasitism evolved. One of our goals is to investigate the life-history evolution of parasites that express variation in host exploitation strategies, and identify the selection pressures that lead to the transition to a parasitic lifestyle. Facultative parasites present a unique and interesting opportunity for addressing these questions because they regularly shift from free-living to parasitic lifestyles. The facultative ectoparasitic mite, Macrocheles subbadius feeds and reproduces on highly ephemeral habitats. However, mites become parasitic under certain circumstances by attaching to and feeding on Drosophila* *fruit fly hosts. Using this study system, the student will experimentally investigate the ecological factors and evolutionary changes that lead to increased infectivity.

The Department of Biological Sciences at U of A is one of the largest and most scientifically diverse departments of its kind in Canada. We offer research-orientated, thesis-based graduate programs at both the MSc and PhD levels. Study programs are tailored individually to graduate student needs and emphasize interdisciplinary thinking. All students accepted into our MSc program have guaranteed funding for at least 2.3 years, at the rate of approximately $22,680/year. Teaching training is provided and is mandatory for all students on graduate teaching assistantships. With ~270 graduate students, >70 full-time faculty, excellent support facilities and ample research funding, a vibrant and exciting learning environment is provided. For more information about applying to the graduate program: http://www.biology.ualberta.ca/programs/-graduate/prospective/ Highly motivated and independent students interested in developing their own research ideas are also encouraged to apply. If you know of an exceptional student who might be interested, please forward this information onto him/her. To apply, please send a brief (max. 1 page) explanation of your research experience and interests, a copy of your curriculum vitae, and names and contact information for 3 references. Email the above as a single .pdf file to lluong@ualberta.ca. Review of applications will begin February 1, 2013. The ideal start date is September 2013. For more information, please contact Dr. Lien Luong (lluong@ualberta.ca).

Lien Luong <lluong@ualberta.ca>

UAntwerp EvolutionaryEcologyBirdParasites

Doctoral student in Ecology Evolutionary Ecology of nest-parasite communities in cavity-nesting birds

Despite the multitude of studies on nestbox-breeding birds, surprisingly little attention has been paid to host-parasite interactions, and to nest parasites in particular. Moreover, most studies have focused on single parasite species without considering interactions among different parasite species or factors governing parasite diversity. Aside from their relevance to their bird hosts, nest parasites can also be studied as ecological com-

munities in their own right. Thanks to their highly standardized conditions and amenability to field experiments with a high degree of spatial replication, nestboxes can be regarded as semi-natural mesocosms that can be used for investigating topics such as interspecific interactions, dispersal and environmental gradients such as urbanization. The present project originated as part of an inter-university, multi-taxon research project on eco-evolutionary dynamics along a single urbanization gradient in Belgium, including communities ranging from birds to plants to aquatic zooplankton. The project is also embedded in a long-term research programme on population dynamics and evolutionary ecology of cavity-nesting birds.

The specific objectives of this PhD project are (1) to describe variation in species richness, community structure and functional diversity of parasites and commensal species inhabiting nests of great tits (Parus major) along an urbanization gradient in Belgium; (2) to study the impact of parasite communities on host fitness, using demographic data collected in an ongoing population study; (3) to study how prevalence and abundance of parasite species are affected by ecological interactions within the nest (competition, mutualism, predation) and how these interactions vary along the urbanization gradient; and (4) to analyze the potential for evolutionary change along this gradient by studying variation at genotypic (using neutral markers) and phenotypic level (life history traits, virulence- and dispersal-related traits) for one or more parasite species.

Profile and requirements

* You hold a Master degree in Biology or comparable with a strong background in ecology and evolutionary biology;

* You can submit outstanding academic results; * You have a solid training in both uni- and multivariate statistical analysis; * Experience with parasite research, entomology and/or community ecology is an advantage;

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 of the scholarship will be April 1st 2013;

* You will enrol in the Antwerp Doctoral School training program (www.ua.ac.be/ads) allowing you to take part in various courses, training programs and conferences within and outside the university;

* You will work in a team of several PhD students, postdocs and technical staff involved in eco-evolutionary research on birds and bird parasites;

* You will be member of the Evolutionary Ecology group, a dynamic and internationally-oriented research group that combines field, lab and modelling approaches to study various questions in ecological and evolutionary research, mainly focusing on birds and mammals (www.ua.ac.be/eveco).

Interested?

* Applicants should send their complete CV, a one-page statement of research interests and motivation for this project, and contact information of two referees who can supply letters of recommendation upon our request

* Applications should be submitted by email to Prof. Erik Matthysen at erik.matthysen@ua.ac.be until the closing date: 20 January 2013

* For more information, contact Erik Matthysen at the same email adress or at (+32) 3265 3464

The University of Antwerp strives to contribute to an open, democratic and multi-cultural society. We follow an equal-opportunity policy.

erik.matthysen@ua.ac.be

UArkansas Diatom Genomics

PhD positions in the Department of Biological Sciences at the University of Arkansas are available beginning in Fall 2013. Research topics center around the phylogeny, systematics, and evolutionary and ecological genomics of diatoms. Students will be encouraged to develop independent research projects in any of these areas. Descriptions of several ongoing projects are available here: http://alverson.openwetware.org/Research.html . The University of Arkansas has a highly diverse, vibrant and rapidly growing student body. The main Fayetteville campus is located in the heart of the beautiful Ozark Mountains, which offer countless outdoor recreational opportunities, including hiking, backpacking, mountain biking, and kayaking.

Interested applicants should contact Andy Alverson (aja@uark.edu) before applying. Applicants must meet graduate admission requirements, and highly qualified candidates with a Masters degree are eligible for Distinguished Doctoral Fellows (DDF) and Doctoral Academy Fellows (DAF). DDFs have a salary range of $30,000V$35,000 for a 12-month stipend, and the DAFs have a range of $20,000V$25,000 for a 12-month

stipend. Additional information, including requirements and deadlines for these opportunities, can be found at http://biology.uark.edu/1255.htm and http://grad.uark.edu/future/funding/index.php. Information on how to apply to the Department of Biological Sciences can be found at http://biology.uark.edu/1251.htm. The deadline for graduate applications for Fall 2013 admission is January 15, 2013.

Andrew Alverson University of Arkansas Department of Biological Sciences 1 University of Arkansas, SCEN 601 Fayetteville, AR 72701-1201

office: 479-575-7975 lab: 479-575-4886

http://alverson.openwetware.org/ Andrew James Alverson <aja@uark.edu>

UAuckland EvolutionCognition

Project title: The Genetics of Complex Cognition

We are seeking a PhD student with interests in ethology, evolution, behavioural ecology and genetics to conduct research into the genetic basis of complex cognition in tool-using New Caledonian crows. The 3- year project is part of a new Marsden grant led by Dr Gavin Hunt (Auckland), in collaboration with Profs Neil Gemmell (Otago) and Russell Gray (Auckland). The PhD position will be based in the Language, Cognition and Culture lab at the University of Auckland led by Prof. Gray.

Project description: The discovery of complex avian cognitive abilities has revolutionized our understanding of the evolution of intelligence. However, the genetic basis of these abilities is unknown. One possibility is that numerous changes in genes across a wide range of functional domains are required for the evolution of complex intelligence. Alternatively, only a limited number of genetic tweaks might be required. The New Caledonian crow offers a highly suitable model to investigate the genetics of complex cognition. This species has a remarkable tool-using lifestyle and manufactures the most sophisticated tools made by nonhuman animals. In contrast, the NC crow's close Corvus relatives do not use tools. Furthermore, distinct local variation exists in NC crows' tool skills that is potentially associated with phenotypic as well as cultural differences. This exciting multi- disciplinary project combines genetics and behavioural ecology to search for genes that underpin a tool-using lifestyle.

The successful candidate will assist in the collection of genetic samples in the southwest pacific outside New Caledonia. The main focus of the student will be fieldwork on the island of Grande Terre, New Caledonia. This work will involve documenting variation in the tool behaviour of NC crows across selected sites, in combination with catching and banding birds and collecting blood samples from them.

Essential qualities for the position. 1. A minimum of First Class or 2.1 Honours Degree in a relevant subject area 2. Proven skill and enthusiasm for fieldwork 3. Confidence at handling birds and a willingness to learn avian blood collection techniques 4. Ability and willingness to live and work for extended periods in tropical conditions under challenging field conditions (e.g., working alone, research in remote rainforest sites, difficult weather conditions) 5. A basic level of conversational French and a willingness to learn the language 6. A valid driving licence and proven driving skills 7. An ability to obtain a temporary resident visa for research in New Caledonia (French overseas territory)

Funding: The PhD position and associated fees are fully funded by the Marsden grant.

How to Apply: Informal pre-submission enquiries to Prof. Russell Gray and Dr. Gavin Hunt are welcome. Please send your formal submission of Curriculum Vitae, academic transcript, a sample of your written scientific work, the names of three referees and a cover letter to: Prof. Russell Gray: Email: rd.gray@auckland.ac.nz Dr. Gavin Hunt: Email: g.hunt@auckland.ac.nz

Further information: See the 'Cognition and culture in New Caledonian crows' website at the University of Auckland for general information about our research on New Caledonian crows and a list of publications. See also the websites of Prof. Gemmell's genetics laboratory at the University of Otago and the Centre for Reproduction and Genomics http://www.psych.auckland.ac.nz/nc-crows http://gemmell-lab.otago.ac.nz/ http://www.otago.ac.nz/crg/staff/otago019504.html Applications close on the 31/1/2013.

Dr Gavin Hunt

School of Psychology, University of Auckland, Private Bag 92019, Auckland 1142, New Zealand.

Tel - general: (+64) 09 373-7599; Tel - DDI: (+64) 09 923-4790; Fax: (+64) 09 373-7450

Our crow web site: http://www.psych.auckland.ac.nz/nc-crows grhunt10@hotmail.com

UBielefeld EvolutionaryBehaviour

Social behaviour of shorebird populations in Madagascar: behaviour, demography and genetics

PhD studentship (3 years), Bielefeld University (Germany) & University of Bath (UK)

Supervisors: Prof. Oliver Krüger, Dr. Joe Hoffman and Prof. Tamás Székely

Mating systems and parental behaviour are among the most diverse social behaviours, and recent works suggest that the social environment influences these behaviours. Small plovers (Charadrius spp.) exhibit monogamous and polygynous breeding systems and some of this variation appear to relate to sex ratios. The objective of the studentship is to carry out fieldwork in three plover populations in Madagascar, and using molecular genetic analysis together with demographic modelling, test whether breeding systems are influenced by the social environment.

We seek a bright and motivated student with strong interests in evolutionary ecology and behavioural ecology. Willingness to carry out fieldwork in a harsh tropical environment is essential for this position. The student will search for nests, trap birds and take blood samples and record their behaviour. In addition, he/she will use molecular genetic methods to test hypotheses of mating system evolution, and develop demographic models to estimate key demographic properties of natural populations. Previous experience with avian field biology, statistical modelling and/or microsatellite genotyping is advantageous. Strong quantitative skills are essential, and willingness to programme is a must.

Fieldwork will be in a remote and pristine location in SW Madagascar. Commodities are extremely basic, the weather can be very harsh, and a great deal of walking and cycling are required. Opportunities for outside communication are very limited. You must be physically fit, hard-working and meticulous, and have a proven ability to work independently. You must have a positive attitude and an ability to look after yourself (i.e. cook your own meals, deal with logistics and organise your own work over extended periods).

The student will be based at the Department of Animal Behaviour at Bielefeld University (www.uni-bielefeld.de/(en)/biologie/vhf/index.html). The Department offers a stimulating international environment and an excellent research infrastructure with access to state-of-the-art techniques. The working language of the Department is English. The student will also spend some of his/her time at the Biodiversity Laboratory at the University of Bath (www.bath.ac.uk/bio-sci/-biodiversity-lab/index.htm).

This studentship (E13/65%) is funded by the German Science Foundation (DFG) and is available for 3 years. Full funding is available for fieldwork and for attending conferences. Please send your CV, the name of 2 referees, and a concise statement of your research interests as a single PDF file to: oliver.krueger@uni-bielefeld.de. For further information concerning this studentship, please contact Oliver Krüger (oliver.krueger@uni-bielefeld.de), Joe Hoffman (joseph.hoffman@uni-bielefeld.de) or Tamás Székely (bssts@bath.ac.uk).

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

The deadline for applications is Friday 25 January 2013.

Interviews will be held in early February and the position is available as soon as possible.

Joe Hoffman Department of Animal Behaviour University of Bielefeld

Postfach 100131

33501 Bielefeld

Germany

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

UCanberra LandscapeGenetics

PhD Opportunity Available at the University of Canberra

Landscape genetics in the Murray-Darling Basin.

We are seeking expressions of interest from suitably qualified students (first class honours or equivalent demonstrated through publication) to conduct research on the landscape genetics of selected freshwater taxa of the Murray-Darling Basin. Research opportunities

present themselves are several spatial and temporal scales. The project(s) will use nuclear DNA markers generated on NextGen sequencing platforms to investigate fine scale population structure in the context of contemporary influences on dispersal, such as dams and weirs, at a local scale and historical influences at the regional scale.

The project scope at the local scale will centre on the upper Murray, and the impact of dams and weirs in the Dartmouth/Hume/Yarrawonga/Torrumbarry storage complex and associated regulated (Broken) and unregulated (Ovens) tributaries of the Murray River. The project scope at the regional scale will focus on the MDB and adjacent central and coastal drainage basins to explore the historical phylogeography of selected instream taxa. Concordant patterns of genetic substructuring will be mapped against a bio-georegionalisation developed in other CRN projects.

Taxa identified as suitable on the basis of (a) life history and dispersal attributes, (b) widespread distribution and (c) preliminary evidence of genetic substructuring within the basin are: the Australian Smelt (Retropinna semoni), Murray Turtle (Emydura macquarii), Common Yabby (Cherax destructor) and the Giant River Prawn (Macrobrachium australiense).

Molecular markers will be developed using RADSeq or related approaches on the Illumina sequencing platform to generate panels of informative SNP markers in non-model organisms, so interest in these technologies and prior experience in DNA techniques is required.

Expressions of interest in a PhD scholarship within the scope of the project outlined above should include

(a) A concise statement in a few paragraphs of your background and interests, including why you are interested in this scholarship and what particular knowledge, skills and attitudes you would bring to the team.

(b) A concise statement in a few paragraphs of where you would see yourself career-wise in 5 year's time, and later in your career, and how this PhD candidate fits in with your aspirations.

(c) The names and contact details of two academic referees who are willing to attest to your ability to work collegiately and contribute positively in a team context, and who will be willing to provide strong support for your application.

(d) A Curriculum Vitae as an attachment, outlining your qualifications and experience.

Expressions of Interest should be directed to Bernd Gruber, Senior CRN Research Fellow, as soon as possible.

For further information about the position or to submit an expression of interest, contact Prof. Bernd Gruber (bernd.gruber@canberra.edu.au).

peter.mail2@unmack.net

UCincinnati EvolutionaryGenetics

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

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

Candidates for this position should have a B.S. or an M.S., with a strong background in plant genetic analysis and molecular techniques, as well as in statistical

analysis. A strong interest in plant conservation is also required. A familiarity with in vitro and/or cryopreservation methods is desirable.

This position provides an annual stipend of $22,000 in addition to a graduate scholarship which covers most tuition costs. The position will start no later than September, 2013, but an earlier start date can be considered.

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

culleyt@ucmail.uc.edu

UEdinburgh ParasiteEvolution

PhD STUDENTSHIPS IN PARASITE/ DISEASE EVOLUTIONARY ECOLOGY University of Edinburgh Sarah Reece http://reece.bio.ed.ac.uk/

(1) LIFE HISTORY EVOLUTION, PHENOTYPIC PLASTICITY AND REPRODUCTIVE STRATEGIES OF MALARIA PARASITES

Our lab integrates developments in disciplines across biology into an evolutionary-ecology framework to conduct novel experiments that investigate the strategies that malaria parasites have evolved to maximize their survival during infections and transmission to new hosts. Research at the interface between medicine and evolutionary ecology offers huge advances to both fields. This is the motivation for our work. For example, by using malaria parasites to test the predictions and assumptions underlying evolutionary theories we can reveal the generality and explanatory power of this approach. Likewise, explaining how parasites have evolved to cope with variable interactions with hosts and vectors (e.g., the availability of resources, competition with other parasites, exposure to drugs and vaccines), is central to making medical interventions as "evolution-proof" as possible. Possible questions that could form the basis of a PhD project on malaria parasites include: (a) how do parasites interact with relatives and non-relatives in mixed- strain or -species infections? (b) what is the optimal allocation of resources to male and female stages? (c) how do parasite mating behaviours maximize reproductive success in the mosquito gut? (d) why do parasites undergo a form of programmed cell suicide? (e) why has plasticity in parasite sex ratio and reproductive effort decisions evolved? (f) is plasticity in host exploitation traits, such as preference for different ages of red blood cell, adaptive? (g) do parasites actively coordinate important behaviours, such as developmental synchronicity?

(2) DRUG RESISTANCE IN PARASITIC NEMATODES

Parasitic nematodes live in the bodies of others - with whom they are engaged in a life-and-death struggle - yet, how parasites cope with the challenges of their lifestyle is remarkably poorly understood. Evolutionary processes continually erode efforts to control these pathogens and, as a consequence, such infections remain responsible for considerable mortality and morbidity in livestock, humans, and crops. Parasitic nematodes of sheep have readily evolved resistance to most anthelmintic drugs available, so finding ways to minimise selection for the emergence and spread of resistance is vital to maximise the useful lifespan of new anthelmintic products. Whilst some molecular markers for anthelmintic resistance genes have been identified, the evolution and ecology of resistance remains is poorly understood. This project could focus on asking one or more of the above questions within an evolutionary context (analogous to recent work on malaria parasites by Sarah Reece). The p roject will focus on investigating the nematodes of domestic sheep in collaboration with Jacqui Matthews (Moredun Research Institute, Edinburgh). Key questions remain unanswered, including: (a) What life history traits are involved in resistance or tolerance to anthelmintics (e.g., do worms shut down reproduction when exposed to drugs and does this help them survive)? (b) How do these traits interact with the evolution of molecular mechanisms that interact with the drugs (e.g., alternative metabolic pathways)? (c) How does recombination influence the spread of resistance mutations (e.g., is mating between sensitive and resistant worms random)? (d) Are there fitness costs of resistance in the absence of drugs (e.g., are resistant worms poorer competitors)? (e) How do processes such as density-dependence in the host, density of hosts on pasture, host age and immunity, and

time on pasture, interact to shape the epidemiology of nematodes exposed to anthelmintic selection pressures? (f) What are optimal treatment strategies for the management of resistance?

(3) LIFE IN VECTORS: MALARIA PARASITE EVOLUTION AND THE CONSEQUENCES OF MOSQUITO CONTROL

Most disease research focuses on the processes that result in symptoms during infections and much progress in uncovering the interactions between parasites and their hosts has been made. However, for vector borne parasites, analogous studies of interactions between parasites and vectors have been neglected, despite the fact that vectors are responsible for spreading disease. Clearly, to fully understand the evolution of such parasites it is necessary to ask how parasites solve the challenges of living in hosts and in vectors. The project will investigate how disease transmission is shaped by the ecological interactions parasites experience inside the vector. The student will use malaria parasites of rodents and mosquitoes to integrate developments from different biological disciplines into an evolutionary

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UEdinburgh TreeEvolution

Title: Quantifying the potential for adaptation of native tree populations to climate change

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

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

Funding Notes:

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

References:

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

scav@ceh.ac.uk

UExeter MicrobialEvolution

PHD IN SYSTEMS AND SYNTHETIC BIOLOGY

We invite applications to pursue a PhD in a new research project funded by the Biotechnology and Biological Sciences Research Council (BBSRC); http://-osslab.ex.ac.uk/adLola.html This exciting project employs both top-down (directed evolution) and bottom-up (synthetic biology) engineering of biomethane producing microbial communities (BMCs) with improved functionality. These two approaches are connected via the resulting BMCs, which will be further analysed in mid-scale reactors with the aim to impact biotechnological application of microbial communities. More broadly, this research project will address several fundamental scientific questions on the link between the structure and function of microbial communities. The project involves 11 Principal Investigators from four institutions, and an industrial consultancy. They bring in expertise on microbial evolution (Professor Angus Buckling), synthetic biology (Dr Orkun Soyer), control and process engineering (Professor Declan Bates, Professor Tom Curtis, Dr Jan Dolfing, Professor David Stuckey, Dr Phil Hobbs), bioinformatics (Dr David Swarbreck, Dr Russell Davenport, Dr David Studholme) and molecular biology (Professor Richard Titball). In addition, the project has several industrial partners including small enterprises specialising in anaerobic digestion as well as multi-national giants such as Veiola and Waitrose. The studentships will address fundamental questions in understanding and engineering microbial communities. The exact nature of specific PhD projects will be determined in consideration of candidates interests and expertise, but will be set in the broad areas of:

* Model-based, reliable design and experimental implementation of synthetic microbial communities. * Development of bioinformatics methods for quantitative analysis of metagenomic sequence data. * Understanding ecological and evolutionary dynamics of microbial communities. * Analysis of phage dynamics in microbial communities. * Development of novel mathematical tools for microbial community modelling.

Four year studentship: Tuition fees UK/EU and an annual maintenance allowance at current research council rate.

To apply please visit; http://www.exeter.ac.uk/-studying/funding/award/?id=1089 Orkun S. Soyer, PhD Senior Lecturer in Systems Biology Engineering, Mathematics and Physical Sciences University of Exeter Tel: +44 (0)1392 723615

Lab: http://osslab.ex.ac.uk/ Tinker: http://-osslab.ex.ac.uk/Tinker.aspx Synthetic Communities: http://osslab.ex.ac.uk/adLola.html "Soyer, Orkun" <O.S.Soyer@exeter.ac.uk>

UGiessen Germany EvolutionaryEcologyTribolium

PhD Position in Evolutionary Ecology, Gie©, Germany

Topic: External immune Defence in the Red Flour Beetle Tribolium castaneum

The aim of this PhD project is to use a manipulative approach to understand the relative importance of internal and external immune defences in the model organism Tribolium castaneum. This beetle and their sister-species expresses external defences in the form of secreted antimicrobial substances as well as internal, "classical" immune mechanisms. The relative advantages and disadvantages of these two types of defences are as yet unclear. They shall be evaluated with the help of selection lines, controlled lab experiments and molecular approaches such as transcriptome analyses.

The project is part of the German Science Foundation, Priority Program 1399 Host-Parasite Coevolution± with a grant to Dr. Gerrit Joop.

This specific PhD position (payment according to 13 TV-H, 65%) under supervision of Dr. Gerrit Joop will be based in the Department Applied Entomology, Institute for Phytopathology and Applied Zoology at the University of Gie©(Hessen, Germany), headed by Prof. Dr. Andreas Vilcinskas. The department itself provides an international and interactive atmosphere, while the University of Gie©and connected institutes (e.g., Fraunhofer Project Group) offer a stimulating research environment with a particular focus on entomology, evolutionary biology, insect biotechnology and genetics.

The city of Gie©is a medium-sized old university town situated in the low mountain range between Vogelsberg, Taunus and Westerwald in the middle of Germany. It offers many opportunities for leisure activities, including theatres and opera, the Gie©summer music festi-

val, hiking, cycling, and canoeing on the river Lahn, which runs through town. Basketball is the sport in town, with the 46ers playing in the German first basketball league. Close by is Germanys financial capital Frankfurt with its international airport.

Requirements for the position: Master or Diploma in Biology; high motivation, excellent background in ecology and/or evolutionary biology; good knowledge of molecular biological methods, population genetics and statistics; handling of complex experimental set-up, teamwork; ideally some experience with T. castaneum, and fluency in English.

Please send applications with CV, one-page statement of research interests, and the names and addresses of two referees as a single pdf- file by email to Gerrit Joop (gjoop<at>zoologie.uni-kiel.de). Deadline for applications: 7th January 2013. Start of position: February 2013 or soon thereafter. Women are especially encouraged to apply. Severely handicapped people will be preferentially considered in case of equivalent qualifications. For further details & questions, send an email to Gerrit Joop (Gerrit.Joop<at>agrar.uni-giessen.de). Otherwise see: http://www.uni-kiel.de/zoologie/-evoecogen/corporateimmunity/ http://www.uni-kiel.de/zoologie/evoecogen/joop/ http://www.uni-giessen.de/cms/fbz/fb09/institute/ipaz/abt/ento
Gerrit Joop <gjoop@zoologie.uni-kiel.de>

UGroningen 2 EvolutionarySystemsBiology

2 PhD Positions in Evolutionary Systems Biology University of Groningen, the Netherlands

The Theoretical Biology group at the University of Groningen is seeking to recruit two PhD students to strengthen a starting research team in Evolutionary Systems biology. The positions are full-time and available immediately.

Research environment

The positions are part of the project Systems biology meets evolutionary theory: modeling the genetics and adaptation of complex traits, funded by the Netherlands Organization for Scientific Research (NWO) and the European Research Council (ERC). Key objectives of this project are to understand how biomolecular interaction networks have been shaped by evolution, and how the structure of such networks influences phenotypic adaptation. To these ends, the research team will integrate evolutionary techniques and insights with systems-biology models, and develop innovative computational approaches for analyzing the structure and function of complex biomolecular networks. The two PhD-students will develop theoretical models focused on specific biological model systems (the evolution of bacterial chemotaxis and the evolution of cross-feeding polymorphisms in populations of bacteria), which are ideally suited to study the molecular basis of adaptation and diversification.

The research team will be embedded in the Theoretical Biology group at the Centre for Ecological and Evolutionary Studies (CEES), which comprises several other strong, internationally recognized research groups in the field of evolutionary biology. Our group also interacts closely with the molecular geneticists and systems biologists at the Groningen Biomolecular Sciences and Biotechnology Institute. The University of Groningen enjoys an international reputation as a dynamic and innovative centre of higher education and belongs to the best research universities in Europe. The university is ranked 24th (3rd among the European universities) on this years Best Places to Work in Academia ranking published by The Scientist.

Requirements

The successful candidates will have previous research experience in theoretical modeling, be in good command of the English language (oral and written) and possess excellent communication skills (indicated by the ability to write scientific papers and deliver presentations). Evolutionary systems biology is an emerging interdisciplinary research field. Therefore, successful candidates are expected to demonstrate an active and supportive approach to inter-disciplinary research that will help to foster collaborations and interactions with other group members. Suitable candidates can be either individuals with a background in the computational/molecular (life-)sciences, who are genuinely interested in evolutionary questions, or evolutionary biologists with a genuine interest in biomolecular mechanisms.

Candidates for the two PhD positions should have: - An MSc in Biology, with a specialization in Systems Biology, Evolutionary Theory or another area of computational or mathematical biology. - Working knowledge of a computer programming language, experience with developing computer simulation code, and a sufficient background in mathematics. - A strong interest in microbial evolution. Candidates with research experience in this area are particularly encouraged to apply.

Conditions of employment

The University of Groningen offers a salary of 2,042 (salary scale 50.0) gross per month in the first year, up to a maximum of 2,612 (scale 50.3) gross per month in the final year, based on a full-time position.The position requires residence in Groningen and must result in a PhD thesis within the 4-year contract period. A PhD training program is part of the agreement and the successful candidate will be enrolled in the Graduate School of Science. The successful candidate will first be offered a temporary position of one year with the option of renewal for another three years. Prolongation of the contract is contingent on sufficient progress in the first year to indicate that a successful completion of the PhD thesis within the next three years is to be expected.

How to apply

Applications, including a letter of motivation, a curriculum vitae, a list of publications (if any), a list of examination marks, and the contact information of three academic referees, must be submitted online through the website: http://www.rug.nl/about-us/work-with-us/-job-opportunities/all-job-vacancies The vacancy numbers for these positions are 212274-75. The positions will remain open until filled. All applications received by January 7, 2013 will be given full consideration.

For further information, please consult http://-www.rug.nl http://www.rug.nl/research/cees/

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UGroningen AvianMicrobes

PhD Position in Animal and Microbial Ecology University of Groningen, the Netherlands Vacancy number 212287

The Animal Ecology and Microbial Ecology groups at the University of Groningen are seeking to recruit a PhD student to strengthen a research team working on the interaction between birds and microbes. The position is full-time and available immediately.

Research environment The position is part of the project -The impact of environment on avian immunity: ecology and evolution of the match between microbial communities and antimicrobial defenses', funded by the Netherlands Organization for Scientific Research (NWO). The key objective of this project is to understand how environmental conditions shape the interactions between the protective systems of birds against microbes and the microbial communities associated with birds. We use the egg-nest unit as a simple model system to study the association between antimicrobial defenses (of the eggs) and microbial communities (of the nest environment and the parent). The project consists of two parts: 1. experimental manipulation of the nest microbial community to study effects on the antimicrobial defenses of eggs in captive birds, and 2. a field study on eggs/nests of wild birds under different environmental conditions. This project fits in a larger research program focused on understanding how environmental pathogen pressure and avian immune defenses interact and vary across space and time. Field activities will connect with this larger research program that has a special focus in the Netherlands and Kenya. The research team works at the interface of the Animal Ecology and Microbial Ecology groups at the Centre for Ecological and Evolutionary Studies (CEES). CEES comprises several other strong, internationally recognized research groups in the fields of ecology and evolutionary biology. The University of Groningen enjoys an international reputation as a dynamic and innovative centre of higher education and belongs to the best research universities in Europe.

Requirements The successful candidate is an enthusiastic and broad-minded candidate interested in integrating Animal and Microbial Ecology, is in good command of the English language (oral and written) and possesses excellent communication skills (indicated by the ability to write scientific papers and deliver presentations). Because of the interdisciplinary nature of the project, the successful candidate is expected to demonstrate an active and supportive approach to interdisciplinary research that will help to foster collaborations and interactions with members from both research groups. Ideally, you are an animal ecologist with a special interest in microbes, or a microbial ecologist with a passion for birds. A background in veterinary or animal science is also possible. There is some flexibility in the balance between work with captive birds and in the field, depending on your interest.

Candidates for the PhD position should have: * An MSc in Biology, with a specialization in Animal Ecology or Microbial Ecology, or a similar degree in a related area such as Veterinary Science. * Experience with work on birds in captivity and/or in the field will be an advantage. * Experience with or an interest in microbiological and biochemical laboratory work.

Conditions of employment The University of Groningen

offers a salary of euro 2,042 (salary scale 50.0) gross per month in the first year, up to a maximum of euro 2,612 (scale 50.3) gross per month in the final year, based on a full-time position. The position requires residence in Groningen and must result in a PhD thesis within the 4-year contract period. A PhD training program is part of the agreement and the successful candidate will be enrolled in the Graduate School of Science. The successful candidate will first be offered a temporary position of one year with the option of renewal for another three years. Prolongation of the contract is contingent on sufficient progress in the first year to indicate that a successful completion of the PhD thesis within the next three years is to be expected.

How to apply Applications, including a letter of motivation, a curriculum vitae, a list of publications (if any), a list of examination marks, and letters of recommendation of two academic referees, must be submitted online through the website http://www.rug.nl/corporate/-vacatures/vacaturesRUG. All applications received by January 20, 2013 will be given full consideration.

Information For further information, please consult http://www.rug.nl http://www.rug.nl/research/cees http://www.rug.nl/research/physiological-ecology http://www.rug.nl/staff/b.i.tieleman

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ULausanne LifeHistoryGenomics

A three year PhD position is available in Thomas Flatt's research group in the Department of Ecology and Evolution at the University of Lausanne, Switzerland, to investigate the genomics and genetics of clinal variation in Drosophila life history and aging.

Our group studies the mechanisms and evolution of life history traits, with a particular emphasis on lifespan and aging. One major focus of our research is on understanding how hormonal signaling pathways affect aging and trade-offs between reproduction and lifespan, immunity, and somatic maintenance. Another central focus is on understanding the genetic basis of evolutionary changes in lifespan and other life history traits in natural and laboratory populations. To address these problems we combine the tools of population genomics, experimental evolution and artificial selection, functional genetics, and physiology in the fruit fly (Drosophila melanogaster).

Our most recent project investigates clinal phenotypic and genetic differentiation in Drosophila life history and aging along a latitudinal gradient (see Fabian et al. 2012 in Molecular Ecology). Drosophila melanogaster, an ancestrally tropical insect that has spread to temperate regions and become cosmopolitan, offers a powerful opportunity for identifying the population genomic basis underlying clinal differentiation. We have recently applied genome-wide next generation sequencing of DNA pools ("pool-seq") to three populations collected along the North American east coast (Southern Florida, Pennsylvania, Maine) to examine patterns of latitudinal differentiation. Comparing these populations is particularly interesting since they exhibit strong clinal differentiation in a number of important life history traits, including body size, fecundity, lifespan and adult reproductive diapause. We found extensive latitudinal differentiation at the genic level, with many of the most strongly differentiated genes being involved in central signaling pathways such as the insulin/TOR, ecdysone, torso, EGFR, TGFâ/BMP, JAK/STAT, immunity and circadian rhythm pathways. While several of these pathways have been previously implicated in the regulation of life history in studies of laboratory mutants, the role of natural variants in these pathways in affecting life history remains unclear to date. We are now seeking to perform additional genomic analyses of clinal differentiation and to functionally test the role of candidate polymorphisms we have identified on life history traits and lifespan.

The project will involve a combination of population sampling; next generation sequencing and bioinformatic analysis; population cage experiments in the laboratory; functional testing of natural alleles using inbred lines, single gene mutants, and transgenes; measuring the effects of these polymorphisms on life history traits; and physiological measurements.Within this project, the PhD student is expected to collaborate closely with the PI, a postdoc, a second PhD student, and two technicians in Lausanne as well as with several external collaborators in the US and in Austria.

For further information on our research and our publications see:

http://i122server.vu-wien.ac.at/pop/Flatt_website/-flatt_home.html < http://ukcatalogue.oup.com/-product/9780199568772.do >

The successful candidate should have a master degree and a solid background in evolutionary biology and/or

genetics. Preference will be given to candidates with previous experience with the Drosophila system. The candidate should be highly motivated, independent, and scientifically driven, with a keen interest in understanding evolutionary processes as well as proximate mechanisms. The work environment is English speaking, and the candidate must have good interpersonal and communication skills. Knowledge of French is helpful but not essential.

The starting date for the position is in the first half of 2013; the exact date is negotiable. The PhD project is for three years, with a possible extension for a fourth year.

The internationally renowned Department of Ecology and Evolution (DEE; www.unil.ch/dee) at the University of Lausanne (UNIL) provides a highly stimulating research environment, hosting 22 research groups and more than 140 graduate students and postdocs and covering a very broad range of subjects in ecology and evolution. DEE is the lead institution in an inter-university PhD program in population genomics, and offers excellent possibilities for collaborations with other groups working on Drosophila genetics, genomics, or bioinformatics. UNIL is also the home of the Lausanne Genomic Technologies Facility (GTF) as well as the High Performance Computing Center (VitalIT), two platforms that offer excellent support for the project.

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ULausanne Parthenogenesis

A fully-funded PhD position is available for research on the evolution of parthenogenesis in insects at the Department of Ecology and Evolution at the University of Lausanne.

The general focus of the group is the diversity of reproductive and genetic systems in animals and the proximate and ultimate mechanisms underlying this diversity. Of particular interest are the factors underlying transitions between genetic systems, and the proposed projects will investigate causes and consequences of transitions from sexual reproduction to (female-producing) parthenogenesis. We combine cytological and molecular genetics approaches with experimental evolution to investigate genetic and genomic implications of transitions between sex and parthenogenesis in different insect systems. Projects may also involve a combination of field-work and modeling of population dynamics. Successful candidates will have the opportunity and are encouraged to develop their own ideas within the frame-work of the group. For further information and a list of publications, see: http://-www.tanjaschwander.com/ The Department of Ecology and Evolution in Lausanne provides a stimulating research environment, with an active program of seminars and discussion groups (in English); see http://-www.unil.ch/dee/ .Lausanne is located in the French part of Switzerland, on the shore of Lake Geneva, and is an attractive city with a high quality of life. The city is surrounded by beautiful mountain environments-an excellent area for outdoor activities. See http://-www.lausanne.ch/ Candidates should have a master degree in an appropriate discipline and a keen interest in evolutionary biology. The positions require independent, highly motivated, and scientifically curious individuals with strong interests in the above described central topic. All our projects are highly integrative and require willingness to closely collaborate with researchers of different backgrounds.

Application requirements: Informal inquiries and applications can be sent to Tanja Schwander (tanja.schwander@gmail.com). Formal applications should include: a 1-2 page cover letter (in English) indicating research interests, your CV, and two letters of reference (please include everything in a single pdf file). Starting date: spring 2013 (earliest possible Feb 1st).

Tanja Schwander

tanja.schwander@gmail.com

UMuenster SexualConflict

PhD advert:

PhD position: Sexual conflict and male-female coevolution

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

The start date will be February 2013 (or as soon as possible thereafter) until January 2016.

I am interested in the study of traits shaped by sexual antagonistic coevolution driven by sexual conflict between the sexes. Sexual conflict is prevalent between the sexes and has been shown to occur in a broad range of taxa. In my research I work with the fruit fly /Drosophila melanogaster/, which is a widely used model organism and also sexual conflict has been widely studied in this species. Within the project the successful candidate will study how ecological factors might alter sexual antagonistic trait expression and the consequences for male-female coevolution. This will be done by combining molecular work with behavioural experimental work to measure trait expression at the molecular level combined with phenotypic tests and fitness estimates.

WWU is a large vibrant university hosting a number of excellent scientific institutions (http://www.uni-muenster.de/en/). The Institute for Evolution and Biology provides a stimulating research environment with a number of scientific groups researching on diverse topics centred on different aspects of the study of Evolution. The town of Muenster itself is characterised by its many students and presents a dynamic environment with many cultural and social events throughout the year (http://www.muenster.de/en/).

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

Please send your application in one single PDF file to Dr. Claudia Fricke (Claudia.Fricke@uni-muenster.de). Included should be 1) a cover letter with a statement of your research interests and motivation (max. 1 page), 2) your CV including details of your research experience (with the abstract of your masters thesis) and 3) contact details of at least two referees.

Applications should be written in English and the deadline is the 7^th of December 2012.

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

– Claudia Fricke Junior Research Leader

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

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

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

UNottingham Evolution Colour Polymorphism

Funding is available for a four year BBSRC DTP PhD studentship (deadline 9th January), to be awarded on a competitive basis within the University of Nottingham, to investigate the evolution, genetics and development of colour polymorphism in snails

Studies on the classic shell colour and banding polymorphism of the land snail Cepaea played a crucial role in establishing the importance of natural selection in maintaining morphological variation. Cepaea is also a pre-eminent model for ecological genetics because the outward colour and banding phenotype is entirely genetically determined, primarily by a 'supergene' of at least five loci. Unfortunately, progress in understanding the evolution and maintenance of the Cepaea polymorphism stalled, partly because of a lack of genetic markers. With a view to re-establish Cepaea as a prominent model of molecular ecology, we are applying next generation sequencing methods to investigate the evolution, genetics and development of this colour polymorphism. Although the precise nature of the project will be determined by the state of play when the project begins and the interests of the student, I envisage that he/she will use Illumina RAD-Seq genotyping runs, along with RNA Seq methods and possible BAC mapping to home in on the genes in question. He/she may also develop new species/models to study (possibly involving fieldwork), enabling deeper comparative analyses, or develop in situ based methods to compare gene expression. The student will receive training in standard molecular lab methods, next generation sequencing and bioinformatic methods. The training programme also includes first year rotation projects, plus a three-month full-time placement outside of the research environment. Finally, as another research interest of the lab is in the evolution and development of sinistral

snails, then a project in this area is also possible.

Applicants should have, or expect to receive, a good degree in a relevant subject, and an interest and enthusiasm for evolution. In the first instance, prospective students should send a CV and an indication of general area of interest to angus.davison@nottingham.ac.uk; see also www.angusdavison.org . Funding details:

Funding is available for four years from Autumn 2013. A full award would be fees plus an annual stipend. This is set by the Research Councils and was £13,590 for 2012/13. 2013/14 rates are currently to be confirmed.

Eligibility:

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

Applicants should go to www.nottingham.ac.uk/bbdtp to download the application and reference forms. For more information regarding projects, training and structure of the DTP see http://www.findaphd.com/-search/PhDDetails.aspx?CAID=954&LID=338 and www.nottingham.ac.uk/bbdtp. Note that an important part of this BBSRC DTP scheme is a lab rotation during the first year. A full list of the possible projects under the Molecules, Cells and Organisms banner is here http://nottingham.ac.uk/graduateschool/-documents/bbsrc-dtp/molecules-cells-and-organisms-projects-2013-2014va.pdf – Dr. Angus Davison Reader in Evolutionary Genetics School of Biology University Park University of Nottingham NG7 2RD

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

UOtago NZ GeneticsComplexAvianCognition

PhD Project Opportunity Available to

Investigate the Genetics of Complex Cognition

We are currently seeking at least one, but potentially several PhD students with interests in genetics/genomics, evolution, and behavioural ecology to conduct research into the genetic basis of complex cognition in New Caledonian crows.

Project Description: The discovery of complex avian cognitive abilities has revolutionized our understanding of the evolution of intelligence. However, the genetic basis of these abilities is unknown. One possibility is that numerous changes in genes across a wide range of functional domains are required for the evolution of complex intelligence. Alternatively, only a limited number of genetic tweaks might be required. We will compare the tool manufacturing New Caledonian crow with closely related non-tool-using crows to search for genes that underpin a tool-using lifestyle. Once identified, we will test the involvement of specific genes by examining if genetic polymorphisms can explain the variability in the tool-using lifestyles of New Caledonian crows that exists between individuals and populations. By harnessing the extraordinary advances in Next-Generation-Sequencing we hope to uncover the genetic basis of complex cognition in the wild.

The project emerges from a new Marsden Grant headed by Dr Gavin Hunt (Auckland) in collaboration with Profs Neil Gemmell (Otago) and Russell Gray (Auckland). The PhD position will be based in the Gemmell laboratory at the University of Otago.

The Ideal Candidate: The ideal candidate will possess experience in molecular genetics, genomics, evolutionary genetics and behavioural ecology. Knowledge of NGS approaches and analyses will be a distinct advantage, while an interest in neurobiology and cognition may be helpful. The successful candidate will be motivated and organised, with a demonstrated capacity to master the broad skill set necessary for the successful completion of a research project. They will be a competent laboratory worker, with experience of all routine molecular genetic techniques, and should be computer literate with familiarity with database management and statistical analyses.

Minimum qualifications: B.Sc. (Hons) and/or M.Sc. in Genetics, Genomics, Molecular Biology or equivalent with an A average or better.

Scholarship Funding: Financial support should be available for a high achieving student with an A average or better via a University of Otago or Departmental scholarship see http://www.otago.ac.nz/-study/scholarships/).

Eligibility: The University of Otago and Departmental scholarships are open to all nationalities.

However, overseas candidates for whom English is not a first language must satisfy the English Language Requirements of the University < http://www.otago.ac.nz/international/postgraduate/index.html#englishlanguage > to be eligible for study (see). Other international eligibility criteria are here < http://www.otago.ac.nz/international/postgraduate/otago002221.html >.

How to Apply: Interested applicants are encouraged to make informal enquiries to Professor Neil Gemmell. Please send your Curriculum Vitae, a copy of your academic transcript, a sample of your written scientific work and the names of three referees with a covering letter to:

Professor Neil J. Gemmell e-mail: neil.gemmell@otago.ac.nz

Further information Gemmell lab < http://gemmell-lab.otago.ac.nz/ > Centre for Reproduction and Genomics < http://www.otago.ac.nz/crg > Cognition and culture in New Caledonian crows < http://www.psych.auckland.ac.nz/uoa/new-caledonian-crow-cognition-and-culture-research >

Applications close on the 1st February 2013. It would be desirable if the successful applicant were able to start in early/mid 2013.

Neil J. Gemmell Professor and Director Centre for Reproduction and Genomics Department of Anatomy University of Otago, PO Box 913 Dunedin 9054 New Zealand

Phone: +64 3 479 6824 Fax: +64 3 479 7254 e-mail: neil.gemmell@otago.ac.nz website: www.otago.ac.nz/crg neil.gemmell@otago.ac.nz

UPompeuFabra Barcelona 2 EvolutionaryGenomics

The Evolutionary Genomics Group at the IBE/UPF is looking for 1 PhD Student, 1 PostDoc and 2 IT technicians.

The Evolutionary Genomics Group, led by Arcadi Navarro (biologiaevolutiva.org/anavarro/), is a friendly and interactive team composed by highly motivated people. The group is part of the Institute of Evolutionary Biology (www.ibe.upf-csic.es) of the Universitat Pompeu Fabra (www.upf.edu) and the Consejo Superior de Investigaciones Científicas (CSIC). Additionally, the group hosts a Node of the Spanish National Bioinformatics Institute (www.inab.org). The group is integrated in the Barcelona Biomedical Research Park (www.prbb.org), a renowned centre for Biomedical research that hosts several other institutions, such as the CRG (Centre for Genomic Regulation www.crg.org), with whom we collaborate regularly. All these organizations share a thrilling and dynamic scientific atmosphere, driven by leading groups in fields such as bioinformatics, systems biology or evolution, just to name a few. To make things better, the PRBB is located close to Barcelona's City Centre (right in front of the beach!).

The student or postdoc will join one of the on-going projects in the lab, including the molecular evolution of segmental duplications, the genetic structure of human socio-economic behaviour, or the evolution of human disease and ageing. Ideal candidates should have a population genetics and/or genome bioinformatics background. The PhD studentship is available for four years and the postdoc for three. All of them are renewable on a yearly basis.

The IT technicians will provide general support to the team and help maintaining our local cluster. Experience in PHP, Java, APACHE and Linux systems is required. Working knowledge of database design and database-oriented programming (MySQL) is also desirable. Candidates willing to pursue a scientific career (either at the doctoral or the postdoctoral level) within our group while performing programming tasks are also encouraged to apply. Positions are open-ended and renewable on a yearly basis.

Salaries will be according to training and experience. Positions will remain open until they are filled. Motivated and potentially competitive applicants should send, preferably via e-mail, a short letter of interest, a CV and the contact details of two references to:

Arcadi Navarro i Cuartiellas Universitat Pompeu Fabra C/ Dr. Aiguader 88 08003 BARCELONA , SPAIN E-mail: arcadi.navarro@upf.edu

Arcadi Navarro <arcadi.navarro@upf.edu>

URhodeIsland EvolutionParasitism

The Lane Lab at the University of Rhode Island (http://cels.uri.edu/bio/lanelab/) is looking to fill at least one PhD position to work on the evolution of

parasitism. Our lab uses oomycetes and red algae as systems to understand genomic changes at the transition between free living and parasitic lifestyles. Candidates should be interested in bioinformatics and handling large-scale datasets. Familiarity with programming is an asset, but not required.

Interested students can apply to either the Integrated Evolutionary Biology or Cell and Molecular Biology graduate groups in the College of the Environment and Life Sciences (http://web.uri.edu/cels/) at URI. The program deadline for applications is January 15th. Potential applicants are strongly encouraged to contact Dr. Chris Lane (clane@mail.uri.edu) with a brief statement of interest and qualifications.

Chris Lane Assistant Professor Department of Biological Sciences University of Rhode Island 120 Flagg Road Kingston, RI., 02881 Office: CBLS 277 ph (401) 874-2683 fax (401) 874-2065 http://cels.uri.edu/bio/-lanelab/

Chris Lane <clane@mail.uri.edu>

UStAndrews EvolutionaryBioionformatics

A PHYLOGENETIC-STATISTICAL MODEL FOR FUNCTIONAL ANNOTATION OF GENOMES

Proposed PhD project in evolutionary bioinformatics

Supervisors:

Dr Daniel Barker, School of Biology, University of St Andrews http://bio.st-andrews.ac.uk/staff/db60.htm Dr John Mitchell, School of Chemistry, University of St Andrews http://chemistry.st-andrews.ac.uk/staff/-jbom/group Background:

A rapid bioinformatics approach to accurately predict the function of genes and gene-regulatory regions within genomes is urgently required. There is an 'analysis gap', with laboratory experiments often infeasible and bioinformatics tools frequently failing to make best use of plentiful genome-sequence data. Additional evidence, either from comparatively analysing several genomes simultaneously (Barker & Pagel 2005) or from non-sequence genome-wide data, provides further clues concerning function and evolution. Applying trait evolution models to genomic data (Latysheva et al. 2012), we will enhance methods we have developed to (a) predict gene-gene functional linkages, using gain and loss from genomes over evolutionary time (Barker et al. 2007), and (b) detect regulatory regions within sequences from sequence motifs and epigenetic data. Methods will be extended to (c) predict gene-environment linkages and (d) predict gene-regulatory region linkages, from gene gain and loss. An integrated predictive model will be developed and tested, inputting gene-sequences and phenotypic and environmental traits, and outputting accurate predictions of biological gene function, with particular attention to enzyme function, and the location and function of regulatory regions. As a practical validation, a range of new genomes will be draft-sequenced using Oxford Nanopore MinION USB sticks and functionally annotated with our novel model.

References: Barker D, Meade A, Pagel M (2007) Constrained models of evolution lead to improved prediction of functional linkage from correlated gain and loss of genes. Bioinformatics 23:14-20. Barker D, Pagel M (2005) Predicting functional gene links from phylogenetic-statistical analyses of whole genomes. PLoS Computational Biology 1:e3. Latysheva N, Junker VL, Palmer WJ, Codd GA, Barker D (2012) The evolution of nitrogen fixation in cyanobacteria. Bioinformatics 28:603-606.

Application procedure:

Excellent UK and other EU students with (or anticipating to receive at the end of this academic year) a minimum of an upper second class Honours degree are encouraged to apply, and will be considered for admission and funding in strict competition with applicants across a range of proposed projects.

Non-EU citizens MAY ONLY APPLY IF THEY HAVE ALREADY OBTAINED FUNDING (to cover university fees + living expenses).

If funding has already been obtained, please indicate this in your application.

Applications must be received in full by 31st January 2013. Please follow the instructions at: http:/-/biology.st-andrews.ac.uk/pageset.aspx?psr=3D77 Informal enquiries are welcome - contact Daniel Barker <db60@st-andrews.ac.uk>.

– Daniel Barker http://bio.st-andrews.ac.uk/staff/-db60.htm The University of St Andrews is a charity registered in Scotland : No SC013532

db60@st-andrews.ac.uk

UStAndrews MarineDiversity

STATISTICAL METHODS FOR THE STUDY OF CONNECTIVITY IN MARINE SPECIES

Supervisor: Prof. Oscar Gaggiotti, Scottish Oceans Institute (http://soi.st-andrews.ac.uk/-default.aspx), School of Biology (http://biology.st-andrews.ac.uk), University of St Andrews (http://-www.st-andrews.ac.uk)

Dispersal is one of the most important processes driving the dynamics and structure of marine communities, local adaptation of species, and maintenance of genetic diversity. Additionally, a thorough knowledge of dispersal patterns is essential for the effective spatial management of fisheries and the design of marine protected areas (MPAs). However, inferring patterns of demographic connectivity in marine species with long-lived pelagic larvae remains a challenging task.

Several approaches and types of data have been used to study connectivity. Genetic approaches typically estimate rates of gene flow while micro-chemical fingerprinting is used to assign individuals to source populations. More recently it has been possible to obtain estimates of connectivity from biophysical models of ocean circulation and larval transport. However, all methods are challenged by the large spatial scale at which dispersal in marine species takes place and by the sheer size of populations of marine organisms. There are good examples of studies that have successfully characterised dispersal patterns at a small spatial scale but the same is not true for large geographic areas. No single method or data type has proven successful in this latter case and it has become clear that there is a need for statistical approaches that combine all available sources of information.

The thesis project is aimed at developing Bayesian approaches to estimate connectivity using all available data and in particular genetic, microchemistry, and output from larval transport models. Some of the statistical techniques necessary to achieve this goal have been developed by Oscar Gaggiotti's group (see references below) and will be used to develop new and improved methods for the estimation of connectivity patterns.

This graduate position is funded by the Marine Alliance for Science and Technology (http://www.masts.ac.uk). The ideal candidate would have a very good background in statistics and an interest in population genetics and computational biology. The focus of the project is on statistical developments and data analysis so there will be no lab or field work at all. Only applicants interested in computer based work should apply.

APPLICATION PROCEDURE Interested candidates should send a letter of introduction, a CV and grade transcripts before 20 January 2013 to Oscar Gaggiotti (see email addresses below). Additionally, two letters of recommendation should be sent independently to the email addresses below:

oeg@st-andrews.ac.uk oscar.gaggiotti@ujf-grenoble.fr

Please note that I'm in the process of moving to St Andrews so you should send the requested material to both email addresses.

List of Publications related to the project

Hoban, S, G Bertorelle and OE Gaggiotti, 2012. Computer simulations: tools for population and evolutionary genetics, Nature Reviews Genetics, 13: 110-122. Meirmans P, J Goudet, Intrabiodiv Consortium and OE Gaggiotti, 2011. Ecology and life-history affect different aspects of the population structure of 27 high-alpine plants, Molecular Ecology, 20: 3144-3155. Gaggiotti, OE, D. Bekkevold, HBJ Jørgensen, M Foll, GR Carvalho, C Andre and DE Ruzzante, 2009. Disentangling the effects of evolutionary, demographic and environmental factors influencing the genetic structure of natural populations: Atlantic herring as a case study. Evolution 63 :2939-2951. Faubet P and OE Gaggiotti, 2008. A new Bayesian method to identify the environmental factors that influence recent migration. Genetics 178:1491-1504. Foll, M, and OE Gaggiotti, 2006. Identifying the environmental factors that determine the genetic structure of Populations. Genetics 174: 875-891. Gaggiotti, OE, SP Brooks, W Amos and J Harwood, 2004. Combining demographic, environmental and genetic data to test hypotheses about colonization events in metapopulations. Molecular Ecology 13: 811-825. Gaggiotti, OE, F Jones, WM Lee, W Amos, J Harwood et al., 2002 Patterns of colonization in a metapopulation of grey seals. Nature 416: 424-427.

Oscar Gaggiotti Professor LECA UMR CNRS 5553 Universite Joseph Fourier BP 53 38041 GRENOBLE France Tel.: 33(0)4 76 51 44 97 Fax: 33(0)4 76 51 42 79 http://www-leca.ujf-grenoble.fr/membres/-gaggiotti.htm http://www-leca.ujf-grenoble.fr/-projets/gaggiottiprojets/IMPBioFr.htm

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

UStAndrews SexAllocation

Graduate Positions: University of St Andrews, School of Biology, Insect Behavioural Ecology Lab.

Up to three PhD studentships are available to study aspects of sex allocation behaviour and genetics in parasitoid wasps with Dr Dave Shuker.

(1) "Determining the mechanisms of irrational decision making" (BBSRC-funding available; in collaboration with Dr Sue Healy) This project will explore how animals make context-dependent decisions in a variety of ecological contexts, and will include field-work on foraging hummingbirds and lab work on parasitoid wasp oviposition and sex allocation behaviour. Deadline 31st January 2013.

(2) "A community genetics approach to understanding tri-trophic interactions" (James Hutton Institute & University of St Andrews funding available; in collaboration with Dr Ali Karley at the JHI in Dundee). This project will combine behavioural and quantitative genetic approaches and explore inter-specific effects on egg laying and sex allocation in the parasitic wasp Aphidius ervi. This project will be based at the James Hutton Institute in Dundee and be co-supervised by Dave Shuker. Deadline 15th January 2013.

(3) "What are the genetic constraints on behaviour?" (NERC-funding available). This project will continue our exploration of the genetic basis of sex allocation behaviour in Nasonia vitripennis, using both quantitative and molecular genetic techniques. There will also be the opportunity for new behavioural research on Nasonia reproductive biology as we seek to place sex allocation within the broader context of life-history evolution in Nasonia. Deadline 31st January 2013.

The University of St Andrews awards PhD studentships on a competitive basis. Some funding streams are only available for UK applicants. For further details please visit findaphd.com or email Dave: david.shuker@st-andrews.ac.uk

All applications are made through the School of Biology, please visit us at http://biology.st-andrews.ac.uk/-postgraduate/ ** ENTO 2013 University of St Andrews 4th-6th September 2013**

For further details of the Royal Entomological Society's International Symposium "Thirty Years of Thornhill & Alcock: The Evolution of Insect Mating Systems" and National Science Meeting please visit: http://www.royensoc.co.uk/content/ento-13-4-6-september-2013 Dr David M Shuker Lecturer in Behavioural Ecology School of Biology University of St Andrews St Andrews KY16 9TH United Kingdom

Email: david.shuker@st-andrews.ac.uk Tel: +44 1334 463376 Fax: +44 1334 463366 Web: http://insects.st-andrews.ac.uk dms14@st-andrews.ac.uk

USussex EffectivePopulationSize

NERC/School of Life Sciences-funded PhD studentship at Sussex University

THE EFFECTIVE POPULATION SIZE OF PLANTS AND ANIMALS

Most species behave genetically as though they have far fewer individuals than their census population size. Humans are a classic example; although there are nearly 7 billion of us, we have the genetic diversity of an "ideal" species with just 20,000 individuals; this is our effective population size (Ne). The effective population size is one of the most important parameters in population genetics, molecular ecology and evolutionary biology. It determines both the level of genetic variation there is in a population and the efficiency of natural selection. Species with small Ne, like our own, have low levels of genetic diversity and natural selection is less effective than in a species with large Ne; the relative inefficiency of natural selection in species with small Ne means they are less likely to fix advantageous mutations and more likely to accumulate deleterious mutations; they are in some senses less well adapted. Surprisingly, despite its fundamental importance, Ne has only been estimated in a hand-full of species.

The aims of the project are two-fold. First, we will estimate Ne in hundreds of animal and plant species using publicly available DNA sequence data. This broad survey will give us the first insight into how many individuals a species typically contains genetically and whether species, such as our own, are unusual. In the second part of the project we will examine the demographic, life history and genetic correlates of Ne, in order to understand what factors and processes contribute to species having different Ne.

The project is computer based and will give the student excellent training in population genetics, bioinformatics and statistics.

The studentship is joint-funded by NERC and the School of Life Sciences at Sussex University, and will commence in either October 2013 or January 2014. Full funding is definitely available for 3.5 years, including research costs. In addition to research, the student will be expected to contribute up to 50 hours/academic year demonstrating/tutorial teaching without additional remuneration.

The Eyre-Walker group studies a range of problems in molecular evolution, further details of which can be found on the group's web-site, http://-www.sussex.ac.uk/lifesci/eyre-walkerlab/. The Eyre-Walker group is part of the Evolution Research group with faculty working in a number of areas including sexual antagonism (Ted Morrow), social insects (Jeremy Field, Francis Ratnieks and Bill Hughes) and the evolution of development (Juan-Pablo Couso and Claudio Alonso).

Recent references relevant to this project (full list available at http://www.lifesci.susx.ac.uk/home/-Adam_Eyre-Walker/Website/Publications.html):

Gossman, T., Keightley, P.D. and Eyre-Walker, A. (2012) The effect of variation in the effective population size on the rate of adaptive molecular evolution in eukaryotes. Gen. Biol. Evol. 4, 658-667.

Gossmann, T., Woolfit, M. and Eyre-Walker, A. (2011) Quantifying the variation in the effective population size within a genome. Genetics 189, 1389-1402.

Piganeau, G. & Eyre-Walker, A. (2009) Evidence for variation in the effective population size of animal mitochondrial DNA. PLoS One 4, e4396.

a.c.eyre-walker@sussex.ac.uk

USussex SocialWaspEvolution

NERC/School of Life Sciences-funded PhD studentship at Sussex University

PARENT-OFFSPRING INTERACTIONS IN PAPER WASPS (POLISTES)

Parental care and eusociality are two of the best-studied forms of social behaviour. Interactions and conflict between immature offspring and adults have been well studied in birds (offspring begging, parental provisioning), but less so in social insects. Functional (adaptive) questions about sociality have also been well investigated, but less is known about underlying mechanisms. The studentship will focus on mechanisms underlying parent-offspring interactions in paper wasps (Polistes). Paper wasps are ideal for this purpose because of their small colony size, open nests and easily manipulated, extremely plastic social system. All adults and immature larvae are continuously visible on the naked nest 'comb', and behaviour is easily video-recorded. Group size is small enough that each adult can be given a unique identifying mark, and because each immature cannot leave its individual 'cell' in the comb, we can also keep track of it as it develops.

The research will use spring co-foundress associations of the well- studied P. dominulus, where typically 3-5 adults tend a group of 20-30 immature offspring. The main focus will be on how adult wasps choose how much effort to put into provisioning the offspring. To what extent does an adult follow a fixed provisioning rule, or at the other extreme, modulate its behaviour according to the needs of the offspring and the provisioning behaviour of its partners? And how does an adult decide which offspring to feed? The research will involve both fieldwork in Spain and lab experiments in the UK, potentially including molecular genotyping.

The studentship is joint-funded by NERC and the School of Life Sciences at Sussex University, and will commence in either October 2013 or January 2014. Full funding is definitely available for 3.5 years, including research costs. In addition to research, the student will be expected to contribute up to 50 hours/academic year demonstrating/tutorial teaching without additional remuneration.

Our website (http://www.sussex.ac.uk/lifesci/-fieldlab/) gives more details of our friendly research group. The School of Life Sciences provides excellent opportunities to interact with leading researchers. The student will particularly benefit from an exceptional (on a world scale) concentration of research expertise at Sussex that focusses on social evolution in insects. Jeremy Field, Francis Ratnieks, Bill Hughes, Dave Goulson (joining Sussex in April 2013), Tom Collett and Paul Graham all lead well-established research groups (see http://www.sussex.ac.uk/lifesci/ebe/-research for details). Our seminar series have a correspondingly strong (though by no means exclusive) focus on social evolution, meaning that students are frequently exposed to leading researchers from other universities. The student will attend annual UK conferences (e.g. the annual 1-2 day UK meeting of the International Union for the Study of Social Insects)

and at least one international conference.

Examples of our related research include:

(1) LEADBEATER, E., CARRUTHERS, J.M., GREEN, J.P., ROSSER, N.S. & FIELD, J. (2011) Nest inheritance is the missing source of direct fitness in a primitively eusocial insect. Science 333:874-876. [see also commentary on this paper in Science 333:833-4, 2011] (2) FIELD, J., CRONIN, A. & BRIDGE, C. (2006). Future fitness and helping in social queues. Nature 441: 214-217. [see also commentaries on this paper in Nature 444:42-3, and Current Biology 16: R599-R601] (3) CANT, M.A. & FIELD, J.P. (2005). Helping effort in a dominance hierarchy. Behavioral Ecology 16:708-715. (4) SHREEVES, G.E., CANT, M.A., BOLTON, A. & FIELD, J. (2003). Insurance-based advantages for subordinate co-foundresses in a temperate paper wasp Proceedings of the Royal Society of London Series B 270:1617-1622. (5) CANT, M.A. & FIELD, J.P. (2001). Helping effort and future fitness in cooperative animal societies. Proceedings of the Royal Society of London Series B 268: 1959-1964.

REQUIREMENTS: we seek a well-motivated student with an interest in behavioural/evolutionary ecology, who enjoys fieldwork. Applicants must have or expect to receive at least a 2:1 degree and be a UK citizen. If you are a citizen of another EU member state you will not generally be eligible, unless you have spent the previous three years in the UK undertaking education (undergraduate or masters) (see http://www.nerc.ac.uk/-funding/available/postgrad/eligibility.asp for eligibility details). The successful applicant must be able to work in the field, and because the work involves recording colour marks on

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UToronto PopulationDynamics

PhD and MSc Positions in Population Dynamics and Conservation at the University of Toronto.

The MK Lab in the Department of Ecology and Evolutionary Biology at the University of Toronto (www.eeb.utoronto.ca/people/d-faculty/Krkosek.htm) has openings at the MSc and PhD levels in the areas of population dynamics and conservation. Candidates should have a strong quantitative background and an interest in using mathematical and statistical models to understand population dynamics, with potential applications to conservation, fisheries, and epidemiology. Interested candidates should contact Martin Krkosek at martin.krkosek@gmail.com with a cover letter, cv, and unofficial transcripts.

Martin Krkosek <martin.krkosek@otago.ac.nz>

UtahStateU ForestLandscapeGenetics

PhD position: Forest Entomology or Aspen Landscape Ecology Utah State University, Logan, Utah USA

We are seeking a PhD student for research on resilience in forests of the US Intermountain West. The PhD student should be interested in one of the projects below:

1) Mountain pine beetle (Dendroctonus ponderosae) responses to a changing climate. The project topic is flexible but should be related to landscape genetics/genomics and adaptive capacity in mountain pine beetle populations of the Intermountain West. 2) Aspen (Populus tremuloides) landscape ecology. The project topic is flexible but should be related to landscape-scale genetics, genomics, cytogenetics, physiology, or disturbance with an emphasis on understanding adaptive capacity and persistence in aspen of the Intermountain West.

The position could start as early as May 2013. Fellowship support includes $20,000 per year for four years along with tuition. The student will also participate as a team member with other graduate students whose research is focused on climate change and resilience in forest ecosystems.

Applications must be completed by 25 January 2013, but applicants should start with an email enquiry to Drs. Barbara Bentz (bbentz@fs.fed.us) or Karen Mock (karen.mock@usu.edu), who can provide additional details. Applicants should have an outstanding academic record and preferably research experience resulting in publication. Utah State University is an equal opportunity employer and we highly encourage applications from underrepresented groups. Candidates are required to be a citizen or national of the US.

With approximately 180 undergraduate and 80 graduate students, USU's Wildland Resources Department

has one of the largest and most active graduate research programs at USU, and is widely recognized for research that addresses natural resource ecology, management and conservation issues in the Intermountain West. The Department is associated with the USU Ecology Center and the Utah Agricultural Experiment Station, and enjoys strong collaborative links across the Logan campus with the Departments of Watershed Sciences, Environment and Society, Biology, Mathematics and Statistics, and Plants, Soils and Climate, among others. Additional information about the College of Natural Resources can be found at http://www.cnr.usu.edu. Logan is a valley community of about 125,000 people nestled in between the Wellsville Mountains and Bear River Range in northeastern Utah. The many ski resorts, lakes, rivers, and mountains in the region make it one of the finest outdoor recreation environments in the nation. The campus is 90 miles north of Salt Lake City. With views of a natural area reserve from campus, the pristine natural environment of the area makes Logan one of America's most attractive and affordable university towns (http://www.tourcachevalley.com/).

karen.mock@usu.edu

Vienna PopulationGenetics

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

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

Topics include:

- Inferring selection using *Drosophila* whole genome sequence data - Analysing next generation sequencing data and understanding the sampling properties of high throughput technologies - The 1001 Genomes Project: Population genetics of *Arabidopsis thaliana* - Speciation genetics in European columbines (*Aquilegia*) - Mutagenesis in the human germline - Population genetic inference using Pool-Seq data - Evolution of gene expression in *Drosophila* - Speciation genomics: mapping of hybrid incompatibilities - Adaptive mutations in C. elegans - Functionally important variation in lifespan and other life history traits in natural and experimental evolution populations - Mathematical models of spatially varying selection in subdivided populations - Statistical methods for detecting selective sweeps using genome- wide data - Population genetic estimators from NGS data: assessing the power for methods for genome scans of selection - The footprint of adaptive gene introgression after secondary contact

Only *complete* applications (CV, motivation letter, university certificates, indication of the two preferred topics in a *single* pdf) received by *10.01.2013* will be considered. Two letters of recommendation need to be sent directly by the referees.

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

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

julia.hosp@gmail.com

ZurichU Social evolution birds

MSc student positions in Biology, University of Zurich, Switzerland.

Four MSc positions are available in the lab of Michael Griesser to study the evolution of family living in birds.

We seek enthusiastic graduate students with a strong interest in evolutionary biology and behavioural ecology. The candidates should be prepared to work independently in the field, and thus previous experience with experimental fieldwork, preferably with birds, is valuable. A driver's license is required for all projects.

Current project opportunities include:

(1)Family dynamics in black wheatears (Oenanthe leucura): Field experiments in birds have suggested that offspring remain with their parents due to nepotistic benefits which arise from staying with the parents, and thus offspring remain only as long as their family is intact. In black wheatears, offspring can remain with their parents over winter, and field observations suggest that offspring remain in their group even if their

father is replaced by a new male. We will use field experiments to investigate the role of changes in family dynamics for the decision of offspring to remain in their natal group. Fieldwork will take place in Guadix (Southern Spain). Basic knowledge of Spanish is an advantage. The candidate will be supervised by Gretchen Wagner and Michael Griesser.

(2)Parental investment and cost of reproduction in birds: Life-history theory assumes that organisms trade-off current against future reproduction to maximize their fitness. We would like to test this hypothesis in the field by experimentally investigating the response of avian breeders, with various life-histories, to an increased cost of current reproduction. Fieldwork will take place in Cordoba (Southern Spain). Basic knowledge of Spanish is an advantage. The candidate will be supervised by Emeline Mourocq and Michael Griesser.

(3)Change in predation risk assessment in rollers (Coracias garrulus): In birds, the predation of dependent offspring is the most important source of reproductive failure. However, this pressure may change during the reproductive cycle. We will use field experiments to address this question in a cavity breeding bird species, the roller. Fieldwork will take place in Southern France in collaboration with Patrick Mayet. Basic knowledge of French is an advantage. The candidate will be supervised by Michael Griesser.

(4)Social life of a non-cooperative bird, the Vinous-throated Parrotbill (Paradoxornis webbianus): A large number of bird species are social but do not breed cooperatively. Earlier studies revealed that direct fitness benefits might be important in these systems, but they remain rather unstudied. Here, we will study parrotbills in an introduced population in Northern Italy to test with field experiments how kinship affects social decisions of the birds during and outside the breeding season. The project is a collaboration with Alessandra Gagliardi, Altberto Botto and Yang Liu. Basic knowledge of Italian is an advantage. The candidate will be supervised by Michael Griesser.

Our research group is part of the Anthropological Institute at the University of Zurich (www.aim.uzh.ch/-index.html), where different research groups work on the evolution of social dynamics and cooperative behaviour. The working language at the institute is English.

MSc studies at the University of Zurich take 2 years, and cover both degree project work and courses. For details see www.mnf.uzh.ch/en/studies/students/-courses-of-study.html#c887. A BSc in Biology is mandatory for enrolment. The current tuition fees per semester for MSc students are 720CHF if living in Switzerland), or 820CHF for all others.

For students interested starting this spring, the term starts 18th February 2013, and thus an enrolment before that date is required. Thus, we consider candidates submitting their application latest by 20st January 2013.

Please apply by sending your Curriculum Vitae, cover letter with statement of research interests, and contact information of at least two references Project (1): gretchen.wagner@uzh.ch Project (2): emeline.mourocq@uzh.ch Project (3) and (4):michael.griesser@uzh.ch

michael.griesser@uzh.ch

Jobs

AMNH NewYork AvianEvolutionSystematics

Assistant or Associate Curator of Ornithology American Museum of Natural History

The American Museum of Natural History (AMNH) in New York is inviting applications for a curatorial position in the Division of Vertebrate Zoology, Department of Ornithology. This is a tenure track position with the salary and duration of review for tenure being negotiable depending on the candidates professional experience and accomplishment.

We seek candidates whose research addresses fundamental questions involving the systematics and evolutionary biology of living birds. The successful candidate will have an accomplished record of scholarship and publication as well as capabilities for leadership within the Division and Department. Candidates who can contribute to Museum initiatives in genomics, phenomics (large-scale phenotypic analysis), and to the global exploration of avian diversity are especially encouraged to apply. Collection and/or field-based research are highly desirable. The ability to communicate effectively within the scholarly community and to a larger public is important. AMNH curators are expected to maintain a high level of productivity in original research, to provide curatorial oversight of relevant collections, and to seek extramural funding. Other responsibilities may include serving on committees and participating in Museum-sponsored exhibits and educational programs, and in the Comparative Biology Ph.D. program at the Richard Gilder Graduate School. Candidates should have postdoctoral or professional employment experience.

Interested candidates should submit electronically, via a single email message, the following materials:

a) complete curriculum vitae, b) a statement detailing research interests, accomplishments, future research plans, and how you envision contributing to the Department of Ornithology and to graduate and postgraduate research and education, c) up to five relevant publications (pdf files), and d) a list of dissertation advisors, committee members, co-authors, and co-PIs on funded grants during the preceding five years.

In addition, each applicant should have three letters of support sent to the Search Committee.

All materials should be submitted electronically, preferably as pdf files, to: Ornithological Search Committee, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192, to: jlc@amnh.org (Subject line: Ornithology Search Committee: your name). Inquires should be directed to Joel Cracraft, Chair of the Search Committee: jlc@amnh.org. Applications and letters of support should be received no later than January 15, 2013.

Joel Cracraft Chair, Division of Vertebrate Zoology Lamont Curator and Curator-in-Charge Department of Ornithology American Museum of Natural History Central Park West at 79th Street New York, New York 10024

Phone: (212) 769-5633 Fax: (212) 769-5759 e-mail: JLC@amnh.org cracraft@amnh.org

Professor, Richard Gilder Graduate School, AMNH Adjunct Professor, Department of Ecology, Evolution

and Environmental Biology, Columbia University, New York Adjunct Professor of Biology, City University of New York, New York

Joel L Cracraft <jlc@amnh.org>

AuburnU BioinformaticsComputationalBiol

Auburn Universityâ Assistant Professor in Bioinformatics/Computational Biologyâ College of Sciences and Mathematics

The Department of Biological Sciences at Auburn University invites applications for a tenure-track faculty appointment (9-month Assistant Professor) in Bioinformatics and/or Computational Biology, beginning Fall 2013. We seek candidates whose research interests expand/enhance existing strengths in life sciences at Auburn University, in particular comparative/functional/population genomics, regulation of gene expression, or molecular systematics/evolution/ecology. Those focused on developing novel computational approaches addressing core problems in environmental sustainability, food systems/safety, and other strategic areas are also encouraged to apply.

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

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

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

CaliforniaAcademy DipteraCurator

POSITION DESCRIPTION Assistant/ Associate CuratorâDiptera

Please apply directly to: The California Academy of Sciences' SnapHire e-recruitment platform (http://calacademy.snaphire.com/), accessing Assistant/Associate Curator - Diptera (9710).

Applications should include 1. A cover letter briefly summarizing their interest 2. A CV, with a list of publications 3. A statement of their research interests and philosophy (not more than 1 page) 4. A statement of their collection and curational interests and philosophy (not more than 1 page) 5. Names of three references

Position Summary

California Academy of Sciences seeks a systematic entomologist to conduct integrative, collections-based research program focused on Diptera (flies). The candidate is expected to develop an internationally recognized research program utilizing modern methods, which may include molecular systematics, genomics and bioinformatics, in pursuing collections-based systematic research on Diptera, with relevance to phylogenetics, genetics, evolution, morphology, behavior, biogeography, biodiversity, ecology, conservation biology or related fields. Frequent publication of highly regarded papers in competitive, peer-reviewed journals, curation of collections in specialty area, service to the scientific community in leadership capacities, acquisition of external funding, engagement in outreach activities, and

mentorship of students are expected.

ESSENTIAL DUTIES & RESPONSIBILITIES

A. RESEARCH: - Conducts research integrating diverse forms of data, including from scientific collections, to answer questions related to the diversity of Life, including its origins, evolutionary mechanisms, patterns and processes, and its future. - Plans and executes original research resulting in peer-reviewed scientific publications. - Plans, directs, and participates in scientific expeditions designed to advance knowledge, facilitate specimen collection, and conserve biodiversity. - Successfully seeks extramural funding and grants to support research activity.

B. COLLECTIONS: - Is responsible for the strategic growth and improvement of scientific collections. - Is dedicated to maintaining and developing biodiversity data associated with scientific collections. - Encourages use of the collections by scholars engaged in research program; requests new material from external sources through donations, exchanges, and purchases; determines desirable additions to fill existing gaps and/or build existing strengths. - Is responsible for professional judgments involving de-accession and disposal of collection material.

C. TRAINING: - Actively trains and mentors the next generation of scientists through supervision of postdoctoral fellows, graduate students and undergraduates. - Dedicated to training scientists originating from developing nations and increasing participation of historically underrepresented groups in systematics and evolutionary biology. - Engages in education activities for Academy staff, including docents.

D. PUBLIC ENGAGEMENT: - Participates in a spectrum of activities that engage diverse audiences in the excitement and process of scientific discovery, and conveys the importance of this work to the larger world. - Activities may include: participation in the development of exhibitions; presentation of popular lectures and presentations; citizen science programs; mentoring youth, adult, and family audiences; participation in education and outreach programs of the Academy; and other forms of popularization and dissemination of science. - Is responsible for review and scientific accuracy of exhibit scripts and technical documentation.

E. FUNDRAISING AND MARKETING: - Participates in fundraising and communication with donors through the Academy's Development team and their donor cultivation programs. - Works closely with Academy marketing staff to leverage scientific discoveries into popular media and to elevate the visibility and impact of the Academy's Research activities.

F. ADMINISTRATION: - May serve as a member of Academy-wide or Research Division committees. - May serve as a Department Chair with primary responsibility for coordinating research and collection activities. - As Chair, oversees setting departmental goals, budget development, monitoring of budgetary activity. - As Chair, is responsible for communicating goals and other matters to department staff, and for communicating departmental matters to Dean of Research. - As Chair, is a member of the Research Executive Committee and the Academy Leadership Team.

G. MISCELLANEOUS SERVICE: - Establishes professional contacts with other institutions and scientists, and builds appropriate partnerships and collaborations. - Participates in the activities of and/or provides advice to local, national, and international scientific societies and academic institutions.

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Canberra 4 NatlCollections

RESEARCH SCIENTISTS - 4 X POSITIONS

* Join CSIRO, Australia's premier research and technology organisation and be a part of this new venture!

* A shared national vision for collections, providing enhanced integration and access.

* Be involved and support scientific discovery.

Location: Canberra, Australia

Salary: $89K-$120K (based on qualifications and experience) plus up to 15.4% superannuation

Tenure: Indefinite

Pre-requisite

* PhD and extensive postdoctoral experience in a relevant field.

CSIRO's National Collections

The Australian National Biological Collections Facility (ANBCF) within CSIRO comprises the Australian National Wildlife Collection (ANWC), Australian National Insect Collection (ANIC), Australian National Herbarium (ANH) and other national collections (in-

cluding fish, algal, seed and wood collections). Each of these collections has staff and resources (traditional research specimens, living collections, cryofrozen tissues, sound, and data). As part of an integrated build in national capability in molecular systematics and evolutionary research, we are currently seeking four positions across ANBCF.

ACT12/03557 - Invertebrate - Molecular Systematics

This is an opportunity for a molecular systematist with a special interest in insects and genomics to make a substantial contribution to the Australian National Insect Collection (ANIC), the largest and most significant collection of Australian insects in the world. It is housed in CSIRO's Ecosystem Sciences, which also conducts research on many other aspects of insect biology (e.g., ecology, biocontrol, biosecurity and insects as model genomic systems).

The appointee will be expected to use molecular data in research on the systematics and evolutionary biology of insects. They will have research strengths in phylogeny, systematics, and biogeography in the context of Australian insects. Their taxon focus will preferably be on the ANIC's collection strengths of beetles (Coleoptera), moths and butterflies (Lepidoptera), flies (Diptera) or ants and wasps (Hymenoptera). The appointee will be expected to interact with colleagues to more fully integrate molecular data and analyses into ongoing research projects.

ACT12/03558 - Vertebrate - Systematics and Collections

To be a relevant force in understanding how organisms will adapt to environmental change we must continue species discovery that inventories our fauna as well as understands the genetic basis to adaptive mechanisms. This position will meet these needs by intersecting relevant disciplines of adaptation biology, evolutionary history, population genetics and systematics.

The appointee will be expected to lead in CSIRO's embracing of genomics in evolutionary biology as applied to natural populations of vertebrates. They will work at the intersection of phylogeny and adaptation, systematics and population genetics, biogeography and phylogeography especially as applied in the context of Australo-Papuan vertebrates. Their focus will be on the ANWC's vertebrate collections (especially birds and mammals) but developing capacity in any terrestrial vertebrate group would be encouraged / supported. The appointee will be expected to develop a field program that will contribute to growth of the collections.

ACT12/04633 - Plant Molecular Systematics and Evolutionary Genomics (x2)

We are seeking to appoint two early to mid-career scientists with interests in undertaking research on the Australian Flora in the areas of molecular systematics, evolutionary genomics and phylogeography. A solid grounding in collections-based science is still seen as essential to this work. The positions are based at the Australian National Herbarium within the CSIRO's Division of Plant Industry, which also conducts research on many other aspects of plant biology (e.g. ecology, developmental biology, crop breeding, molecular biology and genomics). The Australian National Herbarium is a component of a joint venture in biodiversity science between CSIRO and the Federal Department of Sustainability, Environment, Water, Populations and Communities, through the Australian National Botanic Gardens.

About CSIRO

Australia is founding its future on science and innovation. Its national science agency, CSIRO, is a powerhouse house of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation. Find out more! www.csiro.au . For further information and to apply online for the above positions please visit our website at CSIRO CAREERS (http://csiro.nga.net.au/cp/index.cfm?event=jobs.home), choose "Jobs Search" and insert the Job Reference Number where indicated.

Megan.Gardiner@csiro.au

CityUNewYork EvoDevo

Hello all,

Please see the announcement below and feel free to contact me with any questions at ealter@york.cuny.edu. We are particularly interested in applicants with an evo-devo research focus.

Best, Liz

FACULTY VACANCY ANNOUNCEMENT

York College of The City University of New York (CUNY) invites applications for a tenure-track position at the Assistant or Associate Professor level in Developmental Biology to begin Fall semester 2013. Instructional responsibilities include lecture and laboratory courses in developmental biology as well as other major

and non-major courses as needed by the Department. Candidates must demonstrate a strong interest in and commitment to undergraduate teaching and the ability to develop and maintain an active research program supported by external funding. The academic program, instructional and research equipment, and grant programs available at York College can be found at the following link: http://www.york.cuny.edu/academics/-departments/biology . QUALIFICATIONS Ph.D. degree or equivalent in Biology or related field; postdoctoral experience preferred. Also required are the ability to teach successfully, demonstrated scholarship or achievement, and ability to cooperate with others for the good of the institution.

COMPENSATION CUNY offers faculty a competitive compensation and benefits package covering health insurance, pension and retirement benefits, paid parental leave, and savings programs. We also provide mentoring and support for research, scholarship, and publication as part of our commitment to ongoing faculty professional development.

HOW TO APPLY Candidates for faculty positions must provide a CV/resume.

Additionally, applicants should provide a statement of research and teaching experience, and the contact information for three professional references. Please submit your application online through this job board as follows: - Go to www.cuny.edu and click on Employment - Select "Apply Now" then create or login to a user account and provide the requested information - Click on Job Postings on CUNYfirst - Click Search job listings - Click on More search options - Search by Job Opening ID number 6535

In order to be considered for this position, applicants must submit the items noted above and upload everything as ONE document in rtf, doc, or pdf format.

CLOSING DATE January 8, 2013 JOB SEARCH CATEGORY CUNY Job Posting: Faculty EQUAL EMPLOYMENT OPPORTUNITY We are committed to enhancing our diverse academic community by actively encouraging people with disabilities, minorities, veterans, and women to apply. We take pride in our pluralistic community and continue to seek excellence through diversity and inclusion. EO/AA Employer.

S. Elizabeth Alter Assistant Professor Biology Department and the Graduate Center of CUNY York College / CUNY 94 - 20 Guy R. Brewer Blvd, Jamaica, NY 11451 Tel: 718-262-2732 (Office) Tel: 718-262-2637 (Lab) Fax: 718-262-2369 Website: http://-www.york.cuny.edu/portal_college/alter-susan-e

EAlter@york.cuny.edu

ClemsonU 2 TeachingEvolution

BIOLOGY INSTRUCTION (Assistant Professor)

The Department of Biological Sciences at Clemson University invites applications for two tenure-track Assistant Professor faculty positions to begin in August 2013. The Department seeks faculty with strong commitments to the teaching, undergraduate research, and educational outreach missions of Clemson University. Applicants must have a Ph.D. in the biological sciences. Evidence of excellence in teaching is essential. Experience in the development of introductory biology curricula and experience and interest in inquiry-based approaches in biology instruction are desired. The successful candidates will be expected to participate in the development and teaching of our introductory biology courses and the advising of undergraduate students. In addition, successful candidates will be expected to develop a research program on undergraduate instruction or undergraduate research training. The Department of Biological Sciences has outstanding outreach education programs that provide research opportunities through the nationally-funded SC Life and DNA Learning Center programs. Further information about departmental resources, programs, and faculty research interests are available at http://-www.clemson.edu/cafls/departments/biosci/ . In a single pdf file, compile a cover letter, a curriculum vitae, a statement of teaching interests and philosophy, a statement of research interests in undergraduate instruction or research training, and the names of three references. In addition, provide pdf files of up to three publications. Send all application documents to Robert J. Kosinski (e-mail: rjksn@clemson.edu), Department of Biological Sciences, 132 Long Hall, Clemson University, Clemson, SC 29634-0314. For full consideration please submit your application no later than February 15, 2013. Review of applications will continue until the positions are filled.

Clemson University is an Affirmative Action/Equal Opportunity Employer and does not discriminate against any individual or group of individuals on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, veteran status or genetic information.

MPTACEK@clemson.edu

CornellU LabTechnician

Ecology & Evolutionary Biology Cornell University Lab Technician III - Job # 19196

Job Description

Research position in evolutionary biology/herpetology lab. Provide tech support for molecular systematics and comparative population genetics/genomics research. Specific responsibilities include DNA isolation, PCR, library construction, sample preparation, editing sequence data, using genomic database and searching tools, running phylogenetic and population genetic software, and data interpretation. General responsibilities include maintaining and purchasing laboratory supplies, assisting with grant proposal and manuscript preparation, and assisting with student training. This is a one-year appointment, renewable for a second year upon satisfactory performance. Endowed college employee benefits apply.

Qualifications

BS in biology-related field strongly preferred with at least one year of experience in a molecular biology or molecular systematics environment. Working knowledge of standard molecular lab protocols and basic field biology techniques. Neatness, attention to detail, good organizational skills and ability to manage people and be a team leader. Some weekend/evening hours will be necessary for field collecting trips, and time-sensitive lab procedures.

Applications will be accepted through January 30, 2013

Inquiries can be directed to Dr. Kelly Zamudio at krz2@cornell.edu.

Located in Ithaca, NY, Cornell University is an equal opportunity, affirmative action educator and employer.

To apply please visit: https://cornellu.taleo.net/-careersection/10164/jobsearch.ftl Job Number 19196

Kelly R. Zamudio Professor of Ecology and Evolutionary Biology Cornell University Ithaca, NY 14853-2701

kelly.zamudio@cornell.edu

CornellU LabTechnician corrected link

Ecology & Evolutionary Biology Cornell University Lab Technician III - Job # 19196

Job Description

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To apply please visit: https://cornellu.taleo.net/-careersection/10164/jobsearch.ftl Job Number 19196

OR:

https://cornellu.taleo.net/careersection/-jobdetail.ftl?job=3D325109&lang=3Den&sns_id=-mailto#.UNNP0e20mh8.mailto Kelly Zamudio Cornell University Ecology and Evolutionary Biology

kelly.zamudio@cornell.edu

Edinburgh LabTech ConservationGenetics

WildGenes Conservation Genetics Laboratory Technician As the Laboratory Technician, you will report to the Head of WildGenes, working within the Society's Conservation Programmes department. You will carry out laboratory DNA analysis and support with the day to day running of the facility. The successful candidate will be required to undertake DNA extraction and amplification of samples in a robust and timely manner. They will be flexible in their approach and carry out a variety of other tasks as required. As a valued member of the Conservation Programmes department, the post-holder will contribute to the development of the Society in achieving its Mission and Aims.

About you You will be educated to degree level, or hold equivalent relevant experience in biological, biochemical or environmental sciences. Previous experience of laboratory work is desirable whilst excellent working knowledge of Microsoft Office is essential. The successful candidate should have sufficient knowledge-based skills to conduct DNA extraction. A full UK valid driving licence is required as is the ability to work in the UK. Other skills such as note-taking would also be an advantage. With an ability to communicate effectively across a wide range of internal staff and researchers, you will be able to pursue projects effectively with minimum supervision. This role would suit an effective communicator who demonstrates a quality approach to work.

About us The Royal Zoological Society of Scotland (RZSS) owns and manages Edinburgh Zoo and the Highland Wildlife Park. Of equal importance is our excellent international reputation for our conservation and education programmes and we are looking to the future with confidence. We've been a charity since our founding in 1909, Registered charity number: SC004064

This is a full time position (37.5 hours per week, Monday- Friday) Closing date for the above position is Thursday 10 January 2013

If you have queries regarding the role or would like further details, please email Ross McEwing at rmcewing@rzss.org.uk

Closing date: 10 Jan 2013

Dr. Ross McEwing Senior Scientist

WildGenes Laboratory Royal Zoological Society of Scotland Edinburgh EH12 6TS UNITED KINGDOM

Tel: +44 (0)131 3140388 Fax:+44 (0)131 3140376 www.rzss.org.uk/research Ross McEwing <rmcewing@rzss.org.uk>

Editor HumanPopulationGenetics

Human Biology: The International Journal of Population Genetics and Anthropology and the official journal of the American Association of Anthropological Genetics is now accepting applications or nominations for the position of Editor-in-Chief.

A worldwide forum for state-of-the-art ideas, methods, and techniques in the field, Human Biology focuses on genetics in its broadest sense. Included under this rubric are: genetic epidemiology, human population genetics, evolutionary and genetic demography, quantitative genetics, evolutionary biology, ancient DNA studies, biological diversity interpreted in terms of adaptation (biometry, physical anthropology), and interdisciplinary research linking biological and cultural diversity (inferred from linguistic variability, ethnological diversity, archaeological evidence, etc.). The journal is published bimonthly, with six numbers in one volume per year.

The Editor-in-Chief is responsible for soliciting and revising manuscripts for publication. In addition, the Editor-in-Chief is responsible for communication with authors; making editorial decisions regarding acceptance, rejection, and the extent of revision of reviewed manuscripts; and securing copyright agreements from authors of accepted manuscripts. The Editor-in-Chief has final responsibility for the editorial content of Human Biology.

The application for Editor-in-Chief should include the following:

1. Current CV 2. Letter of application on: a. the applicant's goals for the journal and how the applicant will reach said goals b. how the applicant will assist in increasing the journal's Impact Factor c. how the applicant will expand the reach of the journal internationally and to new scholars 3. Outline of possible institutional support

The new Editor-In-Chief will take control of the journal on September 1, 2013, and the incoming Editor-in-Chief will work closely with the current Editor for three

months prior to assuming the position. The search committee will begin review of applications in March.

All queries and applications should be sent to Alicia Vonderharr, Journals Manager, at:

Wayne State University Press 4809 Woodward Ave. Detroit, MI 48201

Email: aliciav@wayne.edu

Lauren Crocker Journals Marketing, Sales & Order Fulfillment Coordinator Wayne State University Press 4809 Woodward Ave. Detroit, MI 48201

Phone: 313-577-4603 Email: lauren.crocker@wayne.edu

wsupress.wayne.edu

Follow Wayne State University Press on Facebook or Twitter !

Lauren Crocker <lauren.crocker@wayne.edu>

EmoryU EvolutionaryGenetics reminder

Tenure Track Position in Evolutionary Genetics

The Department of Biology at Emory University seeks an investigator who studies the mechanisms of evolution. We will consider applicants holding a PhD or equivalent degree with training and experience in a wide range of specializations including, but not limited to, evolutionary genetics, molecular genetics, population genetics, molecular ecology, experimental systems biology, and functional genomics/bioinformatics. This position is for a tenure-track Assistant Professor, although an appointment at a higher rank will be considered in exceptional circumstances.

Applicants are expected to establish a vigorous, extramurally funded research program and enthusiastically participate in the undergraduate and graduate teaching missions of the Biology Department and Interdepartmental Graduate Program in Population Biology, Ecology and Evolution (http://www.biomed.emory.edu/-PROGRAM_SITES/PBEE/)

In addition to a CV and publication list, applicants should submit a single PDF file with the following: 1. A statement of their current and soon anticipated research and approach with a clear description of the questions they are addressing. This statement should explicitly indicate the significance of their research to evolutionary biology at large.

2. The applicant should describe how they will contribute to the Department[1]s teaching mission at both the undergraduate and graduate level. 3. A list of names and e-mail addresses of five potential referees. Do not include letters of recommendation with your application or request that letters of recommendation be sent without being solicited by the Department of Biology.

The Emory University Biology Department (http://-www.biology.emory.edu/) is housed in a modern, well-appointed building. The Biology faculty is productive, well funded, and actively engaged in the research and teaching missions of the University. The successful applicant will have access to state-of-the-art facilities, resources, and academic interactions with over 300 faculty engaged in biological research in the College and Medical School at Emory University and regional institutions including the Centers for Disease Control. Emory is located on a beautiful campus at the periphery of the City of Atlanta, a vibrant, affordable, and culturally diverse city in the wooded foothills of the Appalachian Mountains.

Applications should be submitted electronically to evobiolsrch@emory.edu. Review of applications will begin January 3, 2013. Any questions can be addressed to the same email address.

ngerard@emory.edu

GoetheU Frankfurt FungalEvolution

Goethe-University Frankfurt, Department of Biosciences, Institute of Molecular Biosciences invites applications for the following position: Junior Professorship (W1) for Biochemistry and Biotechnology of Fungi

We are seeking a scientist with research activities complementary to the activities in the LOEWE priority program “Integrated Fungal Research”. The newly established priority program brings together scientists from four hessian universities and a Leibnitz Institute, all working in different areas of mycology ranging from fungal biodiversity, molecular biology and genomics to applied aspects of fungal biotechnology and biochemistry. Possible areas of research could be biochemistry and biotechnology of ribosomal peptides, alkaloids, unusual amino acids, or sugars in fungi, the production of biotechnologically relevant products in fungal model

organisms (like Aspergillus, Penicillium, Yarrowia or Rhodotorula), or fungal cultivation technologies. Candidates must have an excellent publication track record. The successful applicant is expected to engage in cross-disciplinary research activities, as well as to compete for research funding actively. Willingness to participate in the LOEWE priority program "Integrated Fungal Research" is expected. The position comes with adequate administrative and teaching obligations within the Institute of Molecular Biosciences. The junior professor will be hired for a period of three years. An extension for another three years can be granted subject to a successful evaluation. The designated salary for the position is based on "W1" on the German university scale. For further information regarding the general conditions for professorship appointments, please see: http://www.uni-frankfurt.de/ aktuelles/ausschreibung/professuren/index.html. Qualified scientists are invited to submit their applications accompanied by the usual information, such as CV, degrees and certificates, list of publications, details about teaching and international experience, information on grant applications and a concept for future research and teaching within three weeks of publication of this announcement. Please send applications preferentially by E-Mail in a single PDF file to the Dean of the Faculty of Biosciences, Prof. Dr. Anna Starzinski-Powitz, Johann Wolfgang Goethe-University Frankfurt, Maxvon-Laue-Straße 9, 60438 Frankfurt/M. Germany, E-Mail: dekanat15@bio.uni-frankfurt.de.

Details regarding the LOEWE priority program "Integrative Fungal Research" can be obtained from Prof. Dr. Helge B. Bode (h.bode@bio.uni-frankfurt.de) or Prof. Dr. Marco Thines (thines@bio.uni-frankfurt.de).

Many Thanks!

Nice greetings, Jenny Koeppchen

Jenny Koeppchen <Jenny.Koeppchen@senckenberg.de>

IBENS Paris EvolutionaryGenomics

The Institute of Biology of the Ecole Normale Supérieure is seeking to recruit 2 research groups. http://www.ibens.ens.fr/spip.php?rubrique7&lang=-en The Institute of Biology of the Ecole Normale Supérieure "IBENS" was created in 2010. It is affiliated to the ENS, the CNRS and Inserm institutional bodies. The research staff of the IBENS comprises 24 independent groups organized in four sections: Developmental Biology, Neuroscience, Functional Genomics, and Environmental and Evolutionary Genomics. Researchers at the IBENS benefit from common strategic investments including optical imaging and electron microscopy, high-throughput sequencing, computing, protein production, animal (mice, rats, zebrafish, xenopus) and plant facilities. Multidisciplinary research is further reinforced by local interactions and collaborations with the departments of physics, chemistry, mathematics, and cognitive sciences at the ENS.

The selection will be performed in two stages: short-listing in March 2013 and interviews by the Scientific Advisory Board of IBENS in May 2013. Applicants should send a CV (2 pages), a summary of scientific achievements and proposed research program (6 pages). These documents and three letters of recommendation mailed directly by their authors should be sent to: ibens.newresearchgroups@biologie.ens.fr For further information, please contact Danièle Murciano (daniele.murciano@ens.fr, +33 1 32 44 37 42). DEADLINE FOR APPLICATIONS FEBRUARY 1st, 2013

Marie-Anne Felix Institute of Biology of the Ecole Normale Supérieure (IBENS) 46 rue d'Ulm, 75230 Paris cedex 05, France 8th floor. Office: Room 801. Lab: Room 817. mail: felix@biologie.ens.fr Tel: +33-1-44-32-39-44 http://www.ibens.ens.fr/-spip.php?article256&lang=en STRAINS: http://-www.justbio.com/worms/index.php Marie-Anne Felix <felix@biologie.ens.fr>

ImperialCollege London 10 Biodiversity

Imperial College London

Silwood Park Campus

Faculty of Natural Sciences

Department of Life Sciences

Grand Challenges in Ecosystems and the Environment

(Lecturers/Readers/Chairs)

Lecturer salary: £44,150 - £49,200 per annum Reader: minimum starting salary: £54,250 per annum Chair: minimum starting salary: £68,970 per annum

Up to 10 positions to be appointed within the Faculty of Natural Sciences

o Imperial College London is launching a major initia-

tive to tackle the grand challenges and opportunities facing ecological systems and the environment.

o The initiative will appoint a large cohort of scientists in a flexible set up, from permanent academics to sabbaticals and members of collaborative working groups.

o This initiative will benefit from and invest in long-term field experiments both at Silwood Park and around the world, as well as in- house, high-tech laboratory facilities.

o Bringing together some of the top leaders across disciplines, the initiative will strive to ensure the future wellbeing of humanity and ecological systems in a world of global change.

o The initiative will involve groups from across the Faculties of Natural Sciences, Medicine and Engineering, the Grantham Institute for Climate Change, and the Centre for Environmental Policy.

We are seeking scientists at all levels (Lecturers/Readers/Chairs) to develop innovative projects addressing challenges in areas including the following:

* Land-use change and interactions between ecosystem processes, biodiversity and human health and wellbeing; Sustainable food and water supplies; Human-environment-biosphere interactions; Environmental medicine; the response of ecosystems to a changing climate & broader environment, and their feedback on this change.

Managing focal species in complex ecosystems; Disease, pest, invasive and/or vector biology; Ecological synthetic biology and genomics.

Predicting, monitoring and mitigating environmental and biotic change across local to global scales; Ecosystem science, including modelling, field and laboratory experiments; Remote sensing ecology and automated monitoring systems; Ecological engineering and prediction.

The initiative will be based in the Department of Life Sciences at the Silwood Park Campus (http:/-/www3.imperial.ac.uk/silwoodparkcampus), with the option of joint affiliations with other departments where applicable.

Reporting to the Head of the Department, you will be expected to develop new teaching activities including projects and courses, and contribute to teaching and administration within Department. You will be expected to contribute to the assurance and enhancement of the quality of teaching, learning and research within the Department, in line with the College's standards. You will also be required to raise financial support, and manage your own innovative research programme of international quality in areas of Ecosystems, Environment and/or Human Populations.

The successful candidates will be expected to have a good honours degree and a doctorate (or equivalent) in a relevant subject area. You must also be able to demonstrate a strong research record in ecosystems, environment and/or human populations, commensurate with the current stage of your career, together with a proven track record of high quality independent research evidenced by high quality publications in peer reviewed journals. You must have the potential to raise significant research funding from UK and EU sources to maintain and enhance the College's leading research activities. Experience of teaching at undergraduate and postgraduate level is also a "must have", and a record of successful postgraduate student supervision would also be an advantage.

You must 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 must have the ability to lead a research team, manage the finance and your staff. You must also have the ability to communicate and inspire students.

For appointment to the position of Reader, in addition to the above, you must also be able to demonstrate an exceptionally strong research record, alongside a proven track record of securing research funding. You will also be expected to have a extensive experience in postgraduate training and undergraduate teaching across a range of subjects within (or close to) the fields of ecology, evolution and environmental science, together with a track record of successful postgraduate supervision and postdoctoral mentoring.

For appointment to the position of Chair, in addition to the above, you will be expected to demonstrate an international reputation for research and innovation in ecosystems, environment and/or human populations,

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ImperialCollege London 2
EcolEvolution

Imperial College London

Faculty of Natural Sciences

Department of Life Sciences

Division of Ecology and Evolution

Two Academic Positions in Ecology and Evolution (Lecturer/Reader/Chair)

Lecturer salary in the range £44,150 - £49,200 per annum Reader minimum starting salary: £54,250 per annum Chair minimum starting salary: £68,970 per annum

The Division of Ecology and Evolution is looking to make two academic appointments in the broad areas of Ecology & Evolution. The post will be based at the Silwood Park Campus (http://www3.imperial.ac.uk/-silwoodparkcampus).

The successful candidates will contribute to the Division's goal of improving fundamental scientific understanding of biological and ecological processes and systems. The research will focus on solving ecological and evolutionary challenges and could fit into a range of disciplines, including, but not restricted to, ecology, evolution, genomics, agro-biology, or conservation science.

The Division is seeking to appoint candidates with expertise in relevant areas of ecology, evolution, or conservation science. We anticipate that these appointments will be at Lecturer level. However, there is potential for the appointments to be made at more senior academic levels (Reader/Chair), and we welcome applications from more senior researchers.

Reporting to the Head of the Department, you will be expected to identify opportunities in Ecology and Evolution and contribute to teaching and administration within the Division and Department. You will be required to raise financial support, manage your own innovative research programme of international quality in the areas of ecosystems, the environment, and their interaction with human populations that would expand on and complement existing activities within the Department of Life Sciences.

The successful candidate will be expected to have a good honours degree and a doctorate (or equivalent) in a relevant subject area. You will also have an international reputation for research and innovation in ecosystems, environment and/or human populations commensurate with the current stage of your career, underpinned by a record of first-class journal publication. 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. Experience of teaching at undergraduate and Masters' level, and postgraduate student supervision, are not essential, but would be an advantage. You must have excellent interpersonal, verbal and written communication skill with an ability to convey ideas and concepts clearly and effectively to a range of audiences through a variety of methods and media. You must have the ability to lead a research team, manage the finance and your staff. You must also have the ability to communicate and inspire students as you will be expected to contribute to our undergraduate and postgraduate teaching programmes. For appointment to Reader, in addition to the above, candidates must also have an exceptionally strong research record in ecological systems, environment and/or human populations or a closely related subject, and a proven track record of securing research funding. You will also be expected to have extensive experience in postgraduate teaching and undergraduate teaching across a range of subjects within (or close to) the fields of Ecology, Evolution or Environmental Science, together with a track record of successful postgraduate student supervision and postdoctoral mentoring.

For appointment to the position of Chair, in addition to the above, you will also be expected to have an international reputation for your research, and strong leadership qualities in areas which enhance and extend those of the Group.

Previous applicants and/or holders of independent fellowships are welcome to apply.

For an informal discussion about the post please contact Professor Vincent Savolainen (v.savolainen@imperial.ac.uk).

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 2012 256 JT into "Keywords"). Please complete and upload an application form as directed.

Alternatively, if you are unable to apply online, please contact Mrs Diana Anderson by email d.anderson@imperial.ac.uk to request an application form.

Closing date: 31 January 2012

Committed to equality and valuing diversity. We are also an Athena Bronze SWAN Award winner, a Stonewall Diversity Champion and a Two Ticks Employer.

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

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Imperial College London

Faculty of Natural Sciences

Department of Life Sciences

Division of Ecology and Evolution

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

ImperialCollege London Bioinformatics

I have three posts just advertised which i think (at least the first two) would be of interest to the EvolDir.

The first two (Bioinformatics engineer and Web engineer) are part of a Wellcome funded project to further develop web applications for the storage, processing, analysis and visualisation of very large sets of microbial whole genome sequences, via the web.

Further details and particulars can be found here:

Bioinformatics Software Engineer

http://www.jobs.ac.uk/job/AFQ688/bioinformatics-software-engineer/ Web Application Software Engineer:

http://www.jobs.ac.uk/job/AFQ685/web-application-software-engineer/ The third post is part of an FP7 grant entitled 'CitizenCyberLab' (www.citizencyberlab.com) and is for a Web/Mobile software Engineer to focus on translational HTML5 web/mobile apps for device-independant data gathering (see www.epicollect.net)

This project is a collaboration between CERN, UNOSAT, Uni Paris-Descartes, Uni Geneva, UCL and Imperial

Further details can be found here:

http://www.jobs.ac.uk/job/AFQ690/web-mobile-software-engineer all the best

David

David Aanensen PhD Lecturer in Bioinformatics Dept. Infectious Disease Epidemiology, Imperial College London W2 1PG, UK t:+44(0)7590250562 s:daanensen

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InstZoology Namibia FieldAssist BehaviouralPlasticity

The Tsaobis Baboon Project is a long-term study of desert baboons in Namibia. Based at the Institute of Zoology (the research arm of the Zoological Society of London), and affiliated with the Gobabeb Training and Research Centre (Namibia), our aim is to carry out fundamental research in behavioural ecology and population ecology, and to inform conservation policy and practice for social species.

We are seeking to recruit up to six volunteer fieldworkers for the 2013 field season, which will run from early May to late October. Two positions will run the full six-month field season (approx. May - October), while the remaining posts will be divided evenly between the first and last three-month periods. The fieldwork will primarily involve daily follows of baboon troops on foot, collecting behavioural data from individually recognisable animals and their associated ecological conditions. Research in 2013 will be focused on the following two themes:

- Behavioural plasticity and the fitness effects of social information use - Sexual conflicts over reproduction in social groups

Since fieldworkers will be split equally between these themes, applicants should either express a preference, or state "no preference". Further information about the research project, the volunteer fieldworker positions, and the application procedure can be found on the Project's webpages:

www.zsl.org/tsaobisbaboonproject ***The deadline for applications is 9am Monday 7th January 2013***

Interviews will be held at the Institute of Zoology on Monday 14th and Tuesday 15th January 2013. Telephone / Skype interviews will be possible for overseas applicants.

Alex Lee PhD Candidate Institute of Zoology and Imperial College London

alexander.lee09@imperial.ac.uk

LANGEBIO Mexico Biodiversity

The National Laboratory of Genomics for Biodiversity of Mexico (Langebio) is a Unit of the Centro de Investigacin y de Estudios Avanzados± (CINVESTAV), a federal government institution devoted to basic and applied research. Langebios mandate is to conduct top-ranked research and graduate education, while promoting genomic knowledge for the protection and sustainable use of Mexican biodiversity. Research at Langebio is conducted by an international team of scientists, with an emphasis on collaboration and multidisciplinary studies.

We invite applications, rank open, for Professor-Investigator. The successful applicant will utilize molecular, computational and/or genomic approaches to address fundamental questions about the mechanisms underlying the evolution and maintenance of biodiversity and will develop an internationally recognized research program.

While there is no restriction as to taxa, priority will be given to those applicants whose research includes Mexicos wealth of biodiversity.

(http://www.langebio.cinvestav.mx)

Applicants should send a CV, PDFs of their three most important publications, and a three page description of their scientific accomplishments and proposed research program. Junior applicants should arrange for three reference letters to be sent separately.

Review of applications will begin February 15th, 2013. Send applications to the attention of Dr. Luis Herrera-Estrella, Langebio-CINVESTAV, Irapuato, Guanajuato, MEXICO, E-mail: mbernal@langebio.cinvestav.mx

Therese Markow, Ph.D. Professor-Investigator

Therese Markow <tmarkow@ucsd.edu>

Leibniz TechAssist EvolutionaryAdaptations

Advertisement of vacancies The Leibniz Institute for Zoo and Wildlife Research (IZW) in Berlin is Germany's premier wildlife research institute. The IZW focuses on the life histories and mechanisms of evolutionary adaptations of mammals and birds, their limits and their conservation in natural and anthropogenically influenced environments. For a major new interdisciplinary research initiative, funded through the Pact for Research and Innovation via the Leibniz Association, on "Gradual environmental change versus single catastrophe - identifying drivers of mammalian evolution" the IZW, together with its partner, the Potsdam Institute for Climate Impact Research (PIK) with expertise in the areas of climate change, climate policy and climate economics, and in collaboration with further institutions, offers the following positions:

(1+2) 2 PhD positions in Evolutionary Genomics (IZW)

(3) 1 PhD position in Stable Isotope Analysis and Evolutionary Genomics (IZW)

(4) 1 PhD position in Nonlinear Analysis and Reconstruction of Palaeo climate (PIK)

(5) 1 Technical Assistant in Evolutionary Genomics (IZW)

Project

The research initiative will focus on the evolution of mammals in the Sunda Shelf in southeast Asia, a global biodiversity hotspot. By combining climate reconstructions, molecular genetic data and species distribution data from the Late Pleistocene to the present we will detect and understand the mechanisms generating complex distribution patterns of genetic and species diversity (Pleistocene refugia) and thereby evaluate the impact of the hypothesised key drivers which may shape biodiversity. Using carnivores, primates and hoofed mammals as models, this will also contribute to the assessment of the long-term consequences of the current (man-made) biodiversity crisis.

Prerequisites (Positions 1+2, reference 34/2012) Candidates should hold a master's degree or diploma in biology or related disciplines and have a strong background in molecular biology, population genetics, and/or bioinformatics. Experience with 'ancient' DNA work and next generation sequencing is an advantage.

(3, ref 35/2012) The successful candidate will investigate the ecology of mammals in the Sunda Shelf and combine stable isotope analyses with genetic work. Candidates should have a master's degree or diploma in biology or related disciplines. Experience in working with stable isotopes and a background in evolutionary ecology is an advantage.

(4, ref 36/2012) The set of tasks associated with the position includes the reconstruction and analysis of climate conditions in the last 100,000 years in southeast Asia by using proxy records derived from stalagmites and developing new (nonlinear) techniques in order to consider instationarities, uncertainties, time-series with gaps and unequally sampled time-series. The successful candidate should hold a master's degree or diploma in mathematics or physics with profound skills in nonlinear dynamics, data analysis and programming in several languages (e.g. Python, Matlab, C++).

(5, ref 37/2012) We are looking for a technical assistant with strong molecular biology skills and, preferably, experience in 'ancient' DNA work and next generation sequencing.

We offer state-of-the-art methodology and a stimulating research environment in an interdisciplinary, collaborative project. For all candidates, organisational skills, high motivation and the willingness to work as part of a team within a highly interdisciplinary project are essential, as is proficiency in English. For enquiries or further questions, please contact Dr Joerns Fickel (IZW) Tel.: +49 (0)30 5168-314, fickel@izw-berlin.de, or Dr Norbert Marwan (PIK), Tel.: +49 (0)331 288-2466, marwan@pik-potsdam.de.

All positions are subject to final financial confirmation by the Leibniz Association. Salary and benefits will be competitive (e.g., a 65% scientist's salary for the PhD students). Positions are limited to three years and will be available from 1st April 2013. Interviews will take place 4-8 February 2013. As members of the Leibniz Association, both IZW and PIK are equal opportunity employers, are determined to increase the proportion of women in successful scientific careers, and particularly encourage women to apply.

Please submit your application (quoting references 34-37/2012) with a motivation letter, CV, copies of relevant degrees and contact details of two people who can provide a reference as one single PDF-file not larger than 500 kb before or latest on January 6th, 2013 to Stephanie Vollberg / Roswitha Hildebrand, Leibniz Institut for Zoo & Wildlife Research, P.O.Box 700430, D-10324 Berlin, Germany, personal@izw-berlin.de.

wilting@izw-berlin.de

MacEwanU EvolutionaryBiol

Biological Sciences - Assistant Professor MacEwan University

The Department of Biological Sciences in the Faculty of Arts and Science at MacEwan University invites applications for an Assistant Professor position commencing July 1, 2013. The candidate must have a PhD (or solid indication of imminent completion) in Biological Sciences, or a related discipline with a specialization in Molecular/Cellular Biology or Genetics. The candidate must demonstrate excellence, or clear promise of excellence, in teaching. A commitment to research and to the supervision of undergraduate research projects is expected. Candidates utilizing a model organism/system amenable to study in an undergraduate context are of particular interest. Applicants should have fluent written and oral communication skills in English. All qualified candidate are encourage to apply; however, in accordance with Canadian immigration requirements, Canadian citizens and permanent residents will be given priority. If suitable Canadian citizens or permanent residents cannot be found, other individuals will be considered.

Applicants should submit a covering letter complete with curriculum vitae, a statement regarding teaching philosophy and interests, recent teaching evaluations, a statement of research interests and graduate transcripts. Candidates should also arrange for three letters of reference to be sent under separate cover. All correspondence should be addressed to: Human Resources Department, MacEwan University, City Centre campus, 10-600, 10930-104 Avenue NW Edmonton, Alberta, T5J 4S2 (please quote competition number in your application).

All application materials should be submitted before the closing date of February 28, 2013.

This position is included under the MacEwan Faculty Association Collective Agreement.

Employment Category: Full Time Continuing

Salary Range: Commensurate with education and experience

Closing Date: February 28, 2013

Quote Competition No.: 12.12.320

MacEwan University thanks all applicants for their interest in employment; however, only those selected for interviews will be contacted.

Apply to: Human Resources Department MacEwan University University Services Centre 10-600, 10700 104 Ave NW Edmonton AB T5J 4S2 FAX: (780) 497-5430 E-mail: careers@macewan.ca

MacEwan University employment opportunities can be viewed by visiting our website at http://-www.macewan.ca Click on Jobs at MacEwan.

judgek3@macewan.ca

MissouriBotanicalGarden ConservationGenetics

Summary of the position:

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

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

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

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

For more information please visit our website or contact the Recruiter Link to comprehensive posting and job application: http://www.mobot.org/jobs/-mbgjobs.asp#K011 Missouri Botanical Garden Website: www.mobot.org Recruiter: Tracy Breckenridge E-mail: recruiting@mobot.org

Equal Employment Opportunity/Affirmative Action Employer

Matthew Albrecht, Ph.D. Center for Conservation & Sustainable Development Missouri Botanical Garden P.O. Box 299 St. Louis, MO 63166-0299

p: 314.577.0262 f: 314.577.0847 w: http:/-/www.mobot.org/MOBOT/Research/curators/-albrecht.shtml Matthew.Albrecht@mobot.org

PurdueU EvolutionaryBiol

Faculty Position in Evolutionary Biology Department of Biological Sciences Purdue University

The Department of Biological Sciences, Purdue University, invites applicants for a tenure-track faculty position in the area of Evolutionary Biology. We expect to fill one academic-year appointment at the Assistant Professor level. We seek candidates whose research integrates the fields of ecology and evolution through investigations in subfields including behavioral ecology, community ecology, conservation biology, evolutionary genetics, phylogenetics, physiological ecology, and/or population biology. Applicants must have a Ph.D. or equivalent in an appropriate discipline such as ecology, evolution or population biology, and at least 2 years of postdoctoral experience are highly recommended. The successful applicant is expected to conduct externally funded research that addresses fundamental questions in an area listed above; teach and mentor undergraduate and graduate students in the Ecology and Evolutionary Biology curriculum; and participate in ongoing programs in the Department of Biological Sciences.

The Department has over 50 faculty members conduct-

ing research in a wide range of fields including evolutionary biology, ecology, behavior, neurobiology, microbiology/virology, structural biology, developmental biology, molecular/cell biology, and bioinformatics. Further information about the Department is available at http://www.bio.purdue.edu/ .The successful candidate will have opportunities to interact with ecologists and allied scientists across the University, including colleagues in Discovery Park's Center for the Environment and Bindley Bioscience Center. First-rate laboratory and computational facilities for analytical and systems work are available in the Department and allied Centers (e.g., Bioinformatics and Genomics Core Facilities), and field facilities are widely available in the surrounding landscape, including the Ross Biological Reserve that is owned and maintained by the Department of Biological Sciences.

Applications must be submitted electronically to https://hiring.science.purdue.edu as single PDF files that include detailed curriculum vitae, names and addresses of three referees, a 2 - 3 page summary of research interests, and a one-page teaching statement. Inquiries should be directed to Evolutionary Biology Search Committee, Department of Biological Sciences, Purdue University, 915 West State Street, West Lafayette, IN 47907-2054 or emailed to search@bio.purdue.edu. Review of applications will begin January 7, 2013 and continue until the position is filled. A background check will be required for employment in this position.

Purdue University in an Equal Opportunity/Equal Access/Affirmative Action employer fully committed to achieving a diverse workforce.

dewoody@purdue.edu

ReedC Oregon AnimalBehaviour

Assistant/Associate Professor of Biology (Visiting)

The Biology Department at Reed College invites applications for a visiting professor position (preferably at the rank of assistant professor) for the 2013-14 academic year, with the possibility of a second year. We seek applicants with a PhD (required), and post-doctoral experience (preferred) in animal behavior and/or genetics, preferably working with invertebrate or non-mammalian vertebrate organisms. Teaching responsibilities include an upper level lecture/lab course, a seminar course in the candidate's area of expertise, one lower level course, and advising senior thesis research projects. Supplies, equipment, and space are available to support collaborative research with students.

Reed College is a highly selective liberal arts institution with a distinguished record of educational accomplishment and a strong commitment to scholarship (http://-/web.reed.edu). The Reed community believes that cultural diversity is essential to the excellence of our academic program. All applicants are invited to address how their teaching, scholarship, mentoring, community service, or other activities could support Reed's commitment to diversity and inclusion (see http://-www.reed.edu/diversity/).

For full consideration, application materials (cover letter, curriculum vitae, statement of research and teaching interests, one to two relevant reprints, and three letters of recommendation) should be sent as PDF(s) to biology.search@reed.edu subject "visiting biology search" by January 10^th 2013.

Specific inquiries should be directed to Susan Renn, Chair, Visiting Biologist Search Committee, renns@reed.edu

Suzy Renn <renns@reed.edu>

RutgersU Programmer

Research Programmer

Seeking a scientific research programmer to join the laboratory of Dr. Jody Hey at Rutgers University, in Piscataway, New Jersey. Primary responsibility will be to assist in the development of statistical and evolutionary genetic applications. The programmer will work with Dr. Hey as well as postdocs and students in the lab to revise existing code and to write new applications. The work requires experience and skill in C and C++ programming, as well as skill in implementing complex algorithms and data structures. Experience with both Unix and Windows, as well as MPI, is desired. The position is funded by an NIH grant for three years, with possibilities for continued funding.

Either a Ph.D. in some area of computational biology or biochemistry, or a Master's degree in computer science with extensive experience in scientific programming.

Applicants should provide a CV/Resume and three let-

ters of reference

The position is available immediately.

Jody Hey Professor, Department of Genetics Rutgers University Nelson Biological Labs (rm B326) 604 Allison Rd. Piscataway, NJ 08854-8082 732-445-5272 fax 732-445-5870 hey@biology.rutgers.edu http://genfaculty.rutgers.edu/hey/home "Hey, Jody" <Hey@dls.rutgers.edu>

SangerInstitute Programmer MicrobialBioinformatics

Senior Software Developer - Web Applications

Salary range is Â£27589 to Â£38067 per annum dependent on experience

We are seeking an experienced and enthusiastic Web Application Developer to further the development of bioinformatics applications for the intuitive visualisation and analysis of very large sets of microbial genomes via the web. The post is funded for four years as part of the Bill and Melinda Gates Foundation funded Global Pneumococcal Sequencing (GPS) initiative. The work will be carried out within the Pathogen Genomics group at the WTSI, in collaboration with the Department of Infectious Disease Epidemiology at the St. Mary's Campus of Imperial College, London. The Wellcome Trust Sanger Institute (WTSI) is a world leader in genomic research, with an expanding scientific programme dedicated to understanding gene function in health & disease. The Pathogen Genomics team uses high-throughput sequencing and phenotype analysis of bacteria to understand their virulence, evolution, transmission and host-interactions.

Recent advances in DNA sequencing technology provide the ability to obtain the DNA sequences of very large numbers of isolates of bacterial pathogens and open the way to detailed analysis of pathogen behaviour. Making these data useable by communities of researchers requires the development of web applications that logically store and query the genome sequences of large numbers of samples and allow a range of sophisticated analyses to be carried out.

The GPS initiative is aligned with global efforts to reduce vaccine preventable deaths and is focused on genomic analysis of Streptococcus pneumoniae, a major cause of morbidity and mortality throughout the world with a particular impact in low-income regions. The scientific aim of the project is to capture genomic variation in pneumococcal populations around the world, before and after widespread use of current anti-pneumococcal vaccines, in order to better understand how the pathogen responds to such vital clinical interventions thereby informing strategies around their use.

The successful candidate will be part of a dynamic team at the WTSI and will interact with collaborators around the world. They will play a key role in the development of novel visualisation and analysis tools for the intuitive presentation of sets of pneumococcal genomes to large communities of users via the web. Close liaison with other team members, with thorough assessment of existing and potential solutions will be crucial and the ability to collaboratively problem solve and code is a must.

Job Reference 81323 Documents 81-45; Senior Software Developer - Web Application.pdf (PDF, 19.6kb) Essential Skills

The successful candidate will have the following knowledge, experience and skills:

- PhD or MSc in computer science or related area (or equivalent industry experience)

- Evidence of proficiency in computer program design and implementation in modern web programming languages.

- Proven experience of designing and developing web based applications for support of scientific projects

- Experience of dealing with large data sets and running software on a compute farm

- Knowledge and experience of UNIX / LINUX on an advanced level

- Strong interpersonal and communication skills

- Excellent problem-solving skills

- Experience of training and supervising other team members Ideal Skills

Ideal Skills

Expertise in design, creation and validation of intuitive software for visualisation and analysis of biological datasets. Experience with processing next-generation sequencing data would be an asset but is not essential.

Other information

This position is fixed-term for 4 years.

Closing date for applications is Wednesday 2nd January 2013

https://jobs.sanger.ac.uk/wd/plsql/-

wd_portal.show_job?p_web_site_id=-1764&p_web_page_id=158174 Stephen Bentley Principal Scientist Pathogen Genomics Wellcome Trust Sanger Institute * Senior Research Associate Department of Medicine University of Cambridge * Honorary Professor Institute of Infection and Global Health University of Liverpool

Stephen Bentley <sdb@sanger.ac.uk>

UCalifornia Riverside PlantEvolution

FACULTY POSITION - ASSISTANT PROFESSOR PLANT COMMUNITY ECOLOGIST UNIVERSITY OF CALIFORNIA, RIVERSIDE The Department of Botany and Plant Sciences invites applications for an assistant professor, tenure-track (9-month) position in Plant Community Ecology. Applicants should work at the forefront of the field, with emphasis on a functional approach to understanding community dynamics. We seek a plant ecologist who can interact with programs in conservation biology, invasive species ecology, ecological genomics, ecosystem and landscape ecology, and/or theoretical and computational ecology. Preference will be given to candidates who integrate empirical with statistical, phylogenetic, or modeling approaches, and who can apply advanced techniques such as, but not limited to, GIS/remote sensing, niche modeling, ecophysiological measurements, or stable isotopes. The successful candidate will supervise graduate students, develop a graduate-level community ecology course, and participate in the life science undergraduate teaching program. The position includes a research appointment in the Agricultural Experiment Station with an expectation to develop a nationally competitive program and obtain extramural grant funds. For additional information about the Department and the campus visithttp://cnas.ucr.edu/ andhttp://www.plantbiology.ucr.edu/. Applicants must hold a Ph.D. in ecological or environmental sciences or related fields with postdoctoral experience. Evaluation of applications will begin Jan 7, 2013 and continue until the position is filled. The position will be available July 1, 2013. Interested individuals should submit 1) a curriculum vitae, 2) a statement of research and teaching interests,and 3) have three letters of recommendation submitted through Academicjobsonline (https://academicjobsonline.org/ajo/jobs/2291) The University of California, Riverside is an Affirmative Action equal opportunity employer committed to excellence through diversity. – Louis Santiago Associate Professor of Physiological Ecology Botany & Plant Sciences and Center for Conservation Biology University of California 2150 Batchelor Hall Riverside, CA 92521-0124santiago@ucr.edu http://plantbiology.ucr.edu/faculty/santiago.html Louis Santiago Associate Professor of Physiological Ecology Botany & Plant Sciences and Center for Conservation Biology University of California 2150 Batchelor Hall Riverside, CA 92521-0124 santiago@ucr.edu http://plantbiology.ucr.edu/faculty/santiago.html Associate Researcher Smithsonian Tropical Research Institute Apartado 0843-03092 Balboa, Republic of Panama http://stri.si.edu Louis Santiago <santiago@ucr.edu>

UCalifornia SantaBarbara UndergradResearch EvolMatingSystem

RESEARCH INTERNSHIP AVAILABLE FOR UNDERGRADUATES

The joint evolution of mating system, life history, physiological performance, and drought-escape in the wildflower genus, Clarkia (Onagraceae)

The Mazer lab at the University of California, Santa Barbara wishes to recruit two or three volunteer undergraduate or beginning graduate student researchers to assist us in the final field season of an NSF-funded project in the southern Sierra Nevada of California from mid-March to mid-July 2013.

The research team for this project includes plant evolutionary and physiological ecologists at the University of California, Santa Barbara (Dr. Susan Mazer and Dr. Leah Dudley), at the University of St. Thomas (Dr. Simon Emms and Dr. Amy Verhoeven), and at California State University at Chico (Dr. Christopher Ivey). Since 2008, we've been investigating the physiological, genetic, and ecological causes and consequences of the evolution of self-fertilization in several species of the annual wildflower genus, Clarkia.

The project for which we seek additional field assistants includes a field experiment in which genotypes of two predominantly outcrossing taxa (C. xantiana ssp xantiana and C. unguiculata) will be assessed for their physiological rates, water use efficiency, plant architecture, life-history parameters, floral traits, and a variety of other stress-related traits (chlorophyll fluo-

rescence and water potential). The goal is to determine whether, in these outcrossing taxa, genotypes that flower early exhibit a tendency to self-fertilize and/or other traits associated with their earlier-flowering selfing sister taxa. If early flowering genetically associated with floral traits that promote selfing (as suggested by our previous work), then where natural selection favors early flowering in wild Clarkia populations - as may be the case where climate change or drought causes a shorter growing season - high levels of selfing may evolve quickly due to this genetic association, even if selfing is disadvantageous due to its genetic risks (e.g., inbreeding depression). In other words, along with poor pollinator service, shorter growing seasons induced by springtime drought might promote the evolution of selfing, generating population genetic problems that haven't been previously suggested to be a possible outcome of compressed growing seasons.

Details of the research internships: We will provide (a minimum of two) field assistants with shared housing in the Lake Isabella region, but participants would be expected to pay for their own food. We expect volunteers to: (1) be interested in the ecology and evolution of wild species; (2) be willing to work in all weather conditions, (3) participate well in a group setting, (4) work independently when necessary, (5) function at any time of day or night (we will record pre-dawn/night-time measurements 20-30 times during the season - ouch!), and (6) carry heavy objects for short distances. Students will in turn receive a closely mentored field experience and research training in the fields of ecology and evolution, with a special emphasis on plant physiology. We would also strongly encourage the development of independent research projects that may lead to and inform future graduate work.

We're attaching a flier that describes the opportunity, and would greatly appreciate help in distributing it.

Susan Mazer Professor of Ecology & Evolutionary Biology Department of Ecology, Evolution & Marine Biology University of California, Santa Barbara Santa Barbara, CA 93106

cell: 805-729-3980 office: 805-893-8011 FAX: 805-893-2266 mazer@lifesci.ucsb.edu

website: http://www.lifesci.ucsb.edu/eemb/faculty/-mazer/index.html Leah S. Dudley Postdoctoral Researcher, Plant Ecophysiology Department of Ecology, Evolution & Marine Biology University of California, Santa Barbara

susan.mazer@lifesci.ucsb.edu

UFreiburg 2 EvolutionaryBiol

The Faculty of Biology at the University of Freiburg (Germany) invites applications for

2 Research Associates (Wissenschaftlicher Mitarbeiter/in; E13 TV-L)/ Assistant Professorships (A13)

Fulltime position, Start: April 1st 2013

The Institute of Biology I is seeking highly motivated candidates with experience and research interests in the area of evolutionary biology.

1. Position: Molecular Evolution The candidate should have a strong background in evolutionary biology and molecular genetics/genomics. The applicant should be familiar with genomic analyses and molecular genetic techniques (ideally with Quantitative Realtime PCR and RNAi).

2. Position: Evolutionary Biology The candidate should have a strong background in evolutionary biology, preferentially working on social evolution in vertebrates, invertebrates or social microbes.

The positions are part of the new to establish evolutionary biology group by Prof. Dr. Judith Korb at the department of Evolutionary Biology and Animal Ecology. For further information about research see (http://www.biologie.uni-osnabrueck.de/Fachbereich/?x=ae,equ;en), or please contact: Judith.Korb@biologie.uni-osnabrueck.de.

The University of Freiburg is a top research location in Germany. Freiburg is a university town, located in one of the warmest regions of Germany, next to the black forest and close to Alsace and Switzerland. The vibrant town offers a living environment surrounded by beautiful scenery, plenty of entertainment and cultural activities.

Candidates for positions must hold a PhD and should establish externally funded projects, supervise students, contribute to the teaching mission of the department and will have the opportunity to obtain the Habilitation (a German qualification supportive in applications for professorships).

The positions are available starting April 2013 for a maximum of up to 6 years. Initial appointment generally is for three years.

The University of Freiburg is committed to equal oppor-

tunity in employment and gender equality in its working environment. We strongly encourage applications from qualified women. Applications from appropriately qualified handicapped persons are also encouraged.

Interested candidates should send an application (as a single e-mail attachment) containing a complete CV, reprints (pdf-files) of three representative papers and a concise description of current and future research concepts. Applicants should also arrange for two letters of reference to be submitted on their behalf to the address below.

Applications for this position are required by January 31th 2013 and should be sent electronically to: Prof. Dr. Judith Korb, e-mail: Judith.Korb@biologie.uni-osnabrueck.de

"Korb, Judith" <Judith.Korb@Biologie.Uni-Osnabrueck.DE>

UMichigan CollectionManager

The Mammal Division, University of Michigan Museum of Zoology, is seeking to hire a Research Museum Collection Manager. This is a full-time, permanent position.

JOB DUTIES:

1. Maintenance and digitization of the existing mammal collections including dry collections (skins, skulls, skeletons and furs), fluid preserved specimens, frozen tissues, photographs, and digital images. Activities include attention to the condition and arrangement of specimens, as well as maintaining the collection areas and equipment to make them suitable for research, teaching, and use by visitors, either on site or remotely through online communication. Responsibilities also include reviewing, updating, and enhancing the mammal collections management plan; working with faculty curators to develop and implement policies, standards, and procedures for the scientific and technical work performed within the research collections; advise faculty, students and staff on all aspects of collection management involving the mammal collections.

2. Maintenance and digitization of the research and teaching collection catalogs and the field notes. Activities include developing and maintaining a computer database, with digital images and label and catalog printouts. Confer with faculty and student researchers to plan and develop research projects utilizing the research collections; analyze data and problems; develop and recommend solutions to the problems and test the solutions for effectiveness. Author or co-author articles / book chapters for publication; present or co-present with faculty in class settings or at scientific conferences.

3. Accessioning of new specimens. Activities involve preserving new specimens in the appropriate manner and cataloging them in the electronic database.

4. Coordinate and process inter-departmental and inter-institutional loans and exchanges. Activities include the packing and unpacking of loans (specimens and frozen tissue) and providing federal and international permit information when appropriate, and the electronic exchange of digitized information.

5. Routine maintenance of the data portal through which our holdings are made accessible to researchers across the world. This activity requires regular attention to both our electronic, searchable database and a server that connects us to the international community.

6. Maintenance and use of the dermestid beetle colony. This activity involves coordinating the preparation of skeletal preparations for UMMZ vertebrate divisions (fish, reptiles and amphibians, birds and mammals).

7. Maintenance of the Liquid Nitrogen Facility. This activity involves oversight of the organization of tissues for all divisions within the Museum of Zoology (mammals, insects, mollusks, birds, fish, reptiles and amphibians).

8. Training and supervision of staff volunteers, work-study students and graduate research assistants in all aspects of specimen preparation and conservation practices, geo-referencing and digital imaging of specimens and routine collections maintenance tasks.

9. Coordination of research visits and educational tours of the collections; participation in museum outreach activities.

QUALIFICATIONS:

An advanced degree (Master's or doctoral) in biology, zoology, or related fields with 3-5 years of museum experience is required. Extensive experience with database construction, use, and management is strongly preferred. Prior participation in a NSF Advancing Digitization of Biological Collections (ADBC) project is desirable. Familiarity with research collections is required. Expertise with mammals is highly desirable.

Information about applying can be found at http://umjobs.org/job_detail/76432/-res_museum_collection_manager . ptuck@umich.edu

UMinnesota MaizeGenomics

ASSISTANT PROFESSOR: MAIZE TRANSLATIONAL GENOMICS COLLEGE OF FOOD, AGRICULTURAL, AND NATURAL RESOURCE SCIENCES UNIVERSITY OF MINNESOTA

POSITION: Assistant Professor in Maize Translational Genomics (9-month, tenure-track appointment; 75% research, 25% teaching)

CLOSING DATE: December 15, 2012 or until a suitable candidate is identified LOCATION: Department of Agronomy and Plant Genetics, College of Food, Agricultural, and Natural

Resource Sciences, University of Minnesota, St. Paul, MN 55108

RESPONSIBILITIES: We seek a scientist who will establish a strong research and teaching program in maize translational genomics. The successful candidate will (1) use maize as a model species to address critical research questions in genomics, epigenetics, gene expression, or heterosis; (2) translate discoveries into useful genes, germplasm, or genomics tools and resources to meet continuing needs for feed and fuel as well as emerging needs for nutrition and ecosystem services; and (3) educate a diverse group of undergraduate students, graduate students, or postdoctoral scientists. To be successful, the scientist will need to obtain sustained extramural funding for research and collaborate with scientists and stakeholders within and outside the University of Minnesota. The scientist will regularly teach one graduate or undergraduate course that is related to the candidates expertise and that meets current or anticipated teaching needs of the department.

QUALIFICATIONS: A Ph.D. or equivalent doctoral degree in a field related to plant genetics is required. In addition, the following qualifications are preferred: postdoctoral or industry research experience; classroom teaching experience; and a demonstrated ability to compete for extramural grants, to initiate a strong research program in translational genomics, to communicate effectively with diverse audiences, and to interact productively with other scientists.

SALARY AND BENEFITS: Salary is commensurate with background and level of experience, with an expected start date of September 2013. Initial summer-salary support and a competitive faculty benefits package will be provided.

APPLICATION: Include a cover letter, CV, a two-page statement of research accomplishments and interests, a one-page statement of teaching experience and interests, and the names, mailing addresses, and email addresses of three professional references. References will be contacted only of those applicants judged most qualified. Submit applications online at www1.umn.edu/ohr/, requisition #181165. For further information, please contact Dr. Rex Bernardo, search committee chair, by email (bernardo@umn.edu).

As an institution committed to demonstrating excellence through diversity, the College of Food, Agricultural and Natural Resource Sciences and the University are committed to hiring a diverse faculty and staff, and actively encourages candidates from historically underrepresented groups to apply.

“Peter L. Morrell” <pmorrell@umn.edu> “Peter L. Morrell” <pmorrell@umn.edu>

UMinnesota SaintPaul MycologistCuratorOfFungi

Bell Museum of Natural History College of Food, Agricultural and Natural Resource Sciences (CFANS) University of Minnesota - Saint Paul, Minnesota

Position: Mycologist and Curator of Fungi, Bell Museum/Plant Pathology Classification: Assistant Professor, 9 month appointment Reporting To: Director, Bell Museum and Head, Plant Pathology Position Number: 182025

Position Overview: This position is responsible for developing and maintaining an active, collections-based, extramurally funded research program in mycology. Teaching duties required of this position include undergraduate and graduate courses, as well as mentoring students from the University’s diverse undergraduate and graduate student populations. In addition, this position is responsible for curating the Bell Museums mycology collection. Outreach is an important aspect of this position, specifically through participation in public programs offered by the Bell Museum of Natural History.

Major Areas of Accountability: Mycology systematics research and curation V 50% (which includes 15% curatorial activity) The Curator of Fungi is responsible for developing and maintaining an active, extramurally

funded, collections-based research program that emphasizes a conceptual and interdisciplinary approach to the systematics and evolution of fungi. The Curator of Fungi is also responsible for building and maintaining the fungal collections in line with modern museum practices.

Teaching and educational outreachV 50% The incumbent will teach 6 credits annually. Possibilities include undergraduate courses on fungal diversity, systematics and evolution of fungi, macrofungi, an undergraduate honors seminar, as well as a graduate course in the incumbent's area of specialty. S/he will be a member of the graduate faculty and will advise undergraduate and graduate students, including those from diverse cultural backgrounds. The incumbent will help maintain accuracy of scientific content in the public outreach programs of the Bell Museum and will participate in public outreach initiatives (e.g., teacher workshops, exhibits, or education programs).

Essential Qualifications Ph.D. or international equivalent in the Biological Sciences Demonstrated research emphasis in mycology and systematics Evidence of interest in curation of museum collections Preferred Academic Preparation and Experience Post-doctoral experience Curatorial experience with fungal collections Experience maintaining a living fungal collection Evidence of teaching experience at the college level Creativity, quality and productivity in research Potential to maintain an active, extramurally funded research program Ability to communicate effectively both orally and in writing Interest in, experience with, and commitment to diversity and cultural inclusiveness

Salary/Benefits: Salary is competitive and commensurate with experience and qualifications. Two months of summer salary will be provided for the first two years; subsequently summer salary may be supplemented by research and/or educational grants up to 2.5 months. Benefits include employee health, dental, and faculty life/disability insurance, social security, faculty retirement and opportunities for professional development, including sabbatical and semester leave opportunities. Benefits are described at http://-www1.umn.edu/ohr/benefits/index.html Application: Apply online at: https://employment.umn.edu (search for requisition 182025). Applicants should attach: 1) a cover letter that specifically addresses the candidate's commitment to and respect for diversity, cultural competence, and inclusiveness; 2) curriculum vitae; 3) research statement; 4) curation statement; 6) teaching statement; 7) the names, addresses and email contact information for three professional references. Incomplete applications will not be considered.

Please direct technical inquiries about the application process (website, etc) to Ms. Anne Lageson, Search Committee Administrator at lages001@umn.edu. Please direct questions about the position responsibilities to the Search Committee Chair, Andrew Simons at asimons@umn.edu.

Review of applications begins February 1, 2012.

Position will remain open until filled.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.

– Anne D. Lageson Executive Secretary Plant Pathology 612-625-4705

Anne Lageson <lages001@umn.edu>

UNeuchatel FieldAssist HouseSparrows

Field assistant to study house sparrows

We are seeking a field assistant for the upcoming breeding season to join a project investigating the impact of oxidative stress on the development of reproductive strategies in house sparrow. The research will be conducted in two horse farms in Colombier and La Chaux-de-Fonds, Canton of Neuchâtel. The work will start in March and will continue through June.

Our project researches how male social status affects the allocation of antioxidant resources to the protection of the sperm vs. the protection of somatic functions, and how such allocation strategies affect the quality of the sperm produced.

The work of the volunteer will consist of catching and banding birds and following their reproduction, behavioural observations, sample collection and data management.

Qualifications:

(1) BSc or higher in Biology or similar qualification (2) Knowledge in observing & handling birds is a plus (3) Driving license and car are useful (4) Basic knowledge of French is helpful although not essential

The volunteer will receive a small allowance of up to

CHF 500.-/month. We will also cover travel expenses up to 350 to and from the study site.

Applications - including a CV, a letter of motivation (1 pg.) and the name of two referees - should be sent to Fabrice Helfenstein: fabrice.helfenstein@unine.ch

Please use "Volunteer Assistant in Neuchâtel" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 15th January 2013 will be given full consideration.

For further information on the lab & project, see: http://www2.unine.ch/ecophy Fabrice Helfenstein

Assistant Professor FNS Evolutionary Ecophysiology Group Institute of Biology University of Neuchâtel Rue Emile-Argand 11 CH-2000 Neuchâtel Switzerland

Room D104 Tel. +41 (0)32 718 22 34 Tel. +41 (0)79 427 44 24 http://www2.unine.ch/ecophy fabrice.helfenstein@unine.ch

UNeuchatel FieldAssist OxiStress Birds

Expenses-paid field assistant position to study oxidative stress in relation to social status in house sparrows in south of France.

We are seeking a research assistant for the upcoming breeding season to join a project investigating the impact of oxidative stress on the development of reproductive strategies in house sparrow. The research will be conducted in Ariege, south of France. The work will start on 1st of March and will continue through early May.

Our project researches how males with different positions in a dominance hierarchy allocate their antioxidant resources to the protection of their sperm vs. the protection of their somatic functions, and how such allocation strategies affect the quality of the sperm they produce. The project is based at the University of Neuchatel, Switzerland (PI Prof. Fabrice Helfenstein, PhD student Alfonso Rojas), but will be conducted at the CNRS Station for Experimental Ecology in Moulis, Ariege, France, which is situated at the foot of the Pyrenees Mountains.

The work of the volunteer will consist of carrying out an experiment in aviaries with house sparrows. This includes assisting the PhD student with catching and banding birds, behavioural observations, sample collection, data management and data analysis. During the conduct of the experiment we work 7 days a week and 10-12 hours a day.

Qualifications: (1) BSc or higher in Biology or similar qualification (2) Ability to work and live in small groups and sociable personality (3) Fluent in English (4) Ability to endure long working days (5) Knowledge in observing & handling birds is a plus (6) Driving license is helpful (7) Basic knowledge of French is helpful although not essential This is an expenses-paid field assistant position, covering accommodation, food, and travel expenses of up to 300 to and from the study site.

Applications - including a CV, a letter of motivation (1 pg.) and the name of two referees - should be sent to both:

Fabrice Helfenstein: fabrice.helfenstein@unine.ch and Alfonso Rojas: luis.rojas@unine.ch

Please use "Volunteer Assistant in France" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 1st January 2013 will be given full consideration.

For further information on the lab & project, see: http://www2.unine.ch/ecophy fabrice.helfenstein@unine.ch

USheffield 3 EvolutionaryBiol

An opportunity to join one of the UK's top organismal biology departments!

The Department Animal and Plant Sciences, University of Sheffield, has advertised up to three Lectureships in organismal biology (see www.shef.ac.uk/jobs, position reference UoS005748). Appointments at more senior levels may be possible for suitable candidates. Applications in all areas of organismal biology are welcomed but we are particularly interesed in those studying microbial ecology or evolution.

I am happy to answer informal queries about the posts or the department.

Roger

– Roger K Butlin Professor of Evolutionary Biology

Animal and Plant Sciences The University of Sheffield Western Bank Sheffield S10 2TN UK

Tel. +44(0)114 2220097 FAX +44(0)114 2220002

r.k.butlin@shef.ac.uk

Roger Butlin <r.k.butlin@sheffield.ac.uk>

UStirling 2 ConservationBiol

The search for the Chairs advertised below will consider evolutionary biologists with relevant qualifications.

Two Chairs in Biological and Environmental Sciences School of Natural Sciences, University of Stirling, Scotland, United Kingdom.

The School of Natural Sciences invites applications for two full time Professorial/Reader positions within Biological and Environmental Sciences (http://www.sbes.stir.ac.uk/). This interdisciplinary division operates from the molecular to the global scale to address key questions focused on the relationships between society and the environment. Our findings are used to inform policy makers and practitioners in conservation, environmental regulation, planning and management. Building on our internationally leading research in Conservation and Environmental Protection, we seek applications in the area of Environmental Change and Biological Conservation.

Candidates are expected to be outstanding, internationally renowned leaders within their field of research. Successful candidates will have proven track records of research leadership with demonstrable skills in building research groups, obtaining grant funding nationally and internationally, and a substantive record of publications in high impact journals. Strategically these appointments will augment Stirling's reputation as the leading institution for Conservation Biology and Environmental Protection in Scotland and will further strengthen its ranking in these fields across the UK and internationally.

Chair in Conservation Biology: Applications are invited from within the interdisciplinary fields of conservation biology, and its interactions with biology, molecular biology, evolutionary ecology, human activity and environmental policy.

Chair in Environmental Change: We seek applications in the broad area of environmental change. Applicants specialising on the impacts of environmental change on natural biogeochemical cycles within terrestrial or aquatic environments are especially welcome.

For full details see: http://www.stir.ac.uk/about/jobs/list/ For informal discussion, please contact either Professor Ian Simpson (Head of School), +44 1786 467850 or email: i.a.simpson@stir.ac.uk. Alternatively contact Dr Andrew Tyler (Head of Biological and Environmental Sciences), +44 1786 467838 or email: a.n.tyler@stir.ac.uk.

The closing date for receipt of applications for these two positions is 10th January 2013. Interviews will be held on 20th February 2013.

Please apply on-line. If you are unable to make an online application please contact Emma Louden in HR: emma.louden@stir.ac.uk

Mario Vallejo-Marin Biological and Environmental Sciences School of Natural Sciences University of Stirling Stirling, FK9 4LA Scotland Tel. (+44) 01786 467822 http://www.sbes.stir.ac.uk/people/vallejo-marin mario.vallejo@stir.ac.uk

UWisconsin Madison LabTech PollinatorEvol

A technician position is available immediately in the laboratory of Dr. Johanne Brunet in Madison, Wisconsin.

The laboratory is located in the department of Entomology at the University of Wisconsin Madison.

Research in the laboratory is on gene flow and plant/pollinator interactions. Details about the research

can be found at http://www.entomology.wisc.edu/faculty or http://labs.russell.wisc.edu/brunet . This is a USDA-ARS (Agricultural Research Service) position for US citizens. Details on how to apply

for the position can be found at: http://www.usajobs.gov/GetJob/ViewDetails/332069500 The position will be advertised between Dec. 5 and Dec. 19 and all materials need to be received by the end of day on December 19. Although the advertisement includes various positions, the ideal candidate for the position in my laboratory will have a background in evolutionary biology with experience working with plants and pollinators and using and developing molecular markers. Do not hesitate to contact me for more information and for help with the application process at jbrunet@wisc.edu or Johanne.Brunet@ars.usda.gov.

Dr. Johanne Brunet

USDA-ARS VCRU Associate Professor Dept. of Entomology 1630 Linden Drive University of Wisconsin Madison, WI 53706 1-608-265- 3587 (Office) 1- 608-262- 3322 (Fax) http://labs.russell.wisc.edu/brunet jbrunet@wisc.edu

UZurich FieldAssist BirdEvolution

UZurich FieldAssist BirdEvolution

Expenses-paid ïassistant positions to study evolution of family living and cooperative breeding in birds in Spain.

We are seeking some additional applicants for ïresearch volunteers for the upcoming breeding season to join our ïproject investigating the evolution of family living and cooperative breeding in birds. The research is conducted in Andalusia, southern Spain. Starting dates range from the end of February to the middle of March and work will continue through June.

Our project researches the shifts in parental investment patterns in pair living, kin-group living and cooperatively breeding birds. The project is based at the University of Zurich, Switzerland (PI Michael Griesser, PhD students Emeline Mourocq & Gretchen Wagner).

The work of the volunteers will consist of carrying out ïexperiments, locating nests, assisting the PhD students with catching and ringing birds, behavioral observations and data management. This work will give insight into experimental ïand is carried out in scenic semi-arid habitats of southern Spain. Depending on the field workload, we work up to 6 days per week and the days can be long (10-12 hours), including field work and data entry. Observe that temperatures at the beginning of the ïseason can be below 0ÂC, and later in the breeding season be easily above 35ÂC. The work can be physically strenuous at times.

Qualiï:

(1) BSc or higher in Biology or similar qualiï

(2) Ability to work and live in small groups and sociable personality

(3) Fluent in English

(4) Previous ïexperience a plus

(5) Good physical condition and ability to endure long, physically demanding days

(6) Knowledge in observing & handling birds is a plus

(7) Driving license is helpful

(8) Basic knowledge of Spanish is helpful

These are expenses-paid ïassistant positions, covering accommodation, food, and travel expenses of up to 300â¬*toandfromthestudysite*.

Applications - including a CV, a letter of motivation (1 pg.) and the name of two referees - should be sent to both:

Emeline Mourocq: emeline.mourocq@uzh.ch and

Gretchen Wagner: gretchen.wagner@uzh.ch

Please use "Volunteer Field Assistant Position in Spain" as the subject and note your availability during this time period in the body of the e-mail. Applications received until 5th February 2013 will be given full consideration.

If you applied for the previous announcement which came out beginning November 2011, your candidature is being considered, please do not apply again.

For further information on the project, see:

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

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

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

emeline mourocq <emeline.mourocq@uzh.ch>

U Zurich FieldAssist Swedish Lapland

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

For the upcoming field season (March-July 2013) we are looking for two highly motivated expenses paid field volunteer to join our field project investigating life-history 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 offspring quality. The work of the field volunteers will be to help in field experiments, behavioural observations, following radio-tagged birds, measuring nestlings, and data management. This work will give

insight into exciting experimental fieldwork and will be carried out partly in managed forests and partly in scenic pristine boreal habitats. We will work 5-7 days per week in the field depending on the workload of the experiments. Days in the field can be long in particular around midsummer when following dispersing individuals. Observe that temperatures in the beginning of the season can be as low as -30C. The work is physically strenuous at times in particular during the snow melting period in April.

Assistants can apply for either the whole season (preferred option), or from March-mid May, and from May-July. Assistants working from March to May will be doing most of the fieldwork on X-country skis, and given that only the edge of the study site is accessible by car, we ski up to 15km per day. Thus, a previous knowledge of X-country skiing is helpful.

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

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

SPECIFY CLEARLY FOR WHICH WORK PERIOD YOU APPLY.

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

Applications received until 4th January 2013 will be given full consideration.

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

http://www.aim.uzh.ch/Research/birdfamilies/-mgriesser.html http://www.prodoc-evolcoop.uzh.ch/-index.html michael.griesser@uzh.ch

Vienna PopulationGenomics

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

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

*

The Max F. Perutz Laboratories (MFPL; www.mfpl.ac.at) are a recently established joint venture of the University of Vienna and the Medical University of Vienna, engaged in top level biomedical research and training. MFPL houses more than 60 research groups in various areas of Molecular Biology and is embedded in the Vienna Biocenter Campus. The working language of the Institute is English. MFPL is committed to promoting work/life balance, and the campus hosts an international kindergarten.

In recent years, Vienna has developed into one of the leading centers in evolutionary biology (www.evolvienna.at). In addition to a stimulating scientific environment, Vienna also offers an extraordinarily high quality of life. Affordable housing, excellent public transport, great restaurants, a range of international schools, two operas, two music centers, many theaters and museums in combination with a pleasant climate make Vienna one of the most attractive cities in Europe.

Faculty opening

An independent junior faculty position (roughly equivalent to an assistant professorship) is offered to strengthen the Computational Biology and Bioinformatics unit in the area of population genetic modeling. In particular candidates with a track record in statistical genetics or population genomic modeling and data analysis are encouraged to apply. The successful candidate will have a record of high quality research in evolutionary modeling. S/he is expected to develop and maintain an independent research group, and to attract extramural funding.

The position holder will be a co-leader of the Mathematics and Biosciences Group (MaBS), currently led by Joachim Hermisson. Several other groups on campus are involved in evolutionary genetics research, including the groups of Magnus Nordborg (Gregor Mendel Institute) and Arndt von Haeseler (Center for Integrated Bioinformatics Vienna). Moreover, a diverse group of researchers interact through activities of the Vienna School of Population Genetics (www.popgen-vienna.at), which attracts an international body of graduate students. The Vienna Biocenter provides access to an excellent core facility, including several Illumina sequencers, bioinformatics services, and a high-speed computer cluster.

The starting date is flexible (spring 2013 or later). The advertised position is a scientific tenure track position: within the first two years of employment the University of Vienna may offer a qualification agreement if the sci-

entific performance of the employee suggests that the required qualification can be reached. This agreement is connected with the title of Assistant Professor [AssistenzprofessorIn]. In case the goals of the qualification agreement are met, the employment will be made permanent and the title of the employee will be changed to Associate Professor [assoziierte/r ProfessorIn]. We offer a competitive salary and a start-up package.

Application files:

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

1. Application letter (max. 5 pages), to be structured as follows: a. Achievements in research b. Experience and activities in teaching (and advancement of young researchers), teaching plans c. Achievements in knowledge transfer and knowledge management d. Future plans in research and contribution to the scientific profile of the Faculty and the University, respectively

2. Enclosures: a. CV and degree certificates/transcripts b. List of publications, including journal impact factors and number of citations, as well as a list of the V in the opinion of the applicant V 5 most important publications c. Scientific talks, also listing the 5 most important ones d. Esteem factors (e.g. experience as publisher, functions in scientific societies or program committees) e. Acquired third-party fund projects (topic, runtime, origin, volume) f. Teaching (and advancement of young researchers): courses held at universities, supervised theses, teaching evaluations (if existent) g. Names of three references with contact details

Applications shall be submitted in English (preferably as a single PDF) to facultyopenings@mfpl.ac.at, with cc to joachim.hermisson@univie.ac.at . Informal inquiries can be sent to joachim.hermisson@univie.ac.at . The application period ends on January 4th, 2013. Women are strongly encouraged to apply.

– Joachim Hermisson Professor for Mathematics and Biosciences University of Vienna Department for Mathematics Nordbergstr. 15, 1090 Vienna, Austria and Max F.Perutz Laboratories Dr.-Bohrgasse 9, 1030 Vienna, Austria phone: +43 (0) 1 4277 50648

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

YaleU Palenotology

The Department of Geology & Geophysics at Yale University solicits applications for a tenure-track faculty position. We seek candidates with outstanding prospects for research and scholarly leadership who will complement the existing strengths of the Department. The successful applicants will develop and implement independent, externally-funded research programs, advise students, and facilitate interdisciplinary research.

Geobiology (ID #2188). Relevant fields include, but are not limited to: astrobiology, geomicrobiology, and the interactions of Earth and life as revealed by the rock record. This search is affiliated with the Yale Institute for Biospheric Studies.

Yale is an equal opportunity/affirmative action employer. Applications from women and minorities are strongly encouraged. Applicants should submit a curriculum vitae, a statement of research and teaching interests, and a list of publications, plus the names and contact information of four referees. Applications should be submitted online at https://academicjobsonline.org/ajo/yale/G&G. Applications received prior to 1/1/2013 will receive full consideration. For information regarding Yale Geology & Geophysics, visit our website at http://earth.yale.edu
Thomas Near <thomas.near@yale.edu>

Other

Artificial Evolving Systems

Call for Papers Special Issue on Evolvability and Robustness in Artificial Evolving Systems for the Springer journal Genetic Programming and Evolvable Machines Extended Deadline -“ April 30, 2013

The journal Genetic Programming and Evolvable Machines (GPEM) was founded to focus on artificial evolutionary systems that are active -” which take inputs from their environment and act on them to produce their behavior.

Short- and long-term evolution depends on the variational properties of the systems -“ how changes to their structure maps to changes in their behavior (Altenberg, 1994). Robustness and evolvability are key variational properties that themselves show evolutionary dynamics. Active systems are an especially rich domain for the evolution of robustness and evolvability since they often allow for open-ended complexity.

GPEM is calling for papers for a special issue on Evolvability and Robustness in Artificial Evolving Systems. A diversity of concepts under the rubrics of evolvability and robustness have been introduced as the literature on these subjects has expanded. This special issue is open to the full range of these concepts. However, confusion has entered the literature due to imprecise usage of these terms. Therefore, a unique requirement for this special issue will be that the authors provide precise quantitative definitions for the aspects of -evolvability- and -robustness- they investigate.

Examples of topics sought include: - The emergence, or the engineering, of evolvability or robustness into artificial evolutionary systems (AESs); - New theoretical understanding of the evolution of evolvability, robustness, neutral networks, and their inter-relationships; - Case studies of the evolution of evolvability, robustness, or neutral networks in AESs; - Methodology for measuring evolvability and/or robustness; - Relationships between 1) the robustness of the AES-s behavior to variation in inputs and environment, and 2) its robustness under change from the genetic operators (e.g. -plasto-genetic congruence- Ancel and Fontana (2000)); - Mechanisms whereby variational properties of the environment or inputs can shape the variational properties of the AESs under the genetic operators; - Generalization of the biological concept of distribution of mutation effects on fitness to the distribution of genetic operator effects on the objective functions in AESs (Nordin and Banzhaf, 1995).

References Altenberg, L. 1994. The evolution of evolvability in genetic programming. In Kinnear, K. E., editor, Advances in Genetic Programming, pages 47-”74. MIT Press, Cambridge, MA.

Ancel, L. W. and Fontana, W. 2000. Plasticity, evolvability and modularity in RNA. Journal of Experimental Zoology (Molecular and Developmental Evolution), 288:242-“283.

Nordin, P. and Banzhaf, W. 1995. Complexity compression and evolution. In Eshelman, L., editor, Genetic Algorithms: Proceedings of the Sixth International Conference, pages 310-”317, San Francisco. Morgan Kaufmann.

Important Dates: Submission deadline: April 30, 2013. Notification of acceptance: June 30, 2013. Final manuscript: August 31, 2013.

Paper Submission: Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. Springer offers authors, editors and reviewers of Genetic Programming and Evolvable Machines a web-enabled online manuscript submission and review system. Manuscripts should be submitted to: http://GENP.edmgr.com. Instructions for Authors may be found at http://www.springer.com/10710 . All enquiries should be sent to Lee Altenberg at gpem@dynamics.org .

Lee Altenberg, Ph.D. Associate Editor,

BioSystems Phone: (808) 344-1113, E-mail: Lee.Altenberg@dynamics.org Web: http://-dynamics.org/Altenberg/

ChicagoBotanicGarden UndergraduateSummerResearch

Chicago Botanic Garden REU Site: Plant Biology & Conservation Research Experiences for Undergraduates - From Genes to Ecosystems.

More information at - http://www.cbgreu.org/ This summer, the Chicago Botanic Garden and partner institutions will host 10 NSF-REU interns (Research Experiences for Undergraduates) conducting research under the broad theme of PLANT BIOLOGY AND CONSERVATION, from genetic to ecosystem levels of inquiry. Potential projects include work in systematics, conservation biology, restoration ecology, biogeochemistry, and related fields. Students will gain laboratory and field experience, participate in professional development activities, help mentor high-school student researchers, and enjoy a fun social environment.

Participants should be U.S. citizens or permanent residents who will be enrolled as undergraduates after summer 2013. They will receive a stipend of $4,750 and room and board in downtown Chicago. Costs of travel to and from Chicago will be covered. We encourage applications from students who are members of groups underrepresented in the sciences and students who have limited research opportunities at their home institutions. The application deadline is January 31, 2013, and the 10-week program will run from June 10-August 16, 2013.

Interested undergraduates can find more information and apply at http://www.cbgreu.org. Questions can be directed to info@cbgreu.org.

We also ask faculty, postdocs, graduate students, and other undergraduate mentors to please help us spread the word about this exciting opportunity to exceptional undergraduates.

Jeremie Fant Chicago Botanic Garden http://-www.cbgreu.org/ info@cbgreu.org

Lab@chicagobotanic.org

DIYABC answers

Dear all, Thank you for the reassuring feedback on DIYABC. I have received a number of emails that seem to agree on the following:

1. This beta version can be temperamental also with Windows XP;

2. The "START" screen, when everything seems to be ready to rock & roll, if often represents a 'freezing' moment;

3. Sometimes, even if it seems to freeze and to 'not respond', it may still produce the simulation data;

4. It doesn't seem to enjoy much changes in the default settings;

5. Sometimes you need to start the analysis again 2 or 3 times, and then it works fine;

6. I personally got it to work after trying several times and removing the final mtDNA sequence (although it had accepted it was there and took me through all the settings);

7. I also banged on the desk furiously several times, but I am unsure it had any influence on the outcome.

8. There is a general sense of relief and expectation for the release of the new version, which should be with us before the end of the year.

Thank you so much again and good luck.

Stefano.

Dr. Stefano Mariani Reader in Wildlife Biology | School of Environment & Life Sciences Room 316, Peel Building, University of Salford, Salford M5 4WT, UK t: +44 (0)161-295-6913 | m: +44 (0)7712-689-871 s.mariani@salford.ac.uk | www.salford.ac.uk/environment-life-sciences http://-/www.seek.salford.ac.uk/profiles/SMariani.jsp Researcher.ID: A-2964-2012

S.Mariani@salford.ac.uk

FieldMuseum NatHist ResearchPetition

Dear Members of ASPT,

I just signed the petition "Protect Research at Field Museum of Natural History, Chicago" on Change.org.

It's important. Will you sign it too? Here's the link:

http://www.change.org/petitions/protect-research-at-field-museum-of-natural-history-chicago For more information, see also:

http://www.nature.com/news/chicago-s-field-museum-cuts-back-on-science-1.12105 http://-news.sciencemag.org/scienceinsider/2012/12/budget-cuts-hit-chicagos-field-m.html?ref=em Thank you for considering this!

Kathleen Pryer, Ph.D. President American Society of Plant Taxonomists

etripp@rsabg.org

Fis significance

Dear all, I have a huge SNP dataset (hundreds of individuals and about 50K markers) including several populations. I need to calculate the value of the Fis (inbreeding coefficient) index for each population, including the level of statistical significance of the index value.

The software and scripts I found so far only return the index value but no statistical significance.

Does anyone know a package, R script or algorithm able to do this?

Thank you in advance.

Licia Colli

Licia Colli, PhD Istituto di Zootecnica - Facoltà di Agraria Università Cattolica del S. Cuore via Emilia Parmense, 84 29122 Piacenza (PC) Italy e-mail: licia.colli@unicatt.it skype: liquid-diamond Tel: +39 - 0523599205 Fax: +39 - 0523599276

licia.colli@unicatt.it

FrenchGuiana BiodiversityProposals

Annual call for proposals CEBA 2013, French Guiana

The CEntre for the study of Biodiversity in Amazonia (CEBA) is a Laboratory of Excellence based in French Guiana aimed at fostering knowledge on terrestrial biodiversity. The Labex CEBA aims to coordinate research capacity in France on the topic of Amazonian terrestrial biodiversity, and to reinforce collaborations with South American and other international partners. Details are available at http://www.labex-ceba.fr The Labex CEBA opens an annual competitive call for proposals to encourage innovative research on biodiversity in French Guiana. Projects will be evaluated by the Scientific Board and by external referees.

The submission deadline is January 25th, 2013.

To access the call for proposals form: http:/-/www.labex-ceba.fr/en/appel-a-projets-annuel-ceba/ Thanks is advance,

Amaia

Amaya IRIBAR-PELOZUELO <amaya.pelozuelo@univ-tlse3.fr>

Fst estimation genome wide

Dear evoldir user,

I am working on a big dataset comprising more than 4000 individuals genotyped for ~1M SNPs. I would like to estimate mean FST between populations as well as for each locus.

I would be grateful to you if you could gently indicate to me a relatively fast software or package to do it.

I will append all the answers when i will have them.

Thank you very much, Best Regards,

Francesco.

Francesco Montinaro <francesco.montinaro@gmail.com>

Genbank instructions

I have updated and corrected my instructions for submitting DNA sequences for pop gen or phylogenetic studies to GenBank. http://peter.unmack.net/-molecular/data.sub/data.deposition.instructions.html

I also broadened out the content on the website to include various other helpful material relative to molecular sequencing projects and analyses. http://-peter.unmack.net/molecular/ This includes:

General lab advice

Various tips for organizing samples, data and files. Primer design guide. Data deposition in Dryad, TreeBase and GenBank.

Data editing / datafile creation advice

Guide to chromatogram editing and sequence checking. Guide to using Chromas and BioEdit. Guide to data file conversion (phylip, nexus, mega, fasta). Guide to creating haplotype datasets and tables.

Program How-tos

How to run RAxML on CIPRES. Common PAUP analysis blocks for command line version. How to bootstrap in TNT. Using TreeEdit to obtain a starting tree in BEAST. How to make an Arlequin input file using DnaSP. How to phase nuclear data in DnaSP.

Cheers Peter Unmack National Evolutionary Synthesis Center Durham NC, USA

peter.mail2@unmack.net

London LERN Debate How Why of Evolution Dec5

This year's LERN debate will take place next Wednesday (5th December) at 5.30pm in the Pearson G22 Lecture Theatre at UCL. See below (and our website < http://londonevolutionarynetwork.wordpress.com/-2012/11/28/lern-debate-2012/ >) for details.

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"This house believes that the distinction between proximate and ultimate causes hinders a complete understanding of evolutionary processes."

The topic will consider Ernst Mayr's distinction between proximate and ultimate explanations of behaviour, which has been hugely influential in evolutionary theory. Are recent criticisms of this dichotomy invalid or does the direction of future research lie in theory that incorporates interactions between proximate and ultimate explanations?

For: Dr John Odling-Smee < http://lalandlab.st-andrews.ac.uk/niche/WhoWeAre.html > (University of Oxford) Dr Tobias Uller < http://www.zoo.ox.ac.uk/-people/view/uller_t.htm > (University of Oxford)

Against: Professor Tom Dickens < https://-sites.google.com/site/antianthropomorphism/ > (Middlesex University) Dr Thom Scott-Phillips < http://www.dur.ac.uk/anthropology/research/earg/-earg_members/earg_profiles/?mode=staff&id=10585 > (University of Durham)

This is the fourth debate hosted by LERN. Each speaker will get 15 minutes to present their ideas followed by 5 minutes rebuttal time. There will be a 30 minute open Q&A period at the end of the talks. The debate will be followed by a wine reception at 8pm. The event is free for all to attend.

Date and Time: Wednesday 5th December 2012 from 5.30pm

Location: Pearson G22 Lecture Theatre, UCL, Gower Street, London, WC1E 6BT [map < http://goo.gl/-maps/QXV39 >]

The LERN Committee London Evolutionary Research Network (LERN) http://www.londonevolution.net http://twitter.com/londonevolution http://-facebook.com/londonevolution http://vimeo.com/-londonevolution londonevolution@gmail.com

Microsatellite Multiplex Mix Query

Hello, I'm setting up my supplies in my new lab and I'm looking at 2x primer mixes for microsatelitte multiplex PCR.

Has anyone had any experience using BIoline's "ImmoMix" or "MyTaq HS Mix" with multiplexed microsatellites? How did you find they did? How many primers per multiplex were you using? How many (and which) fluorescent dyes?

I have experience using Qiagen's type-it multiplex PCR and it worked extremely well, but I am purchasing a lot of Bioline products and so I would get a better discount overall if I bought from Bioline. That said, I do not want to compromise quality or scoreability of my microsatellites.

Any experience or advice will be much appreciated. I will post responses unless you state you do not wish me to.

Adrian

BU is a Disability Two Ticks Employer and has signed up to the Mindful Employer charter. Information about the accessibility of University buildings can be found on the BU DisabledGo webpages [http://www.disabledgo.com/en/-org/bournemouth-university]

blakea@bournemouth.ac.uk

PDF searchEngine

Dear colleague,

As you know, we all are facing difficulties at any level to get the full scientific article's text of our interest. For this reason, I have developed a search engine in order to find free full scientific articles' text in PDF Format. This search engine indexes more than 80 million free references (mostly to journal articles, theses, patents and posters).

You can try it at this address: http://-www.freefullpdf.com I hope that this tool will help you in your research domain.

Please contact me if you have open access articles that are not indexed in this search engine (Open archives, universities or laboratories websites ...).

Best regards,

Brice Sagot

Ph.D., Biotechnology

contact@freefullpdf.com contact@freefullpdf.com

Rapeseed ErucicAcid

Seeds from High Erucic Acid Rapeseed?

Does anybody have or knows where to order seeds from High Erucic Acid Rapeseed (HEAR) lines of oilseed rape (Brassica napus)? We intend to use the lines in herbivory experiments where we will compare them with lines low in erucic acid (LEAR). LEAR is the regular canola and such lines can easily be ordered here. HEAR lines are grown for making oil for industrial purposes, mostly in the US and Canada, and are not so easily available. Any help is greatly appreciated,

Tom J de Jong Associate Professor Institute of Biology Leiden PO 9505, 2300 RA Leiden, the Netherlands t.j.de.jong@biology.leidenuniv.nl

"T.J. de Jong" <T.J.de.Jong@biology.leidenuniv.nl>

Scyliorhinus Squalus samples request

My name is Vasiliki Kousteni and I am studying the species Scyliorhinus canicula and Squalus blainville in the University of Athens (Greece).

I have collected several samples of both species from Greek waters. However, in order to complete my analysis i need about 70 fin samples from each species species from other seas (e.g. west MED, Atlantic). Of cource if this is not possible also fewer samples could be usefull for me.

So, i would like to ask you if you have samples of these species or if you know someone that could probably help me finding the samples that i need.

For your convenience I give you more details.

1.From each fish (it doesn?t matter if it is dead or alive or if it is kept in fridge for years) you measure the total length and weight and you record the sex (male or female). 2.You record the longitude/latitude of the broader area where the fishes were captured. 3.You cut with a clean scissors a small piece from a fin with dimensions about 2x1.5 cm. There is no problem from which fin the sample will be cut, as long as it is a fin. So it does not matter if it's a pectoral, dorsal etc. 4.You put each fin sample inside a labeled eppendorf with absolute ethanol and you keep them in a cool area, if its possible in a fridge, but not under the sun.

You don't have to worry about the cost of materials used. I can easily mail you enough eppendorfs, 2 cases where you can put them into and cover all the trasportation costs.

The scientific purpose of my study is the following: I will use molecular markers in order to study the phylogeography of the species and to examine if there are interactions among different populations.

For the purpose of the study an official paper can be send to you, signed by my supervisor.

>From my experience I don?t think that there will be any problem with licences.

Thank you again in advance.

For any more questions please do not hesitate to ask.

Kind regards Vasiliki Kousteni

National and Kapodistrian University of Athens Department of Biology, Section of Zoology-Marine Biology, Panepistimiopolis, 157 84, Ilissia Athens GREECE Mob. : +30-6974145282

– Katerina Vasileiadou

Institute of Marine Biology and Genetics Hellenic Centre for Marine Research (HCMR) P.O. Box 2214 71003 Heraklion Crete Greece

Tel: +30 2810 337842 Fax: +30 2810 337870

Hellenic Center for Marine Research This message was sent using IMP, the Internet Messaging Program.

kvasileiadou@hcmr.gr

Software FigTree v1 4 released

I have just released a new version of FigTree (v1.4). This is the first new version since v1.3.1 was released nearly 3 years ago (and which is now been downloaded an amazing 129,873 times).

FigTree v1.4 has a range of new features including new colouring schemes, node shapes (circles, diamonds and squares) that can be sized and coloured by traits and a new colour legend. Numerous bugs have been fixed too.

Download from the usual place:

http://tree.bio.ed.ac.uk/software/figtree Mac, Windows and Linux versions are available.

Source code under a GPL2 license is available from:

http://code.google.com/p/figtree/ Please note that if you try to install this on Mac OS X 10.8 (Mountain Lion) you may get an error that "program is damaged and can't be opened" when you try to open the disk image. To circumvent this problem you need to go into System Preferences, Security & Privacy and then switch "Allow applications downloaded from" to "Anywhere".

Thanks, Andrew

Andrew Rambaut Institute of Evolutionary Biology University of Edinburgh Ashworth Laboratories Edinburgh EH9 3JT EMAIL - a.rambaut@ed.ac.uk TEL - +44 131 6508624

Andrew Rambaut <a.rambaut@ed.ac.uk>

UOxford VolFieldAssist SeabirdEvolution

Voluntary research assistantship in seabird behaviour & ecology Skomer Island & University of Oxford

We are looking for an enthusiastic, hardworking young biologist to work as a voluntary Research Assistant to help with our pelagic seabird research on Skomer Island, Pembrokeshire, Wales, in Spring and Summer 2013. The work will involve several research projects coordinated by Prof Tim Guilford at Oxford's Department of Zoology (see http://oxnav.zoo.ox.ac.uk/). We utilise state-of-the art tracking technologies (miniature GPS, geolocators, time-depth recorders & on-board video), and comprehensive automated activity monitoring systems (RFID controlled burrow-nest sensing networks) on several species (Manx Shearwaters, Atlantic Puffins, Common Guillemots, Razorbills). Most work will involve assisting two doctoral students with the day-to-day maintenance of the burrow sensing systems, weighing and monitoring breeding birds and their chicks, and the deployment and retrieval/downloading of tracking devices. It will also involve entering data collected in the field into appropriate databases. There will be a significant amount of nocturnal work, since the primary study species is the Manx Shearwater, which only arrives at the colony after dark. There will also be scope for involvement in other conservation and ecological projects on the island, which is a National Nature Reserve administered by the Wildlife Trust of South and West Wales.

Unfortunately we cannot provide a stipend but accommodation (shared and basic) expenses on Skomer will be covered. However, the project is a great opportunity to gain valuable experience in modern field ornithology. There will also be opportunities for the assistant to learn some analytical techniques applied to animal movement data. Skomer has mobile coverage and some access to Internet, however movements to and from the mainland are limited due to unpredictable wind conditions. There is a small community of wardens, assistants and volunteers, who are involved in the running and conservation of the Nature Reserve, monitoring the seabird populations, and managing the daily and overnight visitors. There might be opportunities to visit other UK island reserves during the project.

Profile: we are looking for a motivated and hardworking biologist, who likes working in the field and can cope with difficult working and living conditions. Previous experience in the field or in harsh conditions is desirable, but not essential. Work on Skomer requires long hours (with some work at night and at dawn) spent in a cold and wet environment and considerable manual work. A good candidate should be able to work independently and have a reasonable level of fitness. Planning to embark on further research degrees in the future would be a plus (previous assistants have engaged in doctoral studies afterwards). It is also important that the assistant feels comfortable sharing sometimes crowded accommodation with a number of colleagues over long periods of time, and can cope with the occasional untidiness inevitably associated with fieldwork. Unfortunately, for administrative reasons, we can only accept applications from people having permission to work in the UK (UK and EU citizens, UK residents, or persons with a UK work permit).

We are looking for an assistant to work with us between April and September 2013. If you are interested, please email a CV and a statement of interest and arrange for two letters of reference to be emailed to tim.guilford@zoo.ox.ac.uk (with akiko.shoji@zoo.ox.ac.uk and annette.fayet@zoo.ox.ac.uk in cc). The deadline for submitting applications (including reference letters) is the 20th January 2013. Skype interviews will be held early February and we expect to make a decision before the end of February.

Annette Fayet

DPhil student Oxford Navigation Group Department of Zoology University of Oxford

annette.fayet@sjc.ox.ac.uk

Unpublished Bateman data for meta-analysis

RE: Other: Unpublished Bateman data for meta-analysis

Dear Colleagues,

We are currently conducting a meta-analysis with the aim to identify general patterns of how sexual selection operates across sexually reproducing organisms. Specifically, we want to assess overall variation in the 3 parameters underlying the classic âBateman's principles' and their co-variation with key traits of breeding systems (e.g. sex ratios, parental care, etc.).

Given that meta-analyses are sensitive to publication biases, we are looking for unpublished datasets that allow tests for at least one of the classical âBateman parameters'.

Specifically, we are interested in any unpublished study (including plants!) that provide data on

(1) Variances in reproductive success of males and females (and/or) (2) Variances in mating success of males and females (and/or) (3) Bateman gradients (= sexual selection gradients) of males and females

If you have, or know of, such unpublished data sets, we would love to hear about it. Moreover, if you are aware of published work that provides this type of information but may go unnoticed in database searches applying search terms like âBateman slope', âsexual selection gradient' or âopportunity for (sexual) selection' we are happy about notice.

Please email suggestions or questions to: janicke.tim@gmail.com

Many thanks in advance!

Tim Janicke (CEFE-CNRS, Montpellier) Ines Häderer (University of Tuebingen) Nils Anthes (University of Tuebingen)

–

Tim Janicke Centre d'Ecologie Fonctionnelle et Evolutive CNRS-UMR 5175 1919 Route de Mende 34293 Montpellier Cedex 05

Phone: ++33 (0) 4 67 61 32 59 Fax: ++33 (0) 4 67 61 33 36 E-mail: janicke.tim@gmail.com Home: http://timjanicke.wordpress.com/ Tim Janicke <janicke.tim@gmail.com>

PostDocs

AustralianNatlU 2 AmphibianReptilePhylogenetics

Two 3-year positions are available in the Moritz/Keogh labs at the Australian National University. Appointees will be key players in an exciting collaborative research program that seeks to develop and apply phylogenomic methods to the relatively unexplored amphibian and reptile diversity of Australia's monsoonal tropics, and then to apply the resulting knowledge of species boundaries and relationships to improve taxonomy and conservation.

1. Molecular systematist. Research Officer (ANU level 5/6) to support mtDNA phylogenomic analyses of northern Australian herpetofauna. This position is funded by an ARC linkage grant to Moritz, Keogh, Donnellan (SAM), Doughty (WAM), Byrne, Coates and Thiele (DECWA) which seeks to quantify phylogeographic diversity and delimit new species across the Kimberley in particular, and to apply this knowledge to advance conservation planning in the region. Further details are at: http://jobs.anu.edu.au/-PositionDetail.aspx?p=3D3107 2. Field herpetologist and taxonomist. Research Officer (ANU level 5/6) to support field work and taxonomic revisions of northern Australian herpetofauna. This position, funded by an ABRS grant to Moritz & Keogh, will play a lead role in field surveys and sampling of frogs and lizards from the Top End and Kimberley, undertake phenotypic analyses of museum specimens from relevant taxa and assist in descriptions of new species diagnosed through phylogenomic and phenotypic analyses. Further details are at: http://jobs.anu.edu.au/PositionDetail.aspx?p=3D3130 Both positions require a BSc Hons in an appropriate discipline and/or relevant experience. Applications close on January 19th, 2013 and should be submitted via the ANU (jobs.anu.edu.au). Enquiries are welcome and should be sent to Craig Moritz (craig.moritz@anu.edu.au). However, responses should not be expected prior to January 2nd.

Craig Moritz Research School of Biology & Cntr for Biodiversity Anlysis Australian National University +61 2 6125 5651 (CM office) +61 2 6125 9492 (via Claire, M-W am only)

gekkojessie@gmail.com

BrighamYoungU DragonflyPhylogenomics

A postdoctoral position is available in the Bybee lab at Brigham Young University in the Department of Biology starting during the summer of 2013. The successful applicant will work as part of a team to produce a phylogeny of both fossil and extant Odonata (dragonflies and damselflies), as well as examine the evolution of their color visual systems.

The position is funded for a period of up to three years. There will be ample opportunity for the successful candidate to develop additional research projects as time and funding permit.

To be considered it is expected that all applicants will have finished their PhD by August of 2013 in bioinformatics, invertebrate evolutionary biology and/or phylogenetics. Preferably, applicants will have a background in organismal biology but all serious applicants will be considered. Interested applicants should send a cover letter outlining current research interests, future career goals and mentoring experience, as well as a CV and the names and contact details of three references to Seth Bybee at seth.bybee@gmail.com.

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

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

Brigham Young University is affiliated with and sponsored by The Church of Jesus Christ of Latter-Day Saints. All students and faculty are required to abide by the university's honor code and dress and grooming standards: http://-saas.byu.edu/catalog/2011-2012ucat/GeneralInfo/-HonorCode.php#HCOfficeInvovement .It is an equal opportunity employer, does not discriminate on the basis of race, color, gender, age, national origin, veteran status, or against qualified individuals with disabilities.

BYU is located in the heart of the Rocky Mountains in Provo Utah with world famous attractions (e.g., national parks, ski resorts, etc.) close by. Year round, outdoor activities such as Skiing, hiking and biking are all within a 20 minute drive of campus.

Contact Information

Seth Bybee, PhD

Assistant Professor

Department of Biology

401 WIDB

Provo, UT 84602

801-422-3152

Seth.bybee@gmail.com

seth.bybee@gmail.com

BrownU PlantEvolution

The Edwards lab at Brown University is looking for a post-doctoral research associate to join our ongoing efforts focused on the evolution of succulence and alternative photosynthetic syndromes in the Caryophyllales. The postdoc will take the lead in the molecular/phylogenomic aspects of the project. We are currently exploring various NGS approaches to phylogenetics, and she/he will be responsible for generating and analyzing all of these data types. She/he will also take responsibility for general oversight of the molecular lab. While some goals are quite firm (e.g., improved phylogenies for several clades within Caryophyllales), there will be plenty of opportunity to develop other projects based on the applicant's own interests- this will be actively encouraged. The successful candidate will be a highly motivated, independent, careful scientist and team player. She/he will have a proven track record in project design, data collection, analysis, and publication. Previous experience with library prep/analysis of next-gen sequencing, working efficiently with large datasets, and good computing and analytical skills are also important qualities.

The position start date is flexible, and the initial ap-

pointment will be for one year, with an opportunity for extension. To apply, please send a research statement, a current CV, and contact information for three references (and please, send this as a single PDF document) to Erika Edwards (erika_edwards@brown.edu). Applications will be reviewed starting immediately and accepted until the position is filled. Brown University is an EEO/AA employer.

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

office: 401.863.2081 lab: 401.863.6275 fax: 401.863.2166

email: erika_edwards@brown.edu

lab website: http://www.brown.edu/Research/-Edwards_Lab/index.php erika_edwards@brown.edu

Cornell LandscapeGenomics reminder

Postdoctoral Research Position in Comparative Landscape Population Genomics.

A postdoctoral position is available to work in the Zamudio (Cornell University) and Funk (Colorado State University) laboratories on the NSF-funded project EVOTRAC (Evolutionary and Ecological Variability in Organismal Trait Response with Altitude and Climate). EVOTRAC is a trait-based and integrative project studying species vulnerability to climate change in temperate and tropical stream ecosystems, using physiological, population genetic, ecological, and biogeochemical approaches.

The postdoc will reside primarily in the Zamudio laboratory, Department of Ecology and Evolutionary Biology, Cornell University, but will be active across laboratories to integrate the comparative population genomic data for the project. More information on EVOTRAC can be found at http://www.eeb.cornell.edu/evotrac/-welcome.html Description

We are seeking an enthusiastic and independent postdoc to be the lead researcher in analysis of dispersal of aquatic insects and frogs within and among streams using genomic markers (genome-wide SNPs). Primary responsibilities of this position include: 1) plan and oversee sample collections in Colorado and Ecuador in collaboration with other EVOTRAC labs 2) characterize markers for 20 target species, including SNP assays through restriction-site associated DNA (RAD) tag approaches 3) conduct lab research to genotype and quantify dispersal in focal taxa 4) lead data analyses and manuscript preparation 5) coordinate undergraduate projects on related research.

Preference will be given to applicants who have experience in molecular biology, and specifically in the complexities of laboratory and computational techniques in landscape genetics/genomics and molecular estimates of dispersal.

Qualifications Applicants must have a PhD in biology, molecular biology, genetics, or related field. Applicants should have demonstrated experience in collection of comparative population genetic data, strong field and laboratory skills, a consistent record of high-quality publications, and the ability to work independently, but also participate in collaborative team-based projects. EVOTRAC will require periods of fieldwork and the ability to work in remote and sometimes challenging field conditions. Working knowledge of Spanish is highly desirable.

Terms of Appointment Starting salary is $39,500-44,000, depending on experience. Funds are available for one year, and renewable for a second pending satisfactory progress. The position is available starting May 2013; starting date is negotiable.

Application Review of applications will begin January 15, 2013, and continue until a suitable candidate is found. To apply, please send cover letter, CV, a statement of research interests/experiences, representative publications, and names and contact information for three references that are familiar with your work. Applications (PDF format) should be e-mailed to Kelly Zamudio (kelly.zamudio@cornell.edu), Department of Ecology and Evolutionary Biology, Cornell University, Ithaca, NY 14853-2701.

Cornell University is an equal opportunity, affirmative action educator and employer. Applications from women and minorities are encouraged.

Kelly R. Zamudio Professor of Ecology and Evolutionary Biology Cornell University Ithaca, NY 14853-2701

kelly.zamudio@cornell.edu

CzechRep EvolEcolInvasions

POSTDOCTORAL RESEARCH POSITION 29 MONTHS, FIXED-TERM, FROM FEBRUARY 2013

APPLICATIONS CLOSE 15 JANUARY 2013

TOPIC: The impact of biological invasions on reciprocal relationship between bitterling fish and freshwater mussels

ACADEMY OF SCIENCES OF THE CZECH REPUBLIC

One postdoctoral position is available in team of Martin Reichard at the Institute of Vertebrate Biology, Czech Academy of Sciences, located in Brno, Czech Republic (http://www.ivb.cz/fish/reichard.html) from February 2013 to June 2015. Formal appointment is at Institute of Botany, Czech Academy of Sciences in Prague, as a part of a large project with 10 postdoctoral positions.

PROJECT The aim is to quantify the costs and benefits in reciprocal relationship between bitterling fish and freshwater mussels. Bitterling lay their eggs into the gills of unionid mussels and mussels possess a larval stage parasitizing fish. Pilot study demonstrated that either the bitterling or the mussel may gain more benefit in this coevolutionary association and the roles of the host and parasite can be completely reversed (http://www.nature.com/news/-invasive-species-turns-parasites-into-hosts-1.10028).

The project combines respirometry, histology, genetics and behavioural ecology and is based on comparative (interspecific and interpopulation) approach. Fieldwork in Europe and China.

QUALIFICATIONS - PhD in Biology and experience with field work and experiments is required - competence in aquatic respirometry or histology would be advantage (as complementary to our expertise)

SALARY 45 000 CZK, c. 1800 EUR per month

APPLICATION PROCEDURE Consult full documentation, available at: http://www.ibot.cas.cz/sites/-File/prac_mista/vyberove%20rizeni_postdoci_AJ.pdf For this position, code is 'Selected position: postdoc No. 1.a.1'

Please explain your previous work and motivation to apply for this position in your Cover Letter.

For informal enquires and more details (encouraged), please email reichard@ivb.cz

Martin Reichard Institute of Vertebrate Biology Academy of Sciences of the Czech Republic Kvetna 8, 603 65 Brno Czech Republic http://www.ivb.cz/fish/-reichard.html reichard@ivb.cz

DalhousieU LakeTroutPopGenomics

Postdoctoral position

A postdoctoral researcher position is available in Paul Bentzen's laboratory in the Department of Biology at Dalhousie University, Halifax, Nova Scotia. Core responsibilities for the researcher will be to work with existing data sets on microsatellite and mtDNA variation in lake trout (Salvelinus namaycush) populations that display sympatric morphological and/or ecotypic divergence in several large lakes scattered across North America, with the aim of producing several publications for the primary literature. Opportunities will also exist for the researcher to conduct further, novel research on the population genomics of lake trout or other fish species, using approaches such as RADseq.

Qualified candidates will have or be about to receive a PhD degree, expertise in population genetic analyses and research interests in evolutionary or conservation genetics. Experience with geometric morphometric analysis and/or analysis of RAD data would also be beneficial.

The starting date is flexible, but could be as early as January, 2013. The position is for 2 years, with the possibility of renewal for a third year. Starting salary will be $40,000 (Canadian). Interested individuals should contact Paul Bentzen (paul.bentzen@dal.ca). Formal applications should include a CV, cover letter with a statement of research interests, and sample publications, but feel free to contact me first with informal queries.

– Paul Bentzen Professor Dept. of Biology Dalhousie University 902-494-1105

Paul Bentzen <paul.bentzen@dal.ca>

EmoryU VisionEvolution

The Long-term goal of our NIH-funded research is to elucidate the mechanisms of the spectral tuning of visual pigments and adaptive evolution of dim-light and color vision.

Selected References: Yokoyama, S., Tada, T., Zhang, H. and Britt, L. (2008) Elucidation of phenotypic adaptations: molecular analyses of dim-light vision proteins in vertebrates. PNAS 105: 13480-13485.

Tada, T., Altun, A. and Yokoyama, S. (2009) Evolutionary replacement of UV vision by violet vision in fish. PNAS 106: 17457-17462.

Yokoyama, S. (2012) Synthesis of experimental molecular biology and evolutionary biology: an example from the world of vision. BioScience 62 (11): 939-948.

Altun, A., Morokuma, K. and Yokoyama, S. (2011) Hydrogen-bond network around retinal regulates the evolution of ultraviolet and violet vision.

ACS Chemical Biology 6: 775-780. Sekharan, S., Yokoyama, S. and Morokuma, K. (2011) Quantum Mechanical/Molecular Mechanical structure, enantioselectivity, and spectroscopy of hydroxyretinals and insights into the evolution of color vision in small white butterflies. J. Phys. Chem. B. 115 (51): 15380-15388.

We are looking for recent graduates who are well versed in experimental molecular genetics/biotechnology. If you are interested, please send CV to Shozo Yokoyama (syokoya@emory.edu).

Shozo Yokoyama, Ph. D. Asa G. Candler Professor of Biology Department of Biology Emory University 1510 Clifton Road Rollins Research Center Atlanta, GA 30322 Tel:404-727-5379 FAX:404-727-2880 Email:syokoya@emory.edu

syokoya@emory.edu

FredHutchinson Seattle MicrobesComputationalEvol

Our group at the Fred Hutchinson Cancer Research Center in Seattle is looking for a strong student, postdoc, or programmer to write code and analyze data. We develop and apply methods for the evolutionary analysis of next-generation DNA sequence data for research on pathogenic and commensal microbes.

This job will involve algorithm development, efficient implementation, web tool deployment, and collaboration with lab biologists. You will need to be mathematically proficient, have some serious coding chops, and be passionate about biology. On the math side of things, you should at least able to read an algorithms paper and implement what you see there, and at best be able to develop your own theory and algorithms. For coding, we aren't as focused on the specific language as long as you are capable of writing succinct code that is well documented and robust. Linux experience is a must though, and this job will definitely involve a considerable amount of Python and R, as well as some C++11 (and some OCaml if you are keen). We hope you are excited by biology (even if you know rather little) and enthusiastic about collaborating with kick-ass biologists.

If you are from academia, this will be a fun and intense experience that will prepare you for further research in a rapidly developing and important field. We will help you quickly find your own area to work on, and will emphasize development of your research program with corresponding first-author papers. The group is productive and there are a number of outstanding projects that are currently waiting for a champion.

Fred Hutchinson Cancer Research Center, home of about 190 faculty including two Nobel laureates, is an independent, nonprofit research institution dedicated to the development and advancement of biomedical research. We like having the team present for a mid-morning stand-up meeting, but other than that your schedule will be your own, as long as those commits keep coming. You will be joining a core group of one group leader and two programmers, as well as a larger community of statisticians, programmers and hundreds of biologists. The environment here is supportive and highly collaborative.

The salary for this job is competitive for junior-level programmers, grad students and postdocs. The center has great benefits and a lovely campus next to Lake Union within walking distance from downtown. Powerful computing resources and a helpful IT staff await you.

This is a great opportunity to work on cutting-edge research with brilliant collaborators.

Requirements

* PhD in a relevant field * a high level of linux proficiency (at least three years) * top-notch programming skills in either C, C++, or Python * interest in bioinformatics * experience using a VCS, preferably git * the ability to work independently with a long-range goal in mind * R experience a plus * SQL experience a plus

Please send a CV and significant code sample to Erick Matsen at matsen@fhcrc.org. The code should be DRY, well documented, and show that you can use some non-trivial features of your chosen language. The best-case scenario would be if you could point us to an open source project you have worked on in one of our

favorite languages.

You can see a more general version of this job posting at http://matsen.fhcrc.org/openings.html Thank you,

Erick

Frederick "Erick" Matsen, Assistant Member Fred Hutchinson Cancer Research Center http://-matsen.fhcrc.org/ ematsen@gmail.com

HarvardU PlantEvolution

Katharine H. Putnam Fellowships in Plant Science

Application Deadline: February 1, 2013

The Arnold Arboretum of Harvard University invites applicants for research fellowships in plant science. Putnam Fellowships offer excellent opportunities for advanced research and study using the Arboretum's living collections of trees and shrubs. Scientists and horticulturists with a PhD and who have identified a research project that would utilize the Arboretum's living collections are encouraged to apply.

Putnam Fellows conduct basic and applied research in the plant sciences. The goal of the program is to facilitate the research use of the Arboretum's living collections, thereby stimulating their use within the larger scientific community. The research topics of past Putnam Fellows have included taxonomy and systematics, physiological ecology, propagation, plant-insect and/or -pathogen interactions, and collections management. The Putnam Fellowship Program has attracted a diverse array of scholars, and many have gone on to be leaders in academia and public horticulture.

For further information please visit: http://-arboretum.harvard.edu/research/fellowships/putnam-fellowships-in-plant-science/ For additional opportunities please visit: http://arboretum.harvard.edu/-research/fellowships/ AA/EEO: Harvard University is an Affirmative Action/Equal Opportunity Employer.

Pamela K Diggle

Visiting Professor Department of Organismic and Evolutionary Biology Harvard University

Professor Department of Ecology and Evolutionary Biology University of Colorado

diggle@fas.harvard.edu

IndianaU MicrobeEvolution

Post-doctoral position: linking plant traits, microbial communities, and climate change in peatland ecosystems.

A post-doctoral position is available for a qualified individual to study response of structure and function of microbial communities in peatland ecosystems to climate change at Michigan Technological University, in collaboration with the US Forest Service Northern Research Station and Indiana University. Full support is available for two years support for a post-doc to work on two projects: 1) the PEATcosm experiment and 2) a hemispheric-scale analysis of peatland microbial and fungal communities. The PEATcosm experiment conducted at the USFS mesocosm facility (http://goo.gl/-koFpE) is an NSF- funded experiment in which we are examining climate change and plant community effects on peatland bacterial and fungal communities and carbon cycling. We have also received Community Sequencing Program support from the Joint Genome Institute for an extensive study of peatland microbial and fungal community structure at sites across the globe involved in carbon cycling/trace gas flux studies. This opportunity for integrative research at both the experimental and global scale will be an excellent opportunity to focus on macro- and micro-scales of microbe-ecosystem interactions.

Highly qualified candidates will have experience with next-generation sequencing of microbial communities; competency in quantitative methods, including multivariate statistics and bioinformatics; an interest in field-based experiments; and a strong background in microbial ecology, ecosystems ecology, peatland ecology, or a related field.

The candidate would be based primarily at Michigan Tech in the Lilleskov Lab (nrs.fs.fed.us/people/lilleskov). Depending on interest, there is an opportunity to spend time in the Lennon Lab at Indiana University (indiana.edu/~microbes/). The candidate would work in collaboration with other investigators on the PEATcosm project and related peatland research at Michigan Tech (with PIs Erik Lilleskov, Evan Kane, Rod Chimner, Tom Pypker), co-PI Jay Lennon at Indiana University, and collaborators from the global project (Mark Waldrop, Chris Schadt, Nathan Basiliko, Randy Kolka, Merritt Turet-

sky, Susannah Tringe, Dan McLaughlin, Eeva-Stiina Tuittila, Carl Trettin, Ruth Varner, Tim Moore, and others).

Michigan Tech is located on Michigan's Keweenaw Peninsula on the south shore of Lake Superior, a region dominated by vast areas of lakes, forests and wetlands. Michigan Tech is in the small university town of Houghton, MI, which was rated as one of the top 10 U.S. adrenaline outposts by National Geographic Adventure Magazine, boasting excellent skiing, hiking, kayaking and mountain biking. Indiana University is located in Bloomington, a city of approximately of 80,000 people. The city and region has excellent outdoor (biking, hiking, caving) and cultural (restaurants, music, entertainment) opportunities.

Consideration of applications begins immediately and will continue until the position is filled. Start date is as soon as possible, but no later than June 2013. Please send a cover letter that states your research interests, your curriculum vitae, the names and contact information for three references, and any other relevant materials, by email to Erik Lilleskov (elilleskov@fs.fed.us) and Jay Lennon (lennonj@indiana.edu).

Jay T. Lennon Associate Professor Department of Biology Indiana University 1001 E. 3rd Street Bloomington, IN 47405 812-856-0962 (office) 812-856-7235 (lab) 812-855-6082 (fax) lennonj@indiana.edu web: indiana.edu/~microbes wiki: indiana.edu/~lennon

Lennon Jay <lennonj@indiana.edu>

Lisbon EvolutionaryEpistemology

please distribute and apologies for cross postings

AppEEL, the Lisbon Applied Evolutionary Epistemology Lab of the Centre for Philosophy of Science of the Faculty of Science of the University of Lisbon is actively seeking to expand its interdisciplinary research team.

Pending on budgetary approval, the following positions will open from September 1st, 2013 until May 31st, 2016:

2 yearlong Post-Doctoral Research Positions (non-accumulable)

http://appeel.fc.ul.pt/sub/new/dir/postdoctoral.html

4 yearlong PhD Fellowships (non-accumulable)

http://appeel.fc.ul.pt/sub/new/dir/-phdfellowships.html

3, 6 and 12 monthlong Visiting Doctoral and Post-Doctoral Fellowships (accumulable with an existing grant)

http://appeel.fc.ul.pt/sub/new/dir/-doctoralandresearch.html

The positions are open to researchers active in the following research fields:

Philosophy & History of Biology

Evolutionary Biology, Paleontology, Molecular Biology, Symbiology, Virology, Botany

Evolutionary, Social and Cultural Anthropology, Evolutionary Archeology

Evolutionary Linguistics

Evolutionary Psychology

Bioinformatics, Artificial Intelligence, Computational Biology/Linguistics/Anthropology

We especially invite research proposals that focus on:

The nature and scope of the Extended Synthesis in Evolutionary Biology and/or the Sociocultural domain

Applied Evolutionary Epistemology, the Units and Levels of Evolution Debate and Hierarchy Theory

Micro- and Macroevolutionary studies in Biology and/or the Sociocultural sciences

Horizontal and non-gradual vertical evolutionary studies in Biology and/or the Sociocultural Sciences

The application of Bioinformatics and computational techniques to model Biological and Sociocultural Evolution

Applications and inquiries can be send to Nathalie Gontier at nlgontier@fc.ul.pt by February 1st, 2013 and must include the following information:

The ID number of the specific position you are applying for

A full CV

A motivational letter

A research proposal of max. 1.500 words (+/- 3 pages, 12 font size)

Minimally 1, maximally 3 letters of recommendation

AppEEL, the Centre for Philosophy of Science, The Faculty of Science, and the University of Lisbon are an equal opportunity employee and we welcome submissions from people with special needs.

Nathalie Gontier, PhD Lisbon Applied Evolution-

ary Epistemology Lab Centre for Philosophy of Science Faculty of Science, University of Lisbon http://appeel.fc.ul.pt AppEEL Announcements <appeelannouncements@fc.ul.pt>

MaxPlanck 4 Ornithology

The Max Planck Institute for Ornithology, Vogelwarte Radolfzell, is an internationally renowned research institution working in the field of Animal Migration and is leading the ICARUS Project, the International Cooperation for Animal Research Using Space (www.icarusinitiative.org). We are building up an interdisciplinary Management, Technical/Engineering and Research Team on satellite-based global animal tracking within the ICARUS project. We have four open positions

- Engineer with a background in bio-telemetry or communication - 3 Research Scientists in animal movement

We are looking for highly motivated people with good communication skills and international work background who are willing to collaborate in a small, effective team. All team members are keen to interact with industrial space engineering partners and national and international space agencies. The engineer will work with the space industry, biotelemetry outfits and animal ecologists towards enabling tag-to- satellite communication. The three research scientists will test and prepare ICARUS systems in the lab and the wild. We are looking for one research scientist with special skills in immuno-ecology.

The positions are initially limited to 2 years and will be supervised by Prof. Martin Wikelski and ICARUS manager Uschi Mueller. The researcher can expect an outstanding scientific environment and excellent support at this newly re-established department of the Max Planck Institute of Ornithology in Radolfzell, Baden-Württemberg, at Lake Constance. The ICARUS team works at the University of Konstanz, a ‚cluster of excellence' university. The language at the institute is English.

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 underrepresented, the Max Planck Society also encourages women to apply for this position. Payment and benefits are according to the German TVöD, with the precise salary level (up to maximum level 14), depending on personal qualifications. There will be further social benefits according to the provision of the public sector. The positions will begin in January 2013. Screening of applications will begin on December 15th, 2012. For further details, please contact Uschi Mueller (umueller@orn.mpg.de, phone: +49 7531-884725). Applicants should submit a CV, a $\frac{1}{2}$-page statement of work interest, and three references to:

Max Planck Institute for Ornithology Personalabteilung Eberhard-Gwinnerstr. D-82319 Seewiesen or per Email: personal@orn.mpg.de

"Mueller, Uschi" <umueller@orn.mpg.de>

MaxPlanck 4 Ornithology 2

The Max Planck Institute for Ornithology, Vogelwarte Radolfzell, is an internationally renowned research institution working in the field of Animal Migration and is leading the ICARUS Project, the International Cooperation for Animal Research Using Space (www.icarusinitiative.org). We are building up an interdisciplinary Management, Technical/Engineering and Research Team on satellite-based global animal tracking within the ICARUS project. We have four open positions

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Max Planck Institute for Ornithology Personalabteilung Eberhard-Gwinner-Str. D-82319 Seewiesen or per Email: personal@orn.mpg.de

Uschi Müller Project Coordinator ICARUS

Max-Planck-Institute for Ornithology D-78464 Konstanz Phone: +49 -7531 - 88 4725 Mobile: +49 - 162 - 400 89 56 Fax: +49-7531 - 88 3449 Email: umueller@orn.mpg.de uschi.mueller@uni-konstanz.de

“Mueller, Uschi” <umueller@orn.mpg.de>

MaxPlanck Jena Bioinformatics genomics

A post-doctoral fellowship in plant genomics and bioinformatics at MPI-CE.

The Department of Molecular Ecology headed by Professor Ian Baldwin at the Max Planck Institute for Chemical Ecology is offering a postdoctoral position in plant genomics and bioinformatics.

/Nicotiana attenuata/ (common name Coyote tobacco) has been developed as an ecological model plant for plant-herbivore interactions, and its sophisticated herbivore-induced direct and indirect defenses have been intensively investigated during the last 20 years (for more information see: http://ice.mpg.de/ext/-molecular-ecology.html). To further understand the genomic basis of plant defense mechanisms and other adaptations of this remarkable plant to its native habitat (the Great Basin Desert), the Department (in collaboration with the Max Planck Institute of Molecular Genetics in Berlin) is currently sequencing the complete genome of /N. attenuata/ (estimated size 2.5 Gb), as well as a near relative (/N. obtusifolia/) and multiple herbivory-elicited time-course transcriptomes of these two species, near relatives and allopolyploid relatives.

The main tasks of the candidate will be to contribute to the analysis of /Nicotiana/ genomes together with other researchers from the genomics team in the Department and help to build tools that will assist people in the group to optimally use the genome and transcriptome data.

The candidate should have strong background in bioinformatics, computational biology, and computational analysis of next-generation sequences (NGS). Experience in database design and construction is a plus. The candidate should be experienced in at least one programming languages, such as Perl, Python or Java/C++. Experience in Linux system administration and facilities operations is preferred.

The Max Planck Society offers a competitive fellowship, with a duration of 3 years starting May 2013. The opportunity for a German scale salary (TVL-D 13) will depend on the candidates' profile. The postdoctoral fellow will be part of the Max Planck Postdoctoral Network, which offers trainings and science communication opportunities.

Jena is a University town in the center of Germany, with an international student community and good transport connections to other cities (Berlin, Dresden and Munich).

The review process will begin on the 10ˆth January 2013 and continue until position is filled. In case of the (TVL-D 13) position the deadline for application is the 20ˆth of January.

If you are interested in this position, please send a CV, a description of research interests and contact information of 2-3 referees to Prof. Ian Baldwin (baldwin@ice.mpg.de).

For further information, please contact Dr. Shuqing Xu (sxu@ice.mpg.de) or Dr. Aura Navarro (anavarro@ice.mpg.de)

anavarro@ice.mpg.de

MaxPlanck Leipzig EvolutionaryGenomics

Postdoctoral position - Max Planck Institute for Evolutionary Anthropology.

We have an opening for a postdoc in the Genetic Diversity and Selection group, in the Department of Evolutionary Genetics at the Max Planck Institute for Evolutionary Anthropology, in Leipzig. http://www.eva.mpg.de/genetics/files/-population_genomics.html The main focus of our lab is to shed light on the role that natural selection has played in the evolution of humans and other primates. More specifically, we are interested in assessing the influence of natural selection across primate genomes, in the identification and characterization of selection targets, and in understanding the phenotypic consequences of selected variants. The specific project is somewhat flexible, but will broadly address the influence of natural selection in genomes, individuals, populations, or species. For example, the project may take advantage of the high-quality genome-wide datasets of several populations and species we have access to, both through external collaborations and in-house data production.

We are seeking a creative and highly motivated individual with prime interest in population genetics/genomics and evolutionary biology. Candidates should have a PhD in evolutionary biology, population genetics, bioinformatics, computational biology, statistics, or related disciplines. The ideal candidate will have experience in at least one of the areas above, and a strong interest in the others. Previous work in population genetics/genomics (theoretical or analytical), experience with large-scale databases, and strong programming skills are a plus.

The Department of Evolutionary Genetics is a lively, stimulating, and highly collaborative place at the front of primate evolutionary genomics (http://-www.eva.mpg.de/genetics). The Institute is very international and English speaking. It is located in Leipzig, a nice and affordable city of 500,000 habitants that is the capital and major cultural center of German Saxony. Leipzig is at driving distance of Berlin (2 hours) and Prague (3 hours).

To apply send, in PDF format, a cover letter, your CV, and the contact information of at least 2 potential referees to Aida Andrés at aida_andres@eva.mpg.de. Informal inquiries can be sent to the same address.

Aida Andrés, PhD Group Leader, Max Planck Institute for Evolutionary Anthropology

Deutscher Platz 6 04103 Leipzig, Germany

Phone: +49 341 3550 507 Fax: +49 341 3550 555 aida.andres@eva.mpg.de

http://www.eva.mpg.de/genetics/files/-population_genomics.html aida_andres@eva.mpg.de

MaxPlanck Ploen 3 EvolutionaryGenetics

Three postdoc positions for studying the genomics of de novo gene evolution

Max-Planck Institute for Evolutionary Biology, Ploen, Germany

Department of Evolutionary Genetics

Group of Diethard Tautz

http://www.evolbio.mpg.de/15929/-evolutionarygenetics Funded by an ERC advanced grant, we will start a large scale project for understanding patterns and processes of de novo evolution of genes.

There is rapidly accumulating evidence that new gene functions can evolve out of non-coding DNA and that this contributes to evolutionary innovations (see Tautz and Domazet-Loso, The evolutionary origin of orphan genes, Nature Reviews Genetics 12, 692-702). We will follow three major lines of research to investigate this in depth:

1. comparative genomics in the house mouse (genus Mus) species group and outgroups, involving RNASeq and genome sequencing to systematically identify genes with a recent history of de novo evolution

2. use an experimental evolution approach in bacteria/phages to assess the frequency of emergence of functional peptides out of random sequences

3. functional analysis of de novo evolved mouse genes through knockout studies

Qualifications required:

position 1: experience in comparative genomics and

bioinformatics

position 2: experience in bacterial/phage genetics and genomics

position 3: experience in mouse genetics

Candidates should have a completed PhD in the respective fields. Employment is for initially two years, but can be extended for up to five years with the option to develop an own research agenda in the field. Payment will be at the TVöD13 scale with full social benefits.

Applications should be sent to tautz@evolbio.mpg.de and include a complete CV, publication list, letter of motivation and contact information for up to three references.

Prof. Dr. Diethard Tautz Max-Planck-Institut fuer Evolutionsbiologie Abteilung Evolutionsgenetik August-Thienemannstrasse 2 24306 Ploen (Germany) Tel.: 04522 763 390 Fax: 04522 763 281 tautz@evolbio.mpg.de

tautz@evolbio.mpg.de

Moncton NewBrunswick FishEvolution

Postdoc in Evolutionary Freshwater Biology (1.5 years-possible extension conditional to funding) Fisheries and Oceans Canada, Gulf Fisheries Center, Moncton, New Brunswick Canada

The Aquatic Animal Health section, molecular biology group is seeking to recruit a postdoc to strengthen a starting research team in fish evolutionary Systems biology. The position is full-time and available immediately.

Research context

The position is part of a multi-taxonomic evolutionary project, with the goal of barcoding and resolving the taxonomy and evolution of Canadian freshwater fish. The COI barcoding of freshwater fish will be done only for groups where fine resolution is needed, and for species overlapping. A second nuclear gene will be used to confirm/improve resolution. Additional potential fish invaders will also be barcoded along with potential non-banned close relatives, as the ultimate goal is to protect Canadian waters from invasive fish using applied genomics.

The pdf candidate will integrate an on-going project.

Requirements

The successful candidate will have previous research experience in molecular biology, PCR, phylogenetic and evolution of fish, be in good command of the English language (oral and written) and possess excellent communication skills (indicated by the ability to write scientific papers and deliver presentations). Note that the working environment is bilingual french/english, although candidates with no french are welcomed.

Additional requirements are: - A PhD in Computer Science, Biology or Physics, with relevant experience in the area of complex adaptive systems, evolutionary computation or theoretical population genetics.

- A strong interest in evolutionary theory and its biological applications.

Conditions of employment

The Department of Fisheries and Oceans Canada, Moncton, New Brunswick, offers a position for 1.5 yrs. The job is full-time (37.5 hours per week) with an annual salary of 47 000$ (can)

How to apply

Applications, including a letter of motivation, a curriculum vitae, a list of publications, and the contact information of two academic referees, must be submitted to the contact below. The position is open as long as this message is posted.

For further information, please consult: http://-www.nserc-crsng.gc.ca/Students-Etudiants/PD-NP/-Laboratories-Laboratoires/FO-PO_eng.asp http://-www.nserc-crsng.gc.ca/Students-Etudiants/PD-NP/-Laboratories-Laboratoires/index_eng.asp http://grdi-irdg.collaboration.gc.ca/eng/aboutrnd.html Informal enquiries can be made by email to nellie.gagne@dfo-mpo.gc.ca

Nellie Gagné Fisheries and Oceans Canada/Pêches et Océans Canada Molecular biology / Biologie Moléculaire Aquatic animal health/ Santé des animaux aquatiques 343 Université, Moncton N.B. E1C 9B6 ((506) 851-7478 fax (506) 851-2079

“Gagne, Nellie” <Nellie.Gagne@dfo-mpo.gc.ca>

Montpellier PlantAdaptation

POSTDOCTORAL position “genomic study of plant Adaptation”. Montpellier, France.

A postdoctoral position is available to participate in an Agropolis Fondation funded project (ARCAD: Agropolis resource center for crop conservation and adaptation www.arcad-project.org < http://www.arcad-project.org >), focusing on the study of plant adaptation to climate variation. The post-doc will be in charge of statistical analysis of available large of rice and pearl millet datasets. The primary analysis will focus on genome selection scan study (De Mita et al. in press). On a set of the accessions phenotypic data are available allowing to couple selection analysis and association mapping studies.

The team offers a diverse and interactive environment for research in plantevolutionary biology. We share close ties with other evolutionary biology and plant science labs in Montpellier, and we benefit from shared facilities, such as the bioinformatics core research facility. Montpellier is a lively city on the French Mediterranean coast (http://us.montpellier.fr/-1117-discovering-montpellier.htm).

To apply for this position, please send a brief letter of interest (1-2 paragraphs), a CV, and the names and contact information for two references to Yves Vigouroux (yves.vigouroux[at]ird.fr) and Joelle Ronfort (joelle.ronfort[at]supagro.inra.fr). The position is available for 10 months. Opportunity to build up Marie Curie Fellowship or to pursuit on another funded postdoctoral position on similar project will depend on research progress. A Review of applications will begin on mid January, and will continue until the position is filled.

The post-doctoral fellowship is funded by Agropolis Foundation (*http://www.agropolis-fondation.fr/*).

Reference:

De Mita S, Thuillet AC, Gay L, Ahmadi N, Manel S et al. *Detecting selection along environmental gradients: analysis of eight methods and their effectiveness for outbreeding and selfing populations*. /Mol Ecol./in press.

Team web site :

Y Vigouroux

https://sites.google.com/site/-plantbiodiversityadaptation/ J Ronfort

http://umr-agap.cirad.fr/en/scientific-teams/-diversity-and-adaptation-of-grapevine-and-mediterranean-species/objectives Yves Vigouroux Responsable de l'Equipe Anthropisation et Dynamique de la Diversité Génétique -DYNADIV IRD - Institut de Recherche pour le Développement 911 avenue AGROPOLIS BP 64501, 34394 Montpellier cedex 5 France Tel : 33 (0)4 67 41 62 45 ; Fax : 33 (0)4 67 41 62 22 Email : yves.vigouroux@ird.fr

Web : https://sites.google.com/site/-plantbiodiversityadaptation/ "yves.vigouroux@ird.fr" <yves.vigouroux@ird.fr>

NHMLondon BiodiversityGenomics

Postdoctoral Research Assistant Biodiversity Genomics

A postdoctoral position is available to conduct research and to co-ordinate research activities under the Biodiversity Initiative of the Natural History Museum (www.nhm.ac.uk/research-curation/biodiversity/).

The Biodiversity Initiative will develop new methods for studying species-rich ecosystems using genomic methods. The Initiative will develop a standardised sampling program in several tropical forests to study species turnover over spatial distance and along disturbance gradients. High-throughput sequencing will be used to assess simultaneously species diversity and genetic diversity from pools of specimens using PCR-free protocols. Pilot experiments will be carried out on samples from several forests in the UK. The study focuses on insects, as a model of a highly diverse, but taxonomically insufficiently known group.

The job holder will be expected to work closely with a research team of molecular taxonomists, ecologists and collection managers to conduct integrated biodiversity studies that include all steps from field collections to the establishment of standard and frozen collections, and from morphological and molecular taxonomy to genomics and statistical biodiversity analysis. The Initiative will also involve 'citizen scientist' volunteers who conduct field sampling and specimen sorting. This is an exciting opportunity to develop novel approaches to museum-based biodiversity research.

We are seeking an individual with expertise in comparative genomics and bioinformatics, who is familiar with standard software and scripting used in the analysis of next-generation sequencing data. Good understanding of molecular phylogenetics, ecological statistics and/or field biology (entomology) is an advantage. Good communication skills and flexibility to address diverse research needs of the project are also required.

The post is available for 3 years. To apply, please follow the link to an application form at www.nhm.ac.uk/about-us/jobs-volunteering-

internships/index.html .For informal inquiries, contact Dr Alfried P. Vogler, Professor of Molecular Systematics, Natural History Museum, London SW7 5BD, UK, email: apv@nhm.ac.uk. Closing date for applications is January 7th, 2013.

A.Vogler@nhm.ac.uk

Smithsonian PlantEvolution

2013 Smithsonian Institution Research Fellowships

Research fellowships in Botany are available through the Smithsonian Institution Fellowship Program, which provides funding for graduate students, postdoctoral scholars, and senior investigators to conduct research in association with Smithsonian scientists. Candidates are especially encouraged to apply for the new multi-year Peter Buck Fellowships (http://www.si.edu/ofg/fell.htm - fnmnh< http://-www.si.edu/ofg/fell.htm#fnmnh >). Fellows based at the National Museum of Natural History have access to a research staff of more than 100 scholars, world-class collections, and modern core facilities including molecular andstable isotope laboratories and SEM. All applicants should contact potential staff advisors to determine the feasibility of the proposed research and tenure dates, as well as the availability of relevant collections and other resources. Potential staff advisors and information about their work is available at the departmental web site (http://botany.si.edu/).

Proposal deadline is January 15, 2013. Fellowship durations range from three months to three years depending on fellowship category. The stipend for Predoctoral Fellows is $30,000 per year (twelve months) and for Postdoctoral and Senior Fellows is $45,000 per year (twelvemonths). A maximum research allowance of $4,000 per year is available. Ten-week Graduate Student Fellowships are also available with a stipend of $6,500. Fellowships are open to citizens of any country. For more information and to apply online, visit the Program website (http://www.si.edu/-ofg/Applications/SIFELL/SIFELLapp.htm).

Elizabeth Anne Zimmer, Ph.D. Principal Investigator/Research Biologist Department of Botany Laboratories of Analytical Biology National Museum of Natural History, Smithsonian Institution Museum Support Center, MRC 534 4210 Silver Hill Rd. Suitland, MD 20746 Phone: 301-238-1118 FAX: 301-238-3059 Cell: 703-863-9806 email: zimmerl@si.edu URL: http://botany.si.edu/staff/index.cfm "Zimmer, Elizabeth (Liz)" <ZIMMERL@si.edu>

StLouisU EvolutionaryGenomics

POSTDOCTORAL RESEARCH ASSOCIATE IN EVOLUTIONARY GENOMICS

A postdoctoral position is available in the Casola Lab at Saint Louis University. Current research interests in the lab include gene duplication and gene deletion in eukaryotes, comparative and population genomics of allelic and interlocus gene conversion, and the origin of genomic novelties from transposable elements. The postdoc will have flexibility to work on projects in that are of interest and will be expected to present and publish results. More details on active projects in the lab are available online at sites.google.com/a/slu.edu/ccasola.

Candidates must hold a Ph.D. in computational biology, evolutionary genetics/genomics, molecular evolution or a related field. Experience in comparative genome-wide analyses, next-gen sequencing data, and bioinformatic programming are preferred. Programming skills in either perl, python, R or other languages suitable for bioinformatic analyses are required. This is a one-year position renewable depending on performance and external funding. A starting salary will be commensurate with experience and benefits are included. The position is open immediately and the start date is negotiable.

All applications must be made online at http://-jobs.slu.edu. Applicants should submit a cover letter, curriculum vitae, and contact information for three references (name, address, phone number and email). Only electronic applications will be considered. Please send any questions about the position, expectation or requirements to Claudio Casola (ccasola@slu.edu).

Saint Louis University is an affirmative action, equal opportunity employer and encourages applications from women and minorities.

– Claudio Casola, Ph.D.âSt. Louis University Assistant Professor Department of Biology Macelwane Hall, Room 208 Phone: (314) 977-3909 Fax: (314) 977-3658 ccasola@slu.edu https://sites.google.com/a/-slu.edu/ccasola/ ccasola@slu.edu

TubingenU Paeleogenetics

The Paeleogenetics group at the Faculty of Mathematics and Natural Sciences, Tübingen University, is searching for

A research fellow (postdoc, German funding system TVL-E13)

for a period of 2 years, with potential extension up to 5 years starting in

January 2013 or later.

POSITION SUMMARY

We are looking for a Postdoctoral Research Fellow with a strong bioinformatics background to study the evolution and genetic reconstruction of pathogen and human DNA from an archaeological context using next generation sequencing data.

PRIMARY RESPONSIBILITIES

The position is funded by the European Research Council (ERC) as part of a 5 year starting grant with the title "Ancient Pathogen Genomics of re-emerging infectious disease" (APGREID). The aim of the project is to study ancient pathogen genomes from historical pandemics as well as host pathogen interactions throughout time. The primary focus will be the reconstruction of immunity related genes, from human host populations throughout major pandemics in order to get direct insights into host pathogen interactions over time. The research will be focused on common human associated pathogens of viral and bacterial origin and applying phylogenetic and comparative analyses to ancient as well as modern pathogen genomes. The position may involve fieldtrips in order to identify and sample skeletal remains from historical contexts. The project will be directly supervised by the PI. The working climate in the paleogenetics group is open with low hierarchical structures and involves brainstorming and interactions with all the team members during weekly meetings and informal discussions.

Supervisory Responsibilities: The research fellow may be expected to co-supervise a PhD student and potentially other junior staff to assist with the project.

QUALIFICATIONS

A completed Ph.D. in Bioinformatics, Microbiology, Evolutionary Biology, Population genetics, or a related field; post-doctoral research experience is a plus.

SKILLS

A strong sense of team spirit and diplomacy is a requirement. The candidate should have a strong background in population genetics, bacterial or viral genetics and/or pathogen evolution. Proficient background in bioinformatics including experience with next generation sequencing data analysis is a must (e.g. BWA, samtools, GATK). Software skills should include, but not be limited to, most of the following: proficiency in general statistical analysis such as R (model testing, etc.); phylogenetic and evolutionary analysis for building phylogenetic trees and other programs for alignment and building likelihood and Bayesian trees (esp. BEAST). Excellent written and verbal communication skills in English and a proven track record in writing and publishing manuscripts are required.

START DATE:

There is a proposed start date of January 1st, 2013. This starts as a two-year position, however funding is available for 5 years in total. Salary is based on German public funding system(TVL-E13).

How to Apply:

In order to be considered all eligible candidates must email the following

three items: (a) one page cover letter, (b) CV, and (c) three references

to Johannes.krause@uni-tuebingen.de.

Tübingen University is an equal opportunity employer. Women and members of minority groups including disabled persons are strongly encouraged to apply.

Thank you,

Johannes Krause

Dr. rer. nat. Professor for Paleogenetics Institute of Archaeological Sciences(INA) Faculty of Mathematics and Natural Sciences

Eberhard-Karls University Tuebingen Ruemelinstr. 23 72070 Tuebingen Tel: +49 (0) 7071 29 74 089

johannes <krause@eva.mpg.de>

UBrussels DrosophilaSocialNetworks

Postdoctoral position opportunity on Animal Behaviour and Social Networks

Project: DrosoNet (on the use of social network to understand the factors affecting spread andstability of social transmission in Drosophila)

https://docs.google.com/-viewer?a=v&pid=sites&srcid=-ZGVmYXVsdGRvbWFpbnxjZWRyaWNzdWV1cmFuaW1hbGJlaGF2aW91cnxneDo3NmM1NGY1ODAzN2MzOGM5

Cédric Sueur Maître de Conférences, Associate Professor

cedric.sueur@iphc.cnrs.fr / csueur@ulb.ac.be phone: +33(0)388107453 fax: +33(0)388107456 https://-sites.google.com/site/cedricsueuranimalbehaviour/

Ethologie Evolutive DEPE, IPHC, UDS-CNRS UMR7178 23, rue Becquerel f-67087 Strasbourg Cedex FRANCE

Unit of Social Ecology CP231, free university of Brussels Campus Plaine, Bd du triomphe 1050 Brussels BELGIUM

csueur@iphc.cnrs.fr

UCalifornia SanFrancisco MalariaPopGen

Postdoctoral Fellow in Statistical Population Genetics of Malaria at U.C. San Francisco, San Francisco, CA, USA

A postdoctoral position is available starting July, 2013 in the laboratory of Bryan Greenhouse in the Division of Infectious Diseases at U.C. San Francisco. The current position will focus on development and application of statistical models incorporating parasite genetics and epidemiologic data to characterize transmission and evolution of malaria parasites. The successful candidate will have the opportunity to work closely with a diverse team of scientists at UCSF and international collaborators on projects spanning work in malaria elimination to regions with the highest burden of malaria in the world. The fellow will be encouraged to develop an independent line of work under the co-mentorship of Bryan Greenhouse and Rasmus Nielsen (U.C. Berkeley), including presentation and publication of findings. Our work is directly connected to on-the-ground malaria control and elimination efforts, and the scientific output from this position is expected to directly affect interventions in the field in addition to leading to academic publications. Competitive salary including full benefits will be provided commensurate with experience and qualifications.

Essential Skills

* PhD in a relevant field (e.g. population genetics, statistics, computational biology)

* Excellent background in population genetics

* Strong statistical and computational skills

* Demonstrated ability to produce independent, creative work

* Ability to work well as member of a team

* Strong written and oral communication skills

Ideal Skills

* Experience with analysis of pathogen transmission trees / phylogeographic data

* Familiarity with laboratory genetic/genomic assays and data, including QC

* Experience with geospatial data / visualization

To Apply: Please send a detailed CV including publications, brief statement of research/career interests, and contact information for 3 references to Bryan Greenhouse, MD, MA at bryan.greenhouse@ucsf.edu

"Greenhouse, Bryan" <bgreenhouse@medsfgh.ucsf.edu>

UCollegeCork Ireland FishQuantGenetics

Research Fellow in Quantitative Genetics & Evolutionary Biology Job Posted: 18 Dec 2012 Closing Date for Applications: 21 Jan 2013 School: School of Biological, Earth & Environmental Sciences, University College Cork, Ireland. Principal Investigators: Dr Philip McGinnity & Prof. Tom Cross Contract Type: Fixed Term Whole-Time Job Type: Research Salary: 51,716 - 54,820

Position Summary The Beaufort Marine Research Awards, launched in 2007, has provided 20 million to establish world class marine research groups in a number of priority areas aimed at addressing the objectives of Sea Change: A Marine Knowledge, Research and Innovation Strategy for Ireland 2007-2013. The awards target research leaders of international standing and mobile early stage researchers from Ireland and abroad. One of the groups established under this initiative is

the Beaufort Fish Population Genetics Research Centre. This new centre of excellence integrates researchers and research capacity from University College Cork, Queen's University Belfast and the Marine Institute, Ireland.

The School of Biological, Earth & Environmental Sciences, University College Cork (UCC), Ireland, is seeking to employ under the Beaufort Marine Science Scheme, a Research Fellow in the area of Quantitative Genetics and Evolutionary Biology. This position will run from appointment to the end of 2015. The Research Fellow will participate in the practical implementation of an all-Ireland programme in Fish Genetics, aiming to generate high level research activity and to produce publications in the area of population and evolutionary genetics.

Specifically, and in addition to the application of molecular techniques to support its population genetics programme (e.g. microsatellites, sequencing of both nuclear and mtDNA genes, SNPs and Next Generation Sequencing) the Beaufort team has been conducting a series of common garden and reciprocal transfer experiments in addition to developing multigenerational pedigrees on wild fish populations. Some of these populations have been subject to detailed monitoring for many decades and have excellent potential to provide insights into the processes of local adaptation, natural selection, phenotypic plasticity, inbreeding depression and mating strategies, and to gain a improved understanding of such applied topics as the evolutionary consequences of climate variability, fisheries, introgression with captive bred conspecifics, ecosystem changes due to invasive species and disease. The project has and continues to build excellent datasets for Atlantic salmon, brown trout, European lobster, Atlantic cod and stickleback.

We are now seeking a quantitative geneticist/evolutionary biologist who can provide a link between the molecular, biological, demographic and quantitative genetic aspects of the various projects within the Beaufort programme and exploit the research opportunities provided by these unique datasets. There should also be the opportunity to undertake some genomic analysis based upon NGS data. Suitable candidates will have a strong background in evolutionary or conservation genetics (in any species) and have a good knowledge of modern quantitative genetic methodologies.

The successful candidate will be facilitated at the Marine Institute's research centre at Newport, Co. Mayo, Ireland, with scope to spend periods of time at University College Cork and Queens University Belfast.

Criteria - A PhD qualification in quantitative genetics, evolutionary biology, conservation genetics, molecular ecology or a related topic and significant relevant research experience; - The capacity to work independently on research projects; - The ability to assess and evaluate concepts/theories in order to develop original solutions and particular knowledge of, and expertise in research methodologies; - Track record of high quality peer reviewed publications; - Experience with pedigree analysis and kinship reconstruction using molecular data; - Experience with a range of quantitative techniques and statistical modelling for example restricted maximum likelihood (REML) or Bayesian mixed models, in particular 'animal models' for the analysis of pedigree data; - Experience in post graduate and Post-Doctoral supervision; - Strong project management experience; - Ability to provide leadership to small research teams; - Ability to secure independent external research funding; - Ability to contribute to broader organisational and management processes; - Knowledge transfer and commercialisation experience is highly desirable.

For more detailed outline of the Research Fellow responsibilities and career development at University College Cork please see the UCC Job Vacancy website http://www.ucc.ie/en/hr/vacancies/research/full-details-186532-en.html For informal enquiries on the post candidates should contact: Dr Philip McGinnity

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UFlorida SeasonalAdaptation

Postdoc: U. Florida - mechanisms of seasonal adaptation and life history evolution.

A postdoctoral position in genomics and physiology of seasonal adaptation, life history evolution, and speciation is available in Dan Hahns lab at the University of Florida.

Our work takes a vertically integrated approach to understanding how rapid adaptation of insect seasonal life history timing can lead to speciation and radiation onto new host plants in the apple maggot sympatric speciation system. Specifically, a new host race of Rhagoletis pomonella formed when this fly radiated from its native

host plant, hawthorns, onto domesticated apples. Because apples flower and fruit earlier in the summer than hawthorns and adult flies are short lived the two host races have become isolated in time. In this system temporal isolation of the two host races is driven by shifts in the timing of pupal diapause/dormancy wherein the apple host race enters diapause earlier than the hawthorn host race and also exits diapause earlier the next year to synchronize themselves with their novel host fruit. Thus, this system is not only a model for speciation and host plant adaptation, but also for adaptation to shifts in seasonal timing like those expected to occur with shifts in seasonality due to anthropogenic climate change.

Some representative publications include:

Ragland, G.J., S.B. Sim, S. Goudarzi, J.L. Feder, and D.A. Hahn. 2012. Environmental interactions during host race formation: host fruit environment moderates a seasonal shift in phenology in host races of Rhagoletis pomonella. Functional Ecology. 26:921-931.

Ragland, G.J., S.P. Egan, J.L. Feder, S.H. Berlocher, and D.A. Hahn. 2011.Developmental trajectories of gene expression reveal candidates for diapause termination, in the apple maggot fly, Rhagoletis pomonella. Journal of Experimental Biology. 214:3948-3959.

Michel, A.P., S. Sim, T. Powell, M.S. Taylor, P. Nosil, and J.L. Feder. 2010. Widespread genomic divergence during sympatric speciation. PNAS. 107:9724-9729.

Filchak, K.E., Roethele, J.B. & Feder, J.L. 2000. Natural selection and sympatric divergence in the apple maggot Rhagoletis pomonella. Nature. 407:739V742.

Feder, J.L. and K.E. Filchak. 1999. Its about time: the evidence for host plant-mediated selection in the apple maggot fly, Rhagoletis pomonella, and its implications for fitness trade-offs in phytophagous insects. Entomologia Experimentalis et Applicata. 91: 211V225

This project is a collaborative effort with Greg Ragland, Scott Egan, and Jeff Feder at the University of Notre Dame and the successful applicant will be part of a larger team at both U. Florida and Notre Dame. The postdoc will be expected to lead a group of undergraduate and graduate students in field collecting flies from both host plants, rearing them in the lab under different thermal regimes mimicking seasonal shifts, phenotyping dormancy using metabolic rates, and collecting staged tissue samples for RNA-seq, proteomics, and whole-genome associations. The postdoc will be expected to process, analyze, and integrate high-throughput data from next-generation sequencing and mass spectrometry and apply the results to a physiologically informed framework for the evolution of life history timing. Experience with high-dimensionality data, genomics, molecular evolution, and programming in R and Perl/Python are all a plus.

The initial appointment will be for 2 years starting in summer 2013, with extension for up to 4 years based on performance. The University of Florida located in Gainesville offers a rich scientific community for evolution, ecology, physiology/cell biology, and genomics that spans many departments including Entomology and Nematology (the academic home for this appointment), Biology, Wildlife, Forestry, the Genomics Institute, the US Department of Agriculture, and the College of Medicine. There will be substantial opportunities for interdisciplinary training across these units, including training in genomics and informatics, as well as additional training opportunities in teaching/instruction and scientific outreach to the public. Gainesville is a great college town in north Florida surrounded by forests, springs & rivers, and is also an easy drive from the beach on either coast and larger cities like Jacksonville, Orlando, and Tampa.

For more information, contact Dan Hahn (dahahn@ufl.edu). To apply, send a single PDF document including your CV, a brief statement of previous research, and contact information for three references to Dan Hahn (dahahn@ufl.edu) by February 15th. Review of applications will begin in late February and continue until the position is filled, ideally with a summer 2013 start date. Both Dan and Greg will be at the SICB meetings in San Francisco January 3-9 if you would like more information in person.

Daniel A. Hahn Associate Professor Department of Entomology and Nematology University of Florida P.O. Box 110620 Gainesville, FL 32611-0620

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UGroningen EvolutionarySystemsBiology

Postdoc in Evolutionary Systems Biology (3 years) University of Groningen, the Netherlands

The Theoretical Biology group at the University of Groningen is seeking to recruit a postdoc to strengthen

a starting research team in Evolutionary Systems biology. The position is full-time and available immediately.

Research environment

The position is part of the project Systems biology meets evolutionary theory: modeling the genetics and adaptation of complex traits', funded by the Netherlands Organization for Scientific Research (NWO) and the European Research Council (ERC). Key objectives of this project are to understand how biomolecular interaction networks have been shaped by evolution, and how the structure of such networks influences phenotypic adaptation. To these ends, the research team will integrate evolutionary techniques and insights with systems-biology models, and develop innovative computational approaches for analyzing the structure and function of complex biomolecular networks. The role of the postdoc will be to develop methods for model reduction and biological network analysis based on ideas from multi-locus population genetics, and techniques for analyzing adaptive walks on complex fitness landscapes.

The research team will be embedded in the Theoretical Biology group at the Centre for Ecological and Evolutionary Studies (CEES), which comprises several other strong, internationally recognized research groups in the field of evolutionary biology. Our group also interacts closely with the molecular geneticists and systems biologists at the Groningen Biomolecular Sciences and Biotechnology Institute. The University of Groningen enjoys an international reputation as a dynamic and innovative centre of higher education and belongs to the best research universities in Europe. The university is ranked 24th (3rd among the European universities) on this year's 'Best Places to Work in Academia' ranking published by The Scientist.

Requirements

The successful candidate will have previous research experience in theoretical modeling, be in good command of the English language (oral and written) and possess excellent communication skills (indicated by the ability to write scientific papers and deliver presentations). Evolutionary systems biology is an emerging interdisciplinary research field. Suitable candidates can be either individuals with a background in the computational/molecular (life-)sciences, who are genuinely interested in evolutionary questions, or evolutionary biologists with a genuine interest in biomolecular mechanisms. Additional requirements are: - A PhD in Computer Science, Biology or Physics, with relevant experience in the area of complex adaptive systems, evolutionary computation or theoretical population genetics. - Excellent mathematical modeling and computer programming skills. - An active and supportive approach to inter-disciplinary research that will help to foster collaborations and interactions with other group members. - A strong interest in evolutionary theory and its biological applications.

Conditions of employment

The University of Groningen offers an appointment for one year with the option of a two-year extension, conditional on satisfactory performance. The job is full-time (38 hours per week) with a starting salary between 2861 and 3195 (salary scale 10.4 - 10.7) gross per month, depending on qualifications and work experience.

How to apply

Applications, including a letter of motivation, a curriculum vitae, a list of publications, and the contact information of three academic referees, must be submitted online through the website: http://www.rug.nl/about-us/work-with-us/job-opportunities/all-job-vacancies The vacancy number for this position is 212276. The position will remain open until filled. All applications received by January 7, 2013 will be given full consideration.

For further information, please consult:

http://www.rug.nl http://www.rug.nl/research/cees/ http://www.rug.nl/research/theoretical-biology/ http://www.rug.nl/research/theoretical-biology/-people/vdoorn Informal enquiries can be made to Dr. Sander van Doorn (e-mail: g.s.van.doorn@rug.nl; phone: +31-50-3638097)

G. Sander van Doorn University of Groningen Centre for Ecological and Evolutionary Studies - Theoretical Biology Nijenborgh 7 9747 AG Groningen The Netherlands

Phone: +31-50-3638097 Fax: +31-50-3635205 http://-/www.rug.nl/research/theoretical-biology/people/-vdoorn g.s.van.doorn@rug.nl

UHelsinki AdaptingToEutrophication

A postdoctoral fellowship on adaptation to eutrophication at University of Helsinki

A postdoctoral position for up to 3 years is available for work on the consequences of human-induced eu-

trophication for the littoral community of the Northern Baltic Sea. The work will focus on eco-evolutionary dynamics, the relative importance of phenotypic plasticity and genetic changes in surviving rapid changes, and the possibility of evolutionary changes maintaining stable littoral communities (evolutionary rescue). The research can be adjusted to the specific interests of the candidate. I'm seeking an energetic postdoc with a strong background in evolutionary biology or community ecology with an interest in working at the interfaces of these disciplines. For more information on the research, check the website www.mv.helsinki.fi/-home/ucandoli/ or contact me directly by email: ulrika.candolin@helsinki.fi, or phone: +358-9-19157800

If interested, please send an email to Ulrika Candolin (ulrika.candolin@helsinki.fi) with a CV, statement of research interests, and the names, phone numbers, and email addresses of three references.

The appointed candidate can start immediately, but the starting date is negotiable. I will begin reviewing applications 12 December 2012 and will continue to do so until the position is filled.

Ulrika Candolin Dept of Biosciences University of Helsinki PO Box 65 FI-00014 Helsinki

Phone: +358-(0)9-191 57800 Fax: +358-(0)9-191 57694 Mobile: +358-(0)50-576 4055 Email: ulrika.candolin@helsinki.fi http://www.mv.helsinki.fi/-home/ucandoli ulrika.candolin@helsinki.fi

UHelsinki ButterflyGenomics

POST DOCTORAL/RESEARCHER POSITION IN ECOLOGICAL GENOMICS OF THE GLANVILLE FRITILLARY BUTTERFLY

The Metapopulation Research Group at the University of Helsinki invites applications from experienced post docs/young researchers to join a large and highly international research group (www.helsinki.fi/science/-metapop). We seek candidates with experience in large-scale genotyping and NGS, ideally combined with some background in ecology or evolutionary biology. The post doc/researcher will lead a major project in large-scale genotyping of uniquely comprehensive samples from the well-studied metapopulation of the Glanville fritillary for association and linkage analyses and for constructing a pedigree for the natural metapopulation. She/he will closely interact with ecologists, evolutionary biologists, molecular biologists and bioinformaticians. The research group has strong expertise in statistical and mathematical modelling. Given the past extensive ecological knowledge for the butterfly and the current genomic resources, there is an opportunity for an excellent young researcher to make rapid progress. The appointment will be for a fixed term for 2 years with a possibility for a renewal for 2 years.

The Glanville fritillary butterfly (Melitaea cinxia) in Finland is a widely recognized model system in metapopulation and evolutionary biology. A long-term field study has been running in a network of 4,000 habitat fragments since 1991. In the past 5 years, we have developed genomic tools for the species (full genome to be published soon, genetic linkage map available) and sampled systematically the entire metapopulation.

Further information may be obtained from Prof. Ilkka Hanski (ilkka.hanski@helsinki.fi). Applications should be submitted as a single PDF file to biotiedemrg@helsinki.fi. Review of applications will begin on January 7 and continue until the position is filled. Application must include full CV, names and addresses of three referees, and a 2 page summary of research interests.

Ilkka Hanski <ilkka.hanski@helsinki.fi>

UIllinois MaizePhysiologicalGenomics

Postdoctoral positions: Physiological Genomics of Oxidative Stress in Maize The University of Illinois seeks three creative and energetic postdoctoral associates with strong backgrounds in plant physiology, quantitative genetics, or genomics to form a multidisciplinary team to discover the genetic basis of oxidative stress tolerance in maize. Experience with field experimentation, phenomics/remote sensing, statistical analysis of quantitative traits, functional genomics and/or C4 photosynthesis are all desirable. The positions will play key roles within a US$5.7 million, 5-year project funded by the NSF Plant Genome program titled, "MCA-PGR: Genetic and genomic approaches to understand and improve maize responses to ozone". The successful applicants will be expected to actively interact with a team of experimentalists and statisticians integrating data from the genomic, biochemical and physiological scales, with ample opportunity for interdisciplinary training. The start date is as early as January 2013, but flexible.

The University of Illinois at Urbana-Champaign is an equal opportunity employer and offers highly competitive salary and excellent health care benefits. Questions about these positions or applications including a letter of application, CV and the names of three referees can be addressed by email to Melinda Laborg (laborg@uiuc.edu). Applications will be reviewed starting December 30, 2012.

pjb34@illinois.edu

ULeuven 2 VertebrateEvolutionaryBiol

Postdoc position I: Dynamics of hybridisation in European sea bass

We are looking to recruit a postdoctoral fellow who is interested in empirical and experimental vertebrate evolutionary biology.

The core of our research program, funded through a European FP7-KBBE research grant (Aquatrace), is an extensive survey on introgression in natural populations, artificial selection experiments, and genome-wide characterization. These resources are being developed to study patterns of adaptation in natural populations and human-induced evolution through escapees from aquaculture. Fellows with a background and interest in evolution in high gene flow environments and genomics are encouraged to apply. Applicants are required to have a PhD in biological sciences or related fields.

The postdoc will work collaboratively with the senior scientist, another postdoc and graduate students, and associated teams at the University of Padua, Stirling and Santiago de Compostella on the population genomics of European sea bass. The successful candidate will be involved with data collection, methodology, data analysis and writing. The project requires skills in bioinformatics (scripting) and biostatistics. In addition to the primary research responsibilities, duties will include assisting and mentoring graduate students, preparation of manuscripts for publication, and the organization and management of large datasets.

Candidates are expected to apply for eligible external grants to support their income and research (e.g. Research Foundation-Flanders, KU Leuven, EU Marie-Curie). The expected start is Summer 2013.

Interested candidates should email Prof. Filip Volckaert (filip.volckaert@bio.kuleuven.be) with a motivation letter, a commented short list of five representative papers and an extended CV (with publications) by 31 January 2013.

More information: Prof. Filip Volckaert (Email: filip.volckaert@bio.kuleuven.be)

Funding opportunities: Research Foundation-Flanders (www.fwo.be), KU Leuven, EU Marie-Curie

Postdoc position II: Human-induced evolution in stickleback

We are looking to recruit a postdoctoral fellow who is interested in empirical and experimental vertebrate evolutionary biology.

The core of our research program, funded through two excellence grants, is an extensive survey on adaptation in natural populations, artificial selection experiments, and genome-wide characterization. These resources are being developed to study human-induced evolution through urbanization, more specifically ambient mixtures of pollutants. Fellows with a background and interest in experimental evolutionary biology, eco-evo and/or transcriptomics are encouraged to apply. Applicants are required to have a PhD in biological sciences or related fields.

The postdoc will work collaboratively with the senior scientist, another postdoc and graduate students, and an associated team at the University of Antwerp on transcriptomic approaches to adaptation in the three-spined stickleback. The successful candidate will be involved with experimental breeding, data collection, methodology, data analysis and writing. The project requires skills in bioinformatics and biostatistics. In addition to the primary research responsibilities, duties will include assisting and mentoring graduate students, preparation of manuscripts for publication, and the organization and management of large datasets.

Strong candidates are expected to apply for eligible external grants to support their income and research (e.g. Research Foundation-Flanders, KU Leuven, EU Marie-Curie). Candidates from South America, South-Africa, Ukraine and Russia may apply for a BELSPO postdoctoral fellowship (http://www.belspo.be/-belspo/organisation/call_postdoc_en.stm). The expected start is Summer 2013.

Interested candidates should email Prof. Filip Volckaert (filip.volckaert@bio.kuleuven.be) with a motivation letter, a commented short list of five representative papers and an extended CV (with publications) by 21 January 2013.

filip.volckaert@bio.kuleuven.be

UMassachusetts Lowell EvolutionaryGenomics

Postdoctoral Researcher Position in Molecular Evolution, Genomics and Bioinformatics Available at the University of Massachusetts Lowell

A full-time postdoctoral researcher position is available to work in the laboratory of Jessica Garb in the Department of Biological Sciences at the University of Massachusetts Lowell. The appointment is funded through a National Institutes of Health grant aimed at using transcriptomic data to characterize the molecular diversity of spider venoms and to understand the evolutionary genomics of venom toxicity. The position is available immediately, or the start date can be flexible to accommodate the best-suited candidate. The initial position is for one year, with a second year of employment conditional on performance in the first year. This position is contingent upon continued funding.

Work for this position will largely involve analyzing large cDNA sequence datasets generated with Illumina RNA-Seq methods. The candidate will ideally have experience using bioinformatics tools to manipulate large sequence datasets. The work will identify tissue-specific patterns of gene expression and include a variety of molecular evolutionary analyses. The candidate will also have the opportunity to get involved in several other on-going projects in the laboratory related to the evolutionary genomics of spider venoms and/or silks. Major responsibilities for this position include data collection, analysis and writing of manuscripts, and progress in these areas will determine continuation of the appointment. The position will also involve some student mentoring, organization of laboratory activities related to the project, and weekly meetings with the PI and project collaborators. For further information about the lab, and related publications, please visit this site: http://faculty.uml.edu/jgarb/ Minimum Qualifications (Required): - Ph.D. in Biological Sciences, Computer Science or related field (must have Ph.D. by the time of appointment) - Fluent in English - Demonstrated experience writing scientific manuscripts - Ability to think and work independently, and also to work well in a group - A strong interest in integrating genomic, evolutionary and organismal biology - The ability to work effectively with diverse groups

Other Considerations: - Experience and comfort with computational skills, or willingness to self-teach, especially in a UNIX/Linux environment, and the use, modification and implementation of bioinformatics scripts in languages such as Python and Perl preferred - Experience with the R statistical package is also a plus - Experience with analyzing Illumina or other next-generation sequence data (e.g., assembly and annotation methods) - Experience with population genetic and phylogenetic methodology - Experience with quantification of differential gene expression

The University of Massachusetts Lowell (UML) campus is located in northeastern Massachusetts, 20 miles north of the vibrant academic and commercial biotechnology centers of Cambridge and Boston. UML is a full research and teaching university with over 13,000 undergraduate and graduate students. Lowell is within commuting distance of the Cambridge/Boston area and the historic city of Lowell is rich in cultural and academic offerings.

Please direct questions about the position to Jessica_Garb@uml.edu

Applications must be submitted through the UML human resources jobs website (https://jobs.uml.edu job reference 0080798) at the following url:

https://jobs.uml.edu/applicants/jsp/shared/-frameset/Frameset.jsp?time=3D1356538796125
Please submit a cover letter describing relevant experience and research interests, curriculum vitae, sample(s) of scholarly work/publication, and the names and contact information of three references. Review of applications will begin January 20, 2013, and continue until the position is filled. However, the position may close when an adequate number of qualified applications are received.

The University of Massachusetts Lowell is committed to increasing diversity in its faculty, staff, and student populations, as well as curriculum and support programs, and promoting an inclusive environment. We seek candidates who can contribute to that goal and encourage you to apply and identify your strengths in this area.

UMontana PlantEvolutionaryGenetics

A postdoctoral position is available in the lab of Lila Fishman at the University of Montana. Our lab

studies speciation, adaptation, and genetic conflict in the model genus Mimulus (monkeyflowers): http://-dbs.umt.edu/research%5Flabs/fishmanlab/. The postdoc will focus on a NSF-funded project investigating the mechanisms and consequences of selfish chromosomal segregation (female meiotic drive) in yellow monkeyflowers (Fishman & Saunders 2008, Science 322:1559).

Female meiosis results in only a single (successful) meiotic product, and is thus an arena for selection among homologous chromosomes. Centromeres are the primary combatants in this arena, and their selfish evolution has been proposed to shape individual fitness, speciation, and large scale karyotypic evolution. Mimulus guttatus (yellow monkeyflower) is polymorphic for a centromere-associated meiotic drive locus with strong negative fitness effects, providing a rare opportunity to understand both the molecular mechanisms that can subvert equal meiosis and the evolutionary consequences of drive for individual/population fitness and species divergence.

The female meiotic drive project includes FISH experiments to investigate centromere and kinetochore dynamics during female meiotic drive, genetic mapping of unlinked modifiers of the strength of drive, and molecular population genetic analyses of the drive locus and centromeric proteins. The postdoctoral researcher's primary responsibility will be conducting the molecular and cytogenetic components of this integrative project, but he/she will also be encouraged to develop independent research on centromere evolution in Mimulus or other topics. The successful candidate will have earned a PhD in genetics, molecular biology, evolutionary biology, or a related field, and will have strong laboratory skills in cytogenetics, evolutionary genetics, or genomics/bioinformatics. Candidates should also demonstrate excellent communication and writing skills, as evidenced by international publications and/or successful grant writing.

The postdoc position will be based at the University of Montana in Missoula, MT, a livable college town located in the mountains between Yellowstone and Glacier National Parks. However, some cytogenetic work may take place in the labs of collaborators at the University of Georgia. Funding is available for two years, subject to review after the first year, with an annual salary range of $35,000-40,000 (plus benefits) depending on qualifications. Preferred start date: prior to May 15th, 2013, but somewhat flexible.

Review of applications will begin February 15th 2013, and will continue until the position is filled. Please contact Dr. Fishman via email (lila.fishman@mso.umt.edu) with informal inquiries about the position and lab. However, applications (letter of interest, CV and names of 3 references) must be submitted via the UM Human Resources page: https://university-montana-hr.silkroad.com/-epostings/index.cfm?fuseaction=app.jobinfo&jobid=-171&company_id=16254&version=1&source=-ONLINE&jobOwner=992274&aid=1 . – Lila Fishman, Ph.D. Associate Professor Division of Biological Sciences University of Montana Missoula, MT 59812

lila.fishman@mso.umt.edu office: 406 243-5166

lilafishman@gmail.com

UNebraska FloralEvolution

The application deadline has been extended to December 20, 2012 for two postdoctoral positions to study the evolution of flower color in the Smith Lab at the University of Nebraska. Details about these positions can be found here: http://www.iochroma.info/home/-news/positions To apply, email a short cover letter, a CV and three references to sdsmith@unl.edu. Review of applications will continue until positions are filled. Please feel free to email sdsmith@unl.edu with any questions regarding these opportunities.

Stacey D. Smith 314 Manter Hall School of Biological Sciences University of Nebraska Lincoln, NE 68588-0118 phone: 402-472-6741 phone with voicemail: (402) 370-6749 email: sdsmith@unl.edu website: http://www.iochroma.info/ calendar: http://-www.iochroma.info/people/stacey-1/sdscalendar dewitt832@gmail.com

UNebraska MacroevolutionFlowerColor

POSTDOCTORAL POSITION IN MACROEVOLUTION OF FLOWER COLOR, SCHOOL OF BIOLOGICAL SCIENCES, UNIVERSITY OF NEBRASKA-LINCOLN

A postdoctoral position is available to participate in a NSF-funded project focusing on the the mechanisms and macroevolutionary forces shaping the distribution

of red flowers in Solanaceae. This project will apply phylogenetic, anatomical, and biochemical methods to identify the origins of red flowers in the family, determine the mechanistic basis for this coloration, and test the effect of these flower color transitions on diversification rates. The position requires a strong interest in macroevolution and comparative approaches; experience in phylogenetics (including scripting and the use of R) and/or plant biochemistry (including high-performance liquid chromatography) is preferred. The project includes one or more field trips to Latin America, so experience in working abroad is also a plus.

The Smith Lab (www.iochroma.info) in School of Biological Sciences at UNL offers a diverse and interactive environment for research in plant evolutionary biology. We share close ties with other evolutionary biology and plant science labs on campus, and we benefit from shared facilities, such as the bioinformatics core research facility and the core facility for applied genomics and ecology. Lincoln, Nebraska boasts an outstanding quality of life that includes a vibrant downtown with lively music and art scene and a collection of over 120 parks and 130 miles of bike trails, plus a low cost of living.

Please note that another postdoctoral position (on the evolutionary genetics of flower color transitions) is also currently available (see www.iochroma.info/-home/news/positions). To apply for one or both positions, please send a brief letter of interest (1-2 paragraphs, including the position for which you would like to be considered), a CV, and the names and contact information for three references to Stacey D. Smith, sdsmith@unl.edu. Each position is available for 1 year with the possibility of renewal for up to two additional years depending on research progress. Review of applications will begin on December 15, 2012 and will continue until the position is filled. The starting date is flexible, but successful candidates could start as early as February 1, 2013.

– Stacey D. Smith 314 Manter Hall School of Biological Sciences University of Nebraska Lincoln, NE 68588-0118 phone: 402-472-6741 phone with voicemail: (402) 370-6749 email: sdsmith@unl.edu website: http://www.iochroma.info/ calendar: http://-www.iochroma.info/people/stacey-1/sdscalendar dewitt832@gmail.com

UStirling Pollination

Postdoctoral Fellowship Evolutionary Ecology of Buzz-Pollination

A two-year postdoctoral opportunity is available at the Vallejo-Marin Lab, University of Stirling, Scotland, to study the evolution and ecology of plant-pollinator interactions. The successful applicant will enter a highly competitive University-wide selection process for a two-year postdoctoral fellowship, with the prospect of transitioning to a Lecturer (Assistant Professor) position at the end of the fellowship. The Fellow will receive a fixed-term, research-only contract on a salary on the UK Grade 7 scale (£30,122 - £35,939) and a grant for research expenses of £5,000 per year.

The project focuses on buzz-pollination-the use of vibrations by bees to rapidly extract pollen from flowers that releases it through small pores in the anthers. Buzz-pollination occurs in more than 50 families of flowering plants, and includes important crops such as tomatoes and potatoes. Despite its widespread distribution and importance for commercially important crops, little is known about how plant and insect characteristics influence buzz-pollination. The main focus of this project will be to investigate how floral morphology and pollinator behaviour shape the ecology and evolution of buzz-pollination. The project will involve glasshouse and field experiments on selected buzz-pollinated plant species including both wild plants and agricultural crops. Plant work will involve morphological and genetic analyses of floral form and its contribution to pollinator attraction and pollen release. Pollinator work will involve the use of wild and captive bees to study the learning behaviour and efficiency of diverse buzz-pollinators. The project, including fieldwork, will be conducted in conjunction with our collaborators in the Bahamas, Mexico, and the University Stirling.

The position will be based at the department of Biological and Environmental Sciences (BES), University of Stirling, Scotland, United Kingdom. The BES department (http://www.sbes.stir.ac.uk/) is a friendly and vibrant young group of 27 faculty members and a rapidly increasing base of postdoctoral fellows and PhD students. The department has access to several glasshouse rooms, experimental gardens and a state of the art controlled-environment facility, as well as molecular labs. Stirling is located in central Scotland, approximately 50 minutes by train from both Edinburgh and Glasgow. Its proximity to the Scottish Highlands also makes it ideal for those enjoying the outdoors.

Applicants should have a PhD with a background on evolution, ecology or behaviour. Experience in plant-animal interactions, plant reproduction, insect behaviour or quantitative genetics will be an asset. Ap-

plicants should have less than 6 years of postdoctoral experience.

To apply, please send your CV, the name and contact information for two references, and a cover letter explaining your suitability for the post to Dr. Mario Vallejo-Marin (mario.vallejo@stir.ac.uk). Applications will begin to be reviewed immediately until the position is filled. Applications received after 15 February 2013 will not be considered.

Informal queries welcome.

Mario Vallejo-Marin Biological and Environmental Sciences School of Natural Sciences University of Stirling Stirling, FK9 4LA Scotland Tel. (+44) 01786 467822
http://www.sbes.stir.ac.uk/people/vallejo-marin
mario.vallejo@stir.ac.uk

USydney 2 ToadEvolution

POSTDOCTORAL RESEARCH ASSOCIATES IN THE EVOLUTION AND ECOLOGY OF INVASIVE CANE TOADS (2x POSITIONS) SCHOOL OF BIOLOGICAL SCIENCES REFERENCE NO. 1614/0912

. Enhance your research profile by joining a high-profile well- funded project . Become part of a world-class research team using a powerful model system to study evolution operating at ecological timescales . Full-time, fixed term 3-4 years; remuneration package: $92K p.a., further offers may be possible subject to funding and need

The University of Sydney is Australia's first university with an outstanding global reputation for academic and research excellence. It employs over 7500 permanent staff supporting over 49,000 students.

The School of Biological Sciences is one of the largest in Australia with research strengths in many areas of mathematics and statistics. The school attracts a strong body of excellent students as well as Australian Research Council (ARC) grants, fellowships, and other competitive external funding.

Applications are sought for two Postdoctoral Research Associate positions in the evolution and ecology of invasive cane toads that are funded by an ARC Laureate Fellowship "Using biological invasions to understand evolutionary processes" held by Richard Shine.

The project exploits the unique logistical opportunities offered by the cane toad's Australian invasion to pose and test a suite of hypotheses about evolutionary-ecological processes. In particular, why has the rate of dispersal of invasion-front toads increased so rapidly over this relatively brief period? What are the relative roles of spatial sorting and natural selection in driving that range-edge acceleration? How and why do cane toads at the invasion front differ from those in long-colonised areas in traits such as cognitive ability, behavioural syndromes, dispersal tactics, immunobiology, locomotor ability, morphology and phenotypic plasticity? The project not only will compare such traits between toads from invasion-front versus long-colonized areas, but also link those changes to concurrent research on the genetic divergences that have accumulated during the toads' Australian invasion.

This is an opportunity to conduct research in a highly productive research team, on a project that has gathered substantial international recognition. You will spend most of your time working out of the University's Tropical Ecology Research Facility at Middle Point, in a bushland setting 65km east of the city of Darwin in the Northern Territory. The field station has accommodation, office and laboratory facilities, and four-wheel-drive vehicles. However, the research also will require extensive travel in order to collect toads from across the breadth of the Australian tropics. Teaching is not a requirement.

You will have: . PhD degree in biology (or be close to completing one) . sound knowledge of advanced techniques and demonstrated capability of research in at least one of the following areas: analyses of morphology, physiology, performance, behaviour, genetics and/or ecology of free-ranging animals . demonstrated ability to conduct high-quality research either independently or as part of a research team, published research as sole author or in collaboration, excellent written and verbal communication skills.

Experience in conducting fieldwork in remote areas, and in working with multidisciplinary teams, will be highly regarded.

The positions are full-time fixed-term for three to four years subject to completion of a satisfactory probation and confirmation period for new appointees. Further offers may be available subject to funding, need and performance. Successful applicants will need to become members of a University approved superannuation scheme.

Remuneration package: $92K p.a. including $78K p.a. base salary, leave loading and up to 17% superannuation. Some support towards relocation and visa sponsorship will be available for the successful appointees if required.

All applications must be submitted via the University of Sydney careers website. Visit sydney.edu.au/positions and search by the reference number for more information and to apply.

CLOSING DATE: 13 January 2013 (11:30pm Sydney time)

The University is an Equal Opportunity employer committed to equity, diversity and social inclusion. Applications from equity target groups and women are encouraged.

Recruitment Admin <sr.adminpaulinabrianna@sydney.edu.au>

UTexas Austin EvolutionaryBiol

This email is a reminder that the Section of Integrative Biology at the University of Texas at Austin invites applications for a Postdoctoral Fellow in Integrative Biology. This subject area is broadly defined to include evolution, ecology, and behavior. The Fellow will be expected to conduct an independent high-quality research program in collaboration with at least two faculty in the Section. For information about the Section of Integrative Biology at UT and its faculty, visit http://www.biosci.utexas.edu/ib/ . In addition to their research responsibilities, one semester per year the Fellow will co-teach an undergraduate course on Research Methods, as part of the UTeach program for training K-12 science teachers. For information about the UTeach program, visit http://www.uteach.utexas.edu/ The position is for two years, subject to annual review. The Fellow is requested to start work at the University of Texas no later than August 2013. There is an annual salary of $40,000 with an additional $10,000 per year in research support for travel, equipment, or supplies.

Applicants should electronically submit a single pdf file containing the following, in order: 1) Coverletter, including mention of the proposed faculty sponsors (max 1 page). Candidates are advised contact potential faculty sponsors prior to applying, to gauge the level of mutual interest. 2) CV 3) Statement of research accomplishments (maximum 2 pages). 4) Statement describing the candidate's proposed research for the duration of this postdoctoral position (maximum 2 pages). 5) Statement describing the candidate's teaching experience and philosophy (maximum 2 pages) 6) Copies of 2 publications 7) List of three references, with contact information (email, telephone, and mailing address). We will request letters directly from these references, after identifying top candidates.

The application pdf file should be emailed to ibjob@austin.utexas.edu, with a subject line "IB Postdoc Application: <YOUR NAME>". Applications must be received by January 11, 2013. For questions about this position, please send an email to ibjob@austin.utexas.edu, or contact a prospective faculty mentor in the department.

We encourage applications from candidates that have recently completed, or will soon complete, their Ph.D.

The University of Texas is an Equal Opportunity Employer.

danbolnick@austin.utexas.edu

UWashington StatisticalGenetics

University of Washington Department of Statistics

Position Title: Postdoctoral Research Associate.

Position Description: A full-time (1.0 FTE) postdoctoral research position is available in the Department of Statistics at the University of Washington in the area of statistical methodology for inference in the analysis of genetic and genomic data on related individuals. The position involves collaboration with faculty in the Department of Biostatistics and in Medical Genetics. This is a two-year position, subject to satisfactory performance and availability of funding.

The University of Washington Department of Statistics is an internationally recognized leader in statistical science research with 21 faculty members and numerous adjust and affiliate faculty. In the area of statistical genetics and genomics we have also strong collaborative links in teaching and research with the departments of Biostatistics and of Genome Sciences, which are also international leaders in their fields.

Research topics include, but are not limited to: 1) Developing statistical methodology and theory for inferring the structure of relatedness among individuals from genome-wide marker and/or sequence data. 2) Developing new methodology and theory for incorporating location-specific relatedness information into the analysis of data on complex genetic traits.

Position Qualifications: The successful candidate should have: 1) completed (or be expected to complete

by Jan 2013) a Ph. D. in Statistics, Biostatistics, or in Computational Genomics or Population Genetics with a strong Statistical modeling and inference emphasis including knowledge of HMM and/or graphical models. 2) A strong research record evidenced by high quality publications, as well as good communication and team work skills, and ability to lead research and develop ideas independently. 3) Demonstrated programming skills, including knowledge of C and R, and a willingness to program (not exclusively) in these languages.

Salary Range: Salary and benefits will be in accordance with NIH and University of Washington salary scales and policies.

Application: To apply, please send CV, a research statement, and email contact information for three referees, to Dr. Elizabeth Thompson, (eathomp@uw.edu). Please send all information as plain text with ONLY PDF attachments and/or references to a web page.

Application Deadline: Open until filled

The University of Washington is an affirmative action, equal opportunity employer. The University is building a culturally diverse faculty and staff and strongly encourages applications from women, minorities, individuals with disabilities and covered veterans.

eathomp@u.washington.edu

UYork MicrobialEvolution

ERC Postdoctoral Research Associate in Microbiology / Environmental Microbiology / Microbial Ecology & Evolution

University of York -Department of Biology

Ref: 2764

We are seeking a highly motivated postdoctoral researcher to work on a project investigating plasmid-mediated horizontal gene transfer (HGT) in natural communities of soil microbes. This project, which is funded by the European Research Council (ERC), will take a novel coevolutionary perspective to understand the role of plasmid-mediated HGT in bacterial adaptation and the consequences of HGT for the structure and functioning of natural microbial communities.

You will be responsible for the project on a day-to-day basis, performing experimental evolution experiments, a range of phenotypic and molecular analyses and large-scale whole-genomic and metagenomic next-generation sequencing. You should hold a PhD in microbiology / environmental microbiology / microbial ecology & evolution or related discipline and have an advanced level of practical and theoretical knowledge of microbiological laboratory techniques. Candidates with training in environmental microbiology (particularly soils), plasmid biology or next-generation genomics approaches are strongly encouraged to apply.

This post is available from 1 February 2013 for a period of up to 5 years with a salary in the range £29,541 - £36,298 per annum.

Informal enquiries may be made to Professor Michael Brockhurst (email: michael.brockhurst@york.ac.uk).

Closing date: 6 January 2013

https://jobs.york.ac.uk/wd/plsql/-wd_portal.show_job?p_web_site_id=-3885&p_web_page_id=159707 Michael Brockhurst <michael.brockhurst@york.ac.uk>

Umea Sweden Bioinformatics

Post-doc in bioinformatics Sweden

SLU Sweden seeks a highly motivated researcher for a 2 year post-doc in bioinformatics on wild animal model systems. The successful candidate will have a strong background in evolutionary or ecological genetics, computational analysis of next-generation sequencing (NGS) data, and proficiency in relational database design and management. The position is placed in the Molecular Ecology Research Group< http://-www.slu.se/wfe/merg > (SLU Umeå). Additional support will be provided by the Computational Genetics Group< http://www.computationalgenetics.se > (SLU Uppsala). Ongoing research at the department uses genetic techniques to address a wide range of questions in conservation, ecology and evolution. Together with Scilife< http://www.scilifelab.se > in Stockholm/Uppsala we are currently expanding our capacity for genetic analyses of our most important model species (e.g. moose, salmon, trout, lion, brown bear) by high throughput sequencing, genotyping-by-sequencing and SNP chip development. The successful candidate is expected to fully engage in this work, which could include individual research, programming, primary and coauthoring proposals and papers. The acquisition of additional third-party funding may allow independent expansion of the model systems or research questions

addressed.

Review of the applications will begin on January 3, 2013 and continue until the position is filled. Please submit curriculum vitae, a description of research interests and two letters of reference via email to registrator@slu.se.

For further information please contact: Ass. Prof. Göran Spong (goran.spong@slu.se) or Prof. Örjan Carlborg (orjan.carlborg@slu.se).

Göran Spong Associate Professor|Molecular Ecology Research Group < http://www.slu.se/wfe/merg > | Wildlife, Fish, & Environmental Studies | SLU | 90183 Umeå | Sweden

Göran Spong <Goran.Spong@slu.se>

UppsalaU EvolEcolGenetics

POSTDOCTORAL POSITION IN EVOLUTIONARYGENETICS (SPECIATION)

A two-year postdoctoral position INEVOLUTIONARY GENETICS is available at the Department of Ecology andGenetics, Evolutionary Biology Center, Uppsala University, Sweden, starting assoon as possible or as agreed upon.

In this project, you will study genome divergence and the evolutionarygenetics of reproductive isolation in a naturally hybridizing species pair of /Silene/. We have previously identifiedvarious reproductive barriers between the two species, including habitatadaptation and con-specific pollen precedence. In this project, genomic regionscontrolling reproductive barriers will be identified using massive parallelsequencing in order to study their evolution and their role in speciation.

The post-doc will be part of Sophie Karrenbergs group (http://www.ebc.uu.se/forskning/IEG/Plant/-People/Karrenberg_Sophie/).

The Evolutionary Biology Center (EBC, http:/-/www.ebc.uu.se/?languageId=3D1) houses about 300evolutionary biologists from various research fields including genetics,genomics and ecology providing for excellent possibilities of collaboration.Numerous seminars and journal clubs are held. International recruitment iscommon on all levels and the working language is English. State of the artlocal platforms for next-generation sequencing (http://www.scilifelab.uu.se)and high-performance computational analyses (http://www.uppmax.uu.se) are available.

We seek a highly motivated person with a PhD in evolutionarygenetics/genomics and previous experience with next-generation sequencing. Experiencewith ecological experiments and statistical programming is a plus. Candidatesmust be fluent in English (orally and written). We are looking for individualswho excel at working independently and, at the same time have the interpersonaland communication skills to succeed at working in a team.

For more information please contact Sophie Karrenberg (sophie.karrenberg@ebc.uu.se[1], +46 18 471 2863).Union representatives are Anders Grundström, Saco (Swedish Confederation ofprofessional Associations), tel. +46 18 471 53 80 och Carin Söderhäll,TCO/ST (Swedish confederation of Professional Employees), tel. +46 18 47119 96, Stefan Djurström, Seko (the union of service and communicationemployees), tel. +46 18 471 33 15.

How to apply: Please submit a letter of motivation, a curriculum vitaeand a short (1-3 page) description of your past research accomplishments andfuture research plans. The application should further include contact-information for at least two reference persons. Relevant publications should beenclosed. The application should be sent by e-mail to registrator@uu.se[2]. In any correspondence please use the reference number UFV-PA 2012/2893. Please apply no later than January 9, 2013.

Sophie Karrenberg Associate Professor

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

+46-(0)18-471 2863

sophie.karrenberg@ebc.uu.se

http://www.ebc.uu.se/Research/IEG/-Plant+Ecology+and+Evolution/People/-Karrenberg_Sophie/?languageId=1 Länkar: ——- [1] /horde3sso/imp/message.php?index2 [2] /horde3sso/imp/message.php?index2

sophie.karrenberg@ebc.uu.se

Vienna PhylogenyPopulationGenetics

A two-year postdoctoral position is available in the

group of Dr. Carolin Kosiol at the Institute of Population Genetics at the Vetmeduni Vienna. The position will be associated with the project "Empirical codon models for comparative re-sequencing data" and is funded by a Stand-Alone Grant of the Austrian Science Fund (FWF). The project builds on a phylogentic model that is aware of polymorphisms in re-sequencing data and that has recently been developed for nucleotides in the group. The project will use polymorphism as well as divergence data from primate and Drosophila populations.

Candidates will be expected to have completed a PhD in Bioinformatics, Computational Biology, Mathematics, Statistics, Computer Science or a related field. Good programming skills, experience in C, C++ or Java and a scripting language such as Python or Perl are essential. Preferably the candidate has prior experience with either phylogeny or population genetics, but applicants from other areas of bioinformatics are welcome to apply. My group works on probabilistic models of sequence evolution, comparative genomics, next generation sequencing, population genetic aspects of phylogenetics, molecular evolution and natural selection.

In recent years, Vienna has developed into one of the leading centers in evolutionary biology (http://-www.evolvienna.at). In addition to a stimulating scientific environment, Vienna is also a liveable city with affordable housing, good public transport and an exciting cultural life. Please send a letter of interest, CV, and the names and contact details of two referees to Carolin Kosiol at carolin.kosiol@vetmeduni.ac.at Questions and requests for more information should be directed to the same address. Review of applications will begin on 15 January 2013 and will continue until the position is filled.

Carolin Kosiol Group Leader in Bioinformatics Institute of Population Genetics Vetmeduni Vienna Veterinärplatz 1 A-1210 WIEN, Austria TEL +43(0)1-25077-4331

Lab Website: http://i122server.vu-wien.ac.at/-pop/Kosiol_website/kosiol_home.html Vienna Graduate School of Population Genetics: http://www.popgen-vienna.at Carolin Kosiol <carolin.kosiol@vetmeduni.ac.at>

WashingtonU SocialEvolution

Available postdoctoral fellowships on social evolution, multicellularity, kin recognition, and symbiosis in the social amoeba Dictyostelium discoideum at Washington University in St. Louis

One or more postdoctoral positions for 2-3 years are available in 2013 for work on the social amoeba Dictyostelium discoideum, a unique and exciting model organism for social evolution, multicellularity, symbiosis, and kin recognition. D. discoideum has cooperation, conflict, and complete reproductive altruism in its social stage. It also has a short generation time, sequenced genomes, a library of identified cheater knockouts, known recognition genes, easily manipulated population structures, and agricultural and defense symbioses with bacteria. Questions focus on the specifics of kin recognition and relatedness elevation in social groups, symbioses with bacteria, and the role of conflict in multicellular life cycles. We are a friendly and interactive team of highly motivated investigators. We are seeking an energetic postdoc with a strong background in evolutionary biology, social behavior, microbial evolution, genomics, or molecular biology with an interest in working at the interfaces of these disciplines. Check out our website, http://strassmannandquellerlab.wordpress.com/- for more information on our research. If you are interested, please send an email to Joan Strassmann (strassmann@wustl.edu) and David Queller (queller@wustl.edu) with a CV, statement of research interests, and the names, phone numbers, and email addresses of three references. Women and underrepresented minorities are particularly encouraged to apply. We will begin reviewing applications 15 December 2012 and will continue to do so until the positions are filled. David C. Queller, Joan E. Strassmann, Department of Biology, Campus Box 1137, One Brookings Drive, St. Louis MO 63130-4899.

Joan E. Strassmann, Professor of Biology, Department of Biology, Washington University, One Brookings Drive, Campus Box 1137, St. Louis MO 63130

phone: (314) 935-3527 fax: (314) 935-4432, cell: (832) 978-5961skype: strassm, e-mail strassmann@wustl.edu Webpage: http:/-/strassmannandquellerlab.wordpress.com/- Blogs: http://sociobiology.wordpress.com/- http://slowbirding.wordpress.com http://-goodbyehouston.wordpress.com/ Twitter: @JoanStrassmann

Joan Strassmann <strassmann@wustl.edu>

WorkshopsCourses

HumboldtStateU SpeciesModeling Mar17-21

Humboldt State University (Arcata, California, USA) is hosting a special 4.5 day workshop on occupancy modeling this spring (March 17-21). The workshop instructor, Darryl I. MacKenzie, is an internationally renowned biometrician, particularly for his work on the development and application of species occurrence models. This workshop will cover many of the latest methods for modeling patterns and dynamics of species occurrence in a landscape while accounting for the imperfect detection of the species. Participants will be introduced to available software through worked examples, and there will be special emphasis on aspects of study design. While primarily aimed at the beginner and intermediate level, more experienced researchers will also benefit from attending. The course fee is $750 (before 15 January) and $850 (after 15 January). The course will be limited to 19 participants! It is CRITICAL that we reach our enrollment target by 31 January or the workshop will be cancelled! Registration will be begin on 2 January at this website: www.humboldt.edu/omw For more details please email: Andrew.Kinziger@Humboldt.edu

Andrew P. Kinziger, Ph.D. Associate Professor and Curator of Fishes Department of Fisheries Biology Humboldt State University One Harpst Street Arcata CA 95521

707-826-3944

"Andrew P. Kinziger" <Andrew.Kinziger@humboldt.edu>

Lisbon Evolution Jul15-19

1st CALL FOR STUDENTS: 1st International SUMMER School on Evolution

July 15th - 19th, 2013 | Ciência Viva Knowledge Pavilion, Lisbon, Portugal

Website: http://evolutionschool.fc.ul.pt

We are happy to inform you that registration for the 1st International Summer School on Evolution will open on January 7th, 2013. Courses are open to international Master, PhD and Post-doctoral students in the exact, life, human and sociocultural evolutionary sciences.

About the courses

>From Monday to Friday, parallel sessions are organized whereby visiting staff provide a 10-hour course (2 hours a day) on critical aspects of biological and sociocultural evolution. The courses are centered around the following modules.

Module 1: EVOLutionary theory

Courses are taught by: Luís Villarreal, Ilya Tëmkin, Frietson Galis.

Module 2: sociocultural Evolution

Courses are taught by Fiona Jordan, Marion Blute, Nathalie Gontier & Emanuele Serrelli.

Module 3: philosophy of biology

Courses are taught by Derek Turner, Frédéric Bouchard, Michael Ruse.

All courses are taught at a level accessible to Master, PhD and post-doctoral students in the exact, life, human and sociocultural evolutionary sciences. Students of evolutionary biology, evolutionary developmental biology, virology, paleontology, evolutionary linguistics, evolutionary anthropology, and philosophy of biology will especially benefit from these courses.

Students will be provided a mandatory reading list which will form the basis of lectures and discussions. There are neither examinations nor paper assignments.

REGISTRATION FEE

350 euro for the whole week, regardless the number of courses you chose.

HOW TO ENROLL

You can enroll for a specific module (therefore following a 30-hour course on the subject) or you may choose three courses of your specific interest.

About the SUMMER School

The School is organized by the Applied Evolutionary Epistemology Lab of the Centre for Philosophy of Science of the University of Lisbon, in collaboration with Ciência Viva and with the support of the John Templeton Foundation.

SUBSCRIBE TO THE SUMMER SCHOOL MAILINGLIST

http://eepurl.com/n2EGb Websites

http://evolutionschool.fc.ul.pt, http://appeel.fc.ul.pt

Find us on Facebook

https://www.facebook.com/events/374500115949579

appeelannouncements@fc.ul.pt

Lisbon Evolution Mar11-15 CallForStudents

3rd CALL FOR STUDENTS: 1st International Winter School on Evolution

March 11th - 15th, 2013 | Ciência Viva Knowledge Pavilion, Lisbon, Portugal

Website: http://evolutionschool.fc.ul.pt We are happy to inform you that registration is now open for the 1st International Winter School on Evolution. Courses are open to international Master, PhD and Post-doctoral students in the exact, life, human and sociocultural evolutionary sciences.

ABOUT THE COURSES

>From Monday to Friday, parallel sessions are organized whereby visiting staff provide a 10-hour course (2 hours a day) on critical aspects of biological and sociocultural evolution. The courses are centered around the following modules.

MODULE 1: Macroevoluton and the Major Evolutionary Transitions Courses are taught by: Bruce Lieberman, Folmer Bokma, Eörs Szathmáry.

MODULE 2: Language Evolution Courses are taught by William Croft, Mónica Tamariz, Daniel Dor.

MODULE 3: Symbiogenesis, Lateral Gene Transfer and Virolution Courses are taught by Douglas Zook, William Martin, Michael Arnold.

All courses are taught at a level accessible to Master, PhD and post-doctoral students in the exact, life, human and sociocultural evolutionary sciences. Students of evolutionary biology, microbiology, paleontology, evolutionary linguistics, evolutionary anthropology, and philosophy of biology will especially benefit from these courses.

Students will be provided a mandatory reading list which will form the basis of lectures and discussions. There are neither examinations nor paper assignments.

REGISTRATION FEE

350 euro for the whole week, regardless the number of courses you choose.

HOW TO ENROLL

You can enroll for a specific module (therefore following a 30-hour course on the subject) or you may choose three courses of your specific interest. Places are limited, we therefore advise you to enroll as quickly as possible.

ABOUT THE WINTER SCHOOL

The School is organized by the Applied Evolutionary Epistemology Lab of the Centre for Philosophy of Science of the University of Lisbon, in collaboration with Ciência Viva and with the support of the John Templeton Foundation.

DOWNLOAD OUR POSTER

http://evolutionschool.fc.ul.pt/winter/docs/winter.pdf SUBSCRIBE TO THE WINTER SCHOOL MAILINGLIST

http://eepurl.com/n2ELH WEBSITES

http://evolutionschool.fc.ul.pt, http://appeel.fc.ul.pt

appeelannouncements@fc.ul.pt

Lund ScienceCommunication March11-15

Dear PhD students,

Scientists are increasingly required to be effective science communicators to both their peers and non-experts, such as the general public, journalists and policy makers.

The ClimBEco Graduate Research School in Sweden (http://www.cec.lu.se/graduate-research-school) is offering a one week course to help PhD students develop the tools needed to communicate their research effectively.

The details of the course are given below.

Course title: Communicating Scientific Research Course date: 11-15 March 2013 Location: Biology Department, Lund University, Sweden ECTS Points: 3 Last date of registration: 20th January 2013 Information and link to expression of interest: http://www.cec.lu.se/images/CEC/Climbeco/-Course_description_for_Communicating_Science.pdf ClimBEco Research School students will be given priority for entering the course, but others are invited to join. The course is free. Participants not part of ClimBEco need to cover travel and accommodation costs.

Maren Wellenreuther

Marie Curie Postdoctoral Researcher Department of Biology, Lund University SE-223 62 Lund, SWEDEN

Phone: +46 46 222 9014 Mobile: +46 709 429930

*http://marenwellenreuther.com/index.html http://www.lu.se/meel/people/postdocs/maren-wellenreuther < http://www.lu.se/o.o.i.s/26164 > *

maren.wellenreuther@gmail.com

Lyon ComparativeGenomics Jan21-Feb1

European Course “Comparative Genomics” 2013

Organizers: Jean-Nicolas Volff (ENS Lyon), Céline Brochier (University Lyon 1)

Since 2008, we organize the European course entitled “Comparative Genomics” for Master and PhD students from the Ecole Normale Superieure of Lyon and from other European universities.

This year the course will be held from 21 January - 1 February 2013 at the Ecole Normale Superieure de Lyon (France,http://www.ens-lyon.fr). The course aims at initiating students to Comparative Genomics, a young and fast-evolving scientific field with a growing impact on science and societies.

The course covers ten major topics of comparative genomics with an emphasis on recent major discoveries and innovating concepts/approaches in the fields of biology, ecology, medicine and biotechnologies. Each topic is presented by two internationally reputed scientists with complementary views/approaches. The two lectures are followed by a round table with the students and the two speakers.

The program and registration form are available at:

http://lbbe-dmz.univ-lyon1.fr/spip_cg/ Jean-Nicolas Volff and Céline Brochier

Céline Brochier-Armanet

Laboratoire de Biométrie et Biologie Evolutive - UMR CNRS 5558 Université Lyon 1, 43 Bd du 11 Novembre 1918 69622 Villeurbanne, France

Tel: 33 (0)4 26 23 44 76 Mail: celine.brochier-armanet@univ-lyon1.fr

Web page: http://www.frangun.org LIVRE: http:/-/www.springer.com/life+sciences/bioinformatics/-book/978-2-287-99047-2 celine.brochier-armanet@univ-lyon1.fr

MountainLakeBiolStation ConservationBiol

ANNOUNCING: Summer 2013 Field Courses and REU Opportunities Mountain Lake Biological Station < http://mlbs.org/ > MLBS.org

Dear Colleagues and Friends,

Mountain Lake Biological Station (University of Virginia) is pleased to announce its summer program of field-based undergraduate and graduate-level credit courses offered by nationally recruited faculty, and its NSF REU undergraduate research internship program, now in its 21st year. Work at MLBS focuses on field-based ecology, evolution, physiology, and behavior. Learn more about the programs and apply on-line:

Courses: Plant Conservation and Diversity, Techniques in Conservation Biology, Wildlife Disease Ecology, Behavioral Endocrinology, Biology of Fungi and Drawing - http://mlbs.org/summercourses REU: http://-mlbs.org/reuprogram, a 10 week living and learning research experience for undergraduates program.

Please forward this information to colleagues or students you think might be interested.

Thanks for your help!

**** Learn all about Mountain Lake opportunities at < http://mlbs.org/ > MLBS.org ****

Butch Brodie Director, Mountain Lake Biological Station Executive Vice President, Society for the Study of Evolution

Department of Biology University of Virginia P.O. Box 400328 Charlottesville, VA 22904-4328

bbrodie@virginia.edu http://mlbs.org/ http://-faculty.virginia.edu/brodie/

Mountain Lake Biological Station <mlbs@virginia.edu>

UCalifornia LosAngeles ConservationGenomics

UCLA/La Kretz Workshop in Conservation Genomics, 23-28 March, 2013

Conservation biology and genetics have had a long and intimate relationship, and constitute one of the key applications of evolutionary analysis to real-world biological problems. The impacts of population genetics, phylogenetics and phylogeography have been particularly striking for conservation biology, and have helped solve some of the most pressing problems in biological conservation.

As the field of landscape-based genetics continues to grow and mature, the increasing availability of genomic-level data, analytical models and methods stand to make profound new contributions to our ability to identify and protect at-risk populations and recover those that are most endangered. However, genomic level analyses also carry a heavy burden-data sets are enormous, often requiring diverse computational approaches for assembly, quality control and analysis.

This annual workshop will provide a comfortable, informal training environment for a small group of motivated graduate students to explore how conservation problems can best be addressed with genomic-level data. Our goal is to provide hands-on experience on the efficient collection, troubleshooting, and analysis of large data sets for conservation-relevant problems. One of the highlights of our workshop is active participation from members of several US government agencies who are at the forefront of endangered species protection and management, providing a forum for exploring the most relevant aspects of conservation genomics to managers.

The UCLA/La Kretz workshop will be held at the La Kretz Field Station in the heart of the Santa Monica Mountains. Only 30 miles from UCLA (and LAX airport), but nestled in the relatively undeveloped 160,000 acre Santa Monica Mountains National Recreation Area, the Field Station provides an ideal location that brings exciting new developments in genomic science and pressing needs in conservation and management together in a single setting. Our current instructor list, drawn from UCLA faculty and several other southern California partners, includes:

Mike Alfaro Paul Barber Christie Brigham Brant Faircloth Robert Fisher Dave Jacobs Kirk Lohmueller Sergey Nuzhdin John Pollinger Seth Riley Brad Shaffer Tom Smith Victoria Sork Phil Spinks Bob Wayne

Topics covered include:

Traditional conservation genetics Next generation platforms: the best tool for the job Data management pipelines: Quality Control Data storage Data organization Data analysis: SNPs Sequences Exploring very large data sets Functional genomic data Genomic data and GIS Conservation phylogenomics

Prerequisites Available housing limits course enrollment to ˜15 students. Preference is given to doctoral candidates who are in the early to middle stages of their thesis research, and who have completed sufficient prerequisites (through previous coursework or research experience) to have some familiarity with using a

command line interface or programming languages (i.e. Perl, python etc.). Unfortunately, because of limits on class size, postdocs and faculty are discouraged from applying.

Admission and Fees Students will be admitted based on academic qualifications and appropriateness of research interests. The course fee is $350. This includes food and lodging at the La Kretz Field Station, as well as any incidental fees, for the duration of the course (arriving March 23, departing March 28).

Application Forms and Information Visit the La Kretz Center for California Conservation Science website for additional information and to download an application form: http://www.environment.ucla.edu/media/files/-CGW2013application-eb-53m.docx Application Deadline Applications are due by January 11, 2013. Please send a completed application form and one letter of recommendation from your major advisor. Students will be notified via e-mail by January 18, 2013 of acceptance.

Applications should be sent as PDFs via email to:

Phil Spinks email: pqspinks@ucla.edu

pqspinks@ucla.edu

UGroningen MicrobialEvol Feb11-15

New Frontiers in Microbial Ecology The Microbiome vs Holobiont and Ecosystem: New Perspectives of Life

Organizers Under the auspices of the Research School Ecology & Evolution (RSEE), PE&RC and SENSE.

Prof.Dr. J.D. van Elsas (Microbial Ecology, RuG, Groningen)

Prof.Dr. H. van Veen (Dept. Microbial Ecology, Netherlands Institute of Ecology , Wageningen)

Dr. G.A. Kowalchuk (Ecology and Biodiversity, Utrecht University)

Aim of the course To provide students with an appreciation of the most important current developments in the field of microbial ecology and evolution . The course is primarily aimed at PhD level students, but is also open to advanced Master level students with interest in microbial ecology.

Contents and structure

Microbial communities are central to the key biogeochemical processes of all of Earth's ecosystems. Furthermore, it is becoming increasingly clear that microbiomes play fundamental roles in the life of nearly all other organisms, be they plants, coral reefs, insects or humans. A main thrust to our understanding of these communities has come from the rapid development and application of molecular techniques, and more recently high-throughput DNA sequencing technologies.

This course will examine our current understanding of the diversity and functioning of the relevant microbial communities in the above systems.

A limited number of expert teachers will deliver lectures and the students will also have the opportunity for in depth study a topic of their choice from the literature, after which the topic will be put up for discussion with the teachers and other students.

Topics:

- Metagenomics

- Microbiomes affecting hosts or ecosystems:

a.. humans b.. plants c.. ecosystems: terrestrial and aquatic - How do microorganisms interact with each other and with their hosts?

- Microbial diversity versus function: does diversity matter?

- Microbial evolution and horizontal gene transfer

Teachers will include internationally renowned lecturers, as well as esteemed colleagues from the Netherlands.

Provisional program:

Day 1 (Sunday 10th February 2013): Arrival, Registration and Dinner at the course venue 'Assumburg Castle', Heemkerk, the Netherlands

Day 2 (Monday):

8.45- 9.30 Introduction to the course; history and recent developments in Microbial Ecology (Dick van Elsas / Hans van Veen)

9.45-11.00 What tools do we have to study the structure of microbial communities and an introduction to the "omics" toolbox ? (Dick van Elsas / G. Kowalchuk)

11.15-12.45 The microbiota of humans â" the human intestine

13.00-14.30 Lunch

14.30-16.30 The microbiota of plants â" The rhizosphere and rhizoplane (Hans van Veen)

16.30- 18.30 Free: read articles in preparation for discussion

19.00- 21.00 Dinner

Day 3 (Tuesday):

8.45- 10.30 The microbiota of soils â“ functional assessments (George Kowalchuk)

10.45-12.30 The microbiota of marine systems â” functional assessments

12.30-14.00 Lunch

14.00-15.00 Microbial diversity and function (Joana Salles)

15.00-16.00 What rules structure microbial communities

16.00-16.30 Snack

16.30- 17.30 Instructions for student presentations

17.30 General discussion led by Kowalchuk/Salles

19.00- 21.00 Dinner

Day 4 (Wednesday):

8.45- 10.30 Microbial evolution

10.45-12.30 Horizontal Gene Transfer (Dick van Elsas)

12.30-14.00 Lunch

14.00- 16.00 Student presentations I

16.00- 18.00 General discussion led by van Elsas / Salles

19.00- 21.00 Dinner

Day 5 (Thursday):

8.45- 10.30 Microbial genomics

10.45-12.30 Microbial metagenomics and bioinformatics

12.30-14.00 Lunch

14.00-16.00 Student presentations II

16.00-16.30 Snack

16.30- 18.30 Student Literature discussion

19.00- 21.00 Dinner

Day 6 (Friday):

8.45- 10.15 Applied microbial ecology: Medical context

10.15-11.45 Applied microbial ecology: Agricultural context

11.45 - 12.00 Packing

12.00-14.00 Lunch

13.15-14.45 Applied Microbiology: Environmental context

14.45-15.00 End of course & Farewell

Duration and dates 5 days. The course will kick off on sunday night the 10th of February and finishes at 15.00 on friday the 15nd of February 2013.

Location The course will be held 'in house' at Stay Okay, Heemskerk (Assumburg Castle, Heemskerk, The Netherlands), some 30 minutes from the Schiphol International Airport. Bedding and full catering will be provided and is included in the course fee. Transportation to and from de venue will be provided at a set time.

Costs Registration fee is 350, for PhD students with an approved TSP participating in RSEE, SENSE or PE&RC. Other PhD participants pay 450,- and non-PhD participants pay 500,-*. Master student participants: please contact C.M. Eising

* Fees may be subject to a reduction depending on your school and the number of participants.

Registration Please note that for the course to continue, the minimum number of

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

UOxford ComputationalBiol Jul8-Aug16

University of Oxford

Oxford Summer School in Computational Biology 2013

>From July 8th until August 16th 2013, a project-based summer school in computational biology will take place at the University of Oxford. Applications are invited from outstanding students who have completed at least two years of undergraduate study, with a strong background in mathematics, statistics, computer science, physics or chemistry.

Students will work in teams of three for the six-week period on a cutting-edge research project in bioinformatics and computational biology, working with leading researchers from Oxford and a number of collaborators visiting from overseas.

The programme will also include a series of lectures and tutorials covering key topics in bioinformatics and genome analysis and presentations from top researchers in the field.

Accepted students will be offered university accommodation for the duration of the programme and will receive a stipend towards living expenses.

For more information, and to apply, visit Summer School 2013< http://www.stats.ox.ac.uk/__data/-assets/pdf_file/0005/8492/A4_flier_10.12.12Summer >

Final application deadline: 4th March, 2013

Madeline Mitchell PA to Professor Jotun Hein, Professor Chris Holmes & Group Secretary, (Professor Peter Donnelly FRS FMedSci (WTCHG): PA +44 1865 287725) Department of Statistics University of Oxford 1 South Parks Road Oxford OX1 3TG

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email: mitchell@stats.ox.ac.uk

www.stats.ox.ac.uk Madeline Mitchell <madeline.mitchell@stats.ox.ac.uk>

Umea Sweden SpeciesInteractionsSpeciation Jan16-18

Dear colleague,

The workshop Species interactions and speciation will take place in UmeÃ, Sweden, during January 16-18. We would be most grateful to you if you could kindly share this information with potentially interested colleagues in your research group or department.

It is commonly recognized that species interactions can play an important role in the speciation process, both by enabling reproductive isolation and by generating ecological conditions that favor adaptive speciation. Despite this, much contemporary speciation research focuses on single species in isolation. The aim of this workshop is to bring together leading speciation researchers for three days of talks and discussion on the role of species interactions in speciation.

This workshop will be organized as part of the European Science Foundation's Research Networking Programme Frontiers of Speciation Research (FroSpects), which is funded by 16 of ESF's national member organizations. The aims of FroSpects are to bridge between different approaches to speciation research and to promote integrative perspectives that interface empirical insights with theoretical advances and bring together developments in ecology, systematics, and genetics.

In addition to about 10 invited presentations, the conference will feature contributed talks and a poster session. Confirmed invited speakers include Mike Boots, University of Exeter, UK, Tucker Gilman, University of Manchester, UK, Rees Kassen, University of Ottawa, Canada, Nicolas Loeuille, Université Pierre et Marie Curie, Paris, France, Rupert Mazzucco, International Institute for Applied Systems Analysis, Laxenburg, Austria, Hans Metz, Leiden University, Netherlands, Jörgen Ripa, Lund University, Sweden, Axel Rossberg, Cefas & Queen's University Belfast, UK, and Richard Svanbäck, Uppsala University, Sweden.

Registration is open at www.kbc.umu.se/species-interactions-and-speciation-registration.html With many thanks and best wishes,

Ãke Brännström & Ulf Dieckmann

Workshop website: http://www.kbc.umu.se/events/-species-interaction-and-speciation-home.html About FroSpects: http://www.iiasa.ac.at/Research/-EEP/FroSpects About ESF: http://www.esf.org About UmeÃ University: http://www.umu.se Ãke Brännström <ake.brannstrom@gmail.com>

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.