E v o l D i r

December 1, 2014

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

Foreword

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

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

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

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Conferences

Arizona EvolutionaryMedicineSociety Mar19-21

*The International Society for Evolution, Medicine, and Public Health | Inaugural MeetingMarch 19-21, 2015 at **Arizona State University*

March 18, 2015 Pre-meeting for directors of evolutionary medicine programs December 1, 2014 Abstract deadline

The International Society for Evolution, Medicine, & Public Health will hold its inaugural meeting March 19-21 in Tempe, Arizona. Early registration and abstract submission are open until December 1st. Early registrants receive a substantial discount, and all fees are refundable until February 15th. This meeting will bring together scientists, scholars, teachers, clinicians, and students in the evolution and medicine community to share ideas and create new connections that will advance the field. This will be the first large open meeting designed to bridge the many different disciplines (e.g.

infectious disease, genetics, clinical medicine, veterinary medicine, anthropology, psychology, etc.) where relevant research takes place. Students and clinicians with an interest in the field are especially welcome. The format will include invited speakers, shorter presentations, discussion groups and poster sessions. This meeting is co-sponsored by The Society and the Arizona State University Center for Evolution & Medicine.

For full meeting information visit: http://-evmedmeeting.org *Early Registration and abstract submission is open until December 1st.* To register please visit: https://www.regonline.com/builder/site/-Default.aspx?EventID=3D1604576 *Pre-meeting for Directors of Evolutionary Medicine Programs, Centers, and Institutes*,

and those who are considering organizing such units will be held Wednesday, March 18, 12 pm - 5 pm. Organizers include Randolph Nesse, Gillian Bentley, Daniel Blumstein, Barbara Natterson-Horowitz, and Frank Rühle. For information about the pre-meeting visit: http://evmedmeeting.org *Plenary Speakers*

*Harvey Fineberg *Institute of Medicine *Stephen Stearns *Yale University *Barbara Natterson-Horowitz *UCLA *Sir Peter Gluckman *University of Auckland *Ruslan Medzhitov *Yale University *Ann Demogines *(Omenn Award Winner) BioFire Diagnostics

Confirmed participants include: Carl Bergstrom, University of Washington | Sudhir Kumar, Temple University | Daniel Lieberman, Harvard University | Gilbert Omenn, University of Michigan Allen Rodrigo, NESCent | Frank Rühli, University of Zurich | Elizabeth Uhl, University of Georgia | Robert Perlman, University of Chicago | Ajit Varki, UC San Diego | Gillian Bentley, Durham University | Bernard Crespi, Simon Fraser University | David Haig, Harvard University | Andrew Read, Penn State University Mark Schwartz, New York University | Marlene Zuk, University of Minnesota | Cynthia Beall, Case Western University | Charles Nunn, Duke University | Randolph Nesse, Arizona State University | Carlo Maley, UCSF | Athena Aktipis, UCSF | Wenda Trevathan, New Mexico State University | Matthew Keller, University of Colorado, Boulder | Lewis Wolpert, University College London | Joshua Schiffman, University of Utah | Joseph Alcock, University of New Mexico | Kathleen Barnes, Johns Hopkins University | Fabio Zampieri, University of Padua, Italy | Michael Ruse, Florida State University | Detlev Ganten, World Health Summit, Berlin | Grazyna Jasienska, Jagellonian University, Poland | Beverly Strassmann, University of Michigan | Daniel Blumstein, UCLS Mark Flinn, University of Missouri | Koos Boomsma, University of Copenhagen

Sponsor Websites:

The International Society for Evolution, Medicine, & Public Health http://evolutionarymedicine.org and

The Arizona State University Center for Evolution & Medicine

http://evmedcenter.org rmnesse@gmail.com

Arizona EvolutionaryMedicineSociety StudentTravelAwards

*Thanks to support from NESCent and donors, student travel awards are now available for The International Society for Evolution, Medicine, and Public Health Inaugural Meeting. **To apply see http://-EvMedMeeting.org < http://EvMedMeeting.org > *

December 1, 2014 Early registration and abstract deadlineMarch 19-21, 2015 at Arizona State University

March 18, 2015 Pre-meeting for directors of evolutionary medicine programs

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Sponsor Websites:

The International Society for Evolution, Medicine, & Public Health http://evolutionarymedicine.org and

The Arizona State University Center for Evolution & Medicine http://evmedcenter.org Randolph Nesse <nesse@asu.edu>

Bainbridge Washington ChromosomeEvolution Aug17-20

SAVE THE DATE

The annual meeting of the American Genetic Association, "Chromosome Evolution: Molecular Mechanisms and Evolutionary Consequences", will be held on August 17-20, 2015 at IslandWood (https://-islandwood.org/) on Bainbridge Island near Seattle, WA. The meeting will bring together people working on both molecular and evolutionary aspects of chromosome evolution in order to stimulate exchange of ideas between scientists with different perspectives. The meeting will start with the Wilhelmine Key Lecture by Mark Kirkpatrick on the theory surrounding chromosome evolution.

The AGA will provide travel awards to cover registration, room and board for graduate students who would like to attend the meeting. There will be a call for student travel award applications in early February 2015 and applications will be due March 15, 2015.

General registration will be open April 1, 2015. Space will be limited so register early!

Details and registration will be available at the AGA website: http://www.theaga.org Confirmed speakers are: Doris Bachtrog (UC Berkeley) Dan Barbash (Cornell University) Winston Bellott (Whitehead Institute/MIT) Jim Birchler (University of Missouri) Heath Blackmon (University of Texas at Arlington) Justin Blumenstiel (University of Kansas) Kirsten Bomblies (Harvard University) Anna Drinnenberg (Fred Hutchinson Cancer Research Center) Lila Fishman (University of Montana) Jeff Good (University of Montana) Mark Kirkpatrick (University of Texas) - Wilhelmine Key Lecture Jun Kitano (National Institute of Genetics) Michael Lampson (University of Pennsylvania) Mia Levine (University of Pennsylvania) Harmit Malik (Fred Hutchinson Cancer Research Center) Karen Miga (UC Santa Cruz) Rachel O'Neill (University of Connecticut) Galina Petukhova (Uniformed Services University of the Health Sciences) Daven Presgraves (University of Rochester) Loren Rieseberg (University of British Columbia) Jeremy Searle (Cornell University) Beatriz Vicoso (Institute of Science and Technology Austria)

Anjanette Bakerâ Managing Editor, Journal of Heredity http://jhered.oxfordjournals.org/ Manager,â American Genetic Association http://www.theaga.org/ 2030 SE Marine Science Dr Newport, OR 97366 https://-/www.facebook.com/AmericanGeneticAssociation AGAJOH <AGAJOH@oregonstate.edu>

Brazil BromeliaceaeEvolution Mar

The *1st BromEvo* (World Congress on Bromeliad Evolution) in Brazil (March 2015) has an interdisciplinary character and will feature about 30 lectures (conferences and symposia) with researchers from several countries, in addition to space for posters, oral presentations and artistic-scientific exhibition. Prizes for the best works at the undergraduate, master's and doctoral degree levels will be offered. Registration is open. Visit the website: www.bromevo.net and join us!

1st World Congress on Bromeliaceae Evolution (1st BromEvo) *Congress President: Prof. Dr. Ana M. Benko-Iseppon* *Honorary President: Prof. Dr. Georg Zizka* *Vice Chairmen: Prof. Dr. Marccus Alves * * Prof. Dr. Rafael Louzada* * Dr. Katharina Schulte *

Bromeliaceae Evolution <bromevolution@gmail.com>

Cairns BehaviourSpeciation

Dear Colleagues,

I am pleased to announce a symposium to be presented at the Behaviour2015 conference in Cairns, Australia, entitled:

"ANIMAL PERSONALITY AND SPECIATION"

Theoretical and empirical results have demonstrated the importance of considering individual personality in fields as diverse as dispersal dynamics and social evolution. Although behaviors role in speciation is well established (e.g., sexual selection), personalitys role in speciation remains poorly understood. The proposed symposium will serve as an opportunity to synthesize emerging ideas and stimulate future research into the role of personality in speciation. The breadth of evolutionary processes influenced by personality and the ubiquitous role of speciation suggest that this topic will be of broad. We welcome both theoretical and empirical studies on this topic, to be presented as oral presentations.

We welcome inquiries from parties interested in presenting in this symposium. Feel free to contact the organizer, Spencer Ingley, at sjingley@byu.edu for more information about the symposium. Formal abstracts will be submitted through the conference abstract submission system, where you will be able to select this symposium as your desired venue. For more information on submitting your abstract for consideration for this symposium, see: http://www.behaviour2015.org/-symposium-details/ For general conference information see: http://www.behaviour2015.org Spencer J. Ingley NSF Graduate Research Fellow Johnson Lab for Evolutionary Ecology Department of Biology 4102 LSB Brigham Young University Provo, Utah 84602 sjingley@gmail.com Website < http://sjingley.wix.com/-ingley >

Spencer Ingley <sjingley@gmail.com>

Cairns VirtualRealitySymposium Aug9-14

Virtual Reality: Computer animations as a tool in animal behaviour research Symposium at Behaviour 2015 in Cairns, Australia.

Have you ever thought about the ideal animal stimulus in behavioural experiments?

The ideal animal stimulus is under total control of the experimenter, has visual traits and behaviour patterns that can be varied in any way, and produces consistent test trials that can be easily repeated many times. Sounds too far-fetched? Computer animated animal stimuli provide the opportunity to control for all these aspects under standardized conditions necessary to test a given hypothesis.

Interested? Then come and join us at Behaviour 2015 conference in Cairns, Australia, where we are happy to announce an exciting symposium organized to promote the use of computer animations in experimental research. Although computer animations arouse lots of interest among researchers for its advantages, many are reluctant to use it because of seemingly big technical requirements necessary for creating animal stimuli, and the apparently disparate worlds of biology and computer science. The symposium offers the possibility to demystify the process of creating animations and to share knowledge on tools, programs, and the correct implementation of 2-D and 3-D stimuli. Researchers already using computer animations get the opportunity to present and discuss their current work and hence show what is already possible.

More information about the symposium and possible speakers can be found on the symposium webpage http://iec2015-symposium.wix.com/virtual-reality . Please do not hesitate to contact us if you want further information or if you want to contribute in any way to the symposium.

It is already possible to register for the conference and submit your abstract directly to our symposium by choosing it during the submission process. Details and descriptions concerning registration and abstract submission can be found on the official conference website www.behaviour2015.org < http://-www.behaviour2015.org > .

We hope to see you in Cairns!

Organizers:

Stefanie Gierszewski (University of Siegen, Germany), gierszewski@chemie-bio.uni-siegen.de Klaudia Witte (University of Siegen, Germany), witte@biologie.uni-siegen.de Laura Chouinard-Thuly (McGill University, Canada), laura.chouinard-thuly@mail.mcgill.ca

Dipl.-Biol. Stefanie Gierszewski Department of Chemistry & Biology Institute of Biology Research Group Ecology & Behavioral Biology University of Siegen Adolf-Reichwein-Str. 2 D-57068 Siegen phone: +49(0)271-740-2093 Fax: +49(0)271-740-4182

Stefanie Gierszewski <gierszewski@chemie-bio.uni-siegen.de>

ESEB BrainEvolution

Brain evolution symposium at ESEB 2015

We would like to invite abstract submissions for the following symposium at next years European Society for Evolutionary Biology:

Emerging models in evolutionary and ecological neurobiology

Despite their fundamental importance in animal biology and diversification, we know little about the proximate basis of ecologically relevant behaviour in wild populations. Understanding the genetic and neural basis of behavioural evolution is of primary interest, but also reveals mechanistic principles governing the evolution of complex phenotypes. Recent developments in sequencing technology, methods to quantify complex behaviour, and the application of neurological techniques to more diverse organisms, have led to accelerated progress in this field. A number of organisms have attracted particular attention and are emerging as promising model systems. Notable insights include the identification of distinct genetic and neural modules underpinning behaviour, the effects of gene expression and patterning on the evolution of brain size/structure, the extent of plasticity or divergence in brain structure between closely related species, and the nature of developmental and functional constraints acting on the brain.

We are interested in abstracts covering a wide range of approaches including intraspecific/experimental studies and interspecific/comparative studies, ranging from molecular/developmental approaches through to behaviour, anatomy and ecology.

Details of ESEB 2015 are available here: http:/-/www3.unil.ch/wpmu/eseb2015/ Abstract submission and registration should open in early November.

Please feel free to get in touch if you have any questions.

Stephen Montgomery (stephen.montgomery@cantab.net) Alison Wright (alison.e.wright@ucl.ac.uk)

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Dr. Stephen Montgomery

Early Career Research Fellow Leverhulme Trust Dept. of Genetics, Evolution and Environment University College London www.SHMontgomery.co.uk Stephen Montgomery <stephen.h.montgomery@ucl.ac.uk>

JaneliaHHMI EvolutionaryCellBiology Mar15-18

Technological advances in the last decade strongly suggest that bringing the fields of Cell Biology and Evolutionary Biology together into an integrated field of Evolutionary Cell Biology (ECB) will dramatically increase our understanding of cell biological structures, functions, and processes, while also providing deep insights into the mechanisms of evolutionary change. This meeting brings together experts in evolutionary biology, cell biology, and a range of other disciplines to address 1) the application of evolutionary perspectives and methodology to aid in elucidating the structure, function and mechanisms of cellular processes, and 2) the study of cell biological diversity to gain insight into the mechanisms of evolution and the history of life on earth.

For more information about Janelia conferences: http://www.janelia.org/conferences-events/-overview Apply for participation: https://-conference.janelia.org/cms/login.html Organizers Frances Brodsky, University of California, San Francisco Nicole King, HHMI/University of California,

Berkeley Harmit Malik, HHMI/Fred Hutchinson Cancer Research Center Dyche Mullins, HHMI/University of California, San Francisco

Invited Participants Ginger Armbrust, University of Washington Monica Bettencourt-Dias, Instituto Gulbenkian de Ciencia Joel Dacks, University of Alberta Scott Dawson, University of California, Davis Damien Devos, Universidad Pablo de Olavide Allan Drummond, University of Chicago Michael Eisen, HHMI/University of California, Berkeley Nels Elde, University of Utah Mark Field, University of Dundee Holly Goodson, University of Notre Dame Rebecca Heald, University of California, Berkeley Eric Karsenti, European Molecular Biology Laboratory (EMBL) Richard Lenski, Michigan State University Michael Lynch, Indiana University Bloomington Wallace Marshall, University of California, San Francisco Andrew Murray, Harvard University Daniel Needleman, Harvard University James Nelson, Stanford University José Pereira Leal, Instituto Gulbenkian de Ciencia Joseph Pogliano, University of California, San Diego Natasha Raikhel, University of California, Riverside Margaret Robinson, University of Cambridge David Roos, University of Pennsylvania Michael Rout, Rockefeller University Shelley Sazer, Baylor College of Medicine Pamela Silver, Harvard Medical School Mukund Thattai, National Centre for Biological Sciences Joseph Thornton, University of Chicago Aaron Turkewitz, University of Chicago Ajit Varki, University of California, San Diego John Wallingford, HHMI/University of Texas at Austin

nicoleking.ucb@gmail.com

Lausanne ESEB CommunityEvolution Aug10-14

ESEB Symposium: Evolutionary analysis of ecological communities

We would like to invite abstract submissions for the following symposium within the 15ˆth Congress of the European Society for Evolutionary Biology (ESEB), to be held in Lausanne, Switzerland, 10-14 August 2015:

Evolutionary analysis of ecological communities±

INVITED SPEAKERS:

Catherine Graham (Stony Brook University, USA)

http://catherinegraham.weebly.com/ Mike Hickerson (City College of New York, USA)

http://hickerlab.wordpress.com/ ORGANISERS:

Brent Emerson (IPNA, Consejo Superior de Investigaciones Cientficas, Spain)

http://brentemerson.com Andres Baselga (Universidad de Santiago de Compostela, Spain)

http://webspersoais.usc.es/persoais/andres.baselga/ SYMPOSIUM DESCRIPTION:

The application of evolutionary theory, methods and experimentation to the analysis of communities of species can facilitate our understanding of how communities of species form, the processes that contribute to their formation, and the factors that contribute to variation both within and among such communities. For example, the application of molecular genetic markers within ecological communities potentially provides for an escape from timescale being polarised as either ecological or evolutionary, while also providing a neutral benchmark (i.e. spatial patterns of neutral genetic markers) against which to compare species-level patterns potentially driven by non-neutral processes.Experimental approaches can examine the interaction effects among species, and how these may influence trait variation within and among species.The evolutionary analysis of biological communities spans the fields of community genetics, population genetics, phylogeography, community phylogenetics, experimental evolution, macroecology and macroevolution. We solicit submissions from both empirical and theoretical biologists who are interested in how communities of species assemble, interact, and evolve over space and time.This symposium aims to bring together researchers from across different disciplines within evolutionary biology with a focus on the analysis and understanding of multispecies systems.

The site for registration for the ESEB meeting and for abstract submission for this symposium is now open at: http://www3.unil.ch/wpmu/eseb2015/ DEADLINE for abstract submission for contributed talks and posters: 10 January 2015.

Abstracts will be evaluated by the symposium organizers and will be selected for either oral or poster presentation by early March. When submitting your abstract please state your preference (talk, poster) during the submission process.

Brent Emerson Island Ecology and Evolution Research Group Instituto de Productos Naturales y Agrobiologa (IPNA-CSIC) C/Astrofsico Francisco Snchez 3 La Laguna, Tenerife, Canary Islands, 38206, Spain e-mail: bemerson@ipna.csic.es http://brentemerson.com/ Brent C Emerson <bemerson@ipna.csic.es>

Lausanne ESEB CooperationWithoutKinship Aug10-14

Dear colleagues,

We are excited to invite submissions to the symposium "Cooperation without kinship: from genomes to mutualism" to be held at the 15th Congress of the European Society for Evolutionary Biology (ESEB), August 10-14 2015 in Lausanne, Switzerland.

While kin selection is a powerful explanation for some cooperation, there are many cases where relatedness is simply not possible, such as cooperation between species. More generally, these cases are forms of "egalitarian" cooperation and include examples as diverse as genes in a genome, nuclear and organellar genomes within cells, and species in symbiosis and mutualisms. Without relatedness, the key hurdle in egalitarian coalitions is conflict suppression. Conflict suppression mechanisms have been studied in all the key examples of egalitarian coalitions, including the suppression of transposable elements in genomes, and cheaters in mutualisms. However, these systems are rarely discussed together.

We hope to bring together researchers from across these diverse systems to stimulate interactions and seek general principles underlying the evolution of egalitarian cooperation.

We have two great invited speakers: - Toby Kiers, Vrije Universiteit Amsterdam, http://www.tobykiers.com/- - Justin Blumenstiel, University of Kansas, http://-www.people.ku.edu/ ˜ jblumens/ General details of ESEB 2015 can be found here: http://www3.unil.ch/-wpmu/eseb2015/ Abstract submission and registration are due January 10th, 2015.

In the meantime, please don't hesitate to get in touch if you have any questions!

All the best, Arvid Agren, arvid.agren@utoronto.ca Kevin Foster, kevin.foster@zoo.ox.ac.uk

arvid.agren@utoronto.ca

Lausanne ESEB EcoEvoResponseGlobalChange Aug10-14

Dear colleagues,

We are very happy to invite submissions to the following ESEB 2015 symposium:

Forecasting Eco-Evolutionary Responses To Global Changes

Our goal is to highlight current empirical and theoretical studies that mix evolutionary and ecological approaches to investigate the fate of species' ranges or persistence under a changing environment.

The 15th Congress of the European Society for Evolutionary Biology (ESEB), will be held in Lausanne, Switzerland, from August 10 - 14 2015.

http://www3.unil.ch/wpmu/eseb2015/ INVITED SPEAKERS

Katja Schiffers (Laboratoire d'Ecologie Alpine, Grenoble, France) http://www.katja-schiffers.eu/ Kathleen Donohue (Duke University, NC, USA) http://-sites.duke.edu/donohuelab/ ORGANISERS

Frédéric Guillaume (University of Zurich, Switzerland) http://www.ieu.uzh.ch/research/evolbiol/ecoevo.html Ophélie Ronce (CNRS - University of Montpellier, France) http://www.metapop.univ-montp2.fr/-?page_id=3D91 SYNOPSIS

"Evolutionary biology is seldom seen as a predictive science mostly because evolutionary changes are traditionally expected to occur over long time scales where it becomes impossible to predict evolutionary trajectories. Current evidence for rapid adaptive changes on short time scales challenges this vision and argues for the inclusion of evolutionary responses into ecological niche modelling of shifting species' distributions under climate changes. Ecological forecasting of future species' ranges has been preferred based on the premise of conservatism of species' fundamental ecological niches on the time scale of global change. The question of niche conservatism is currently intensely debated and a role for evolutionary adaptation in niche dynamics is expected. Current niche modelling predictions of species extinctions may thus be inaccurate whenever species have the capacity to adapt to novel conditions outside their niche. On the other hand, evo-

lutionary processes may aggravate the consequences of environmental changes on species persistence whenever the evolution of adaptive traits is limited by genetic or demographic constraints. This symposium aims at highlighting recent efforts to bring together ecological and evolutionary approaches to better understand and predict the potential responses of natural species to environmental changes and the impact of ongoing global changes on the maintenance of biodiversity."

The DEADLINE for abstract submission is January 10, 2015. Further details on ABSTRACT SUBMISSION and the conference are here: http://www3.unil.ch/wpmu/eseb2015/ Abstracts will be evaluated by the symposium organisers and will be selected for either oral or poster presentation by early March. When submitting your abstract please state your preference (talk, poster).

We are looking forward to holding a very exciting symposium!

Fred Guillaume & Ophélie Ronce

<frederic.guillaume@ieu.uzh.ch>
<ophelie.ronce@univ-montp2.fr>

— Frédéric Guillaume SNSF Assistant Professor Institute of Evolutionary Biology and Environmental Studies University of Zürich Winterthurerstrasse 190 CH-8057 Zürich tel: +41 (0)44 635 66 23 office: Y13-G-38

http://www.ieu.uzh.ch/research/evolbiol/ecoevo.html
frederic.guillaume@ieu.uzh.ch

Lausanne ESEB EvoEcoCooperationTheoryExp Aug10-14

Dear colleagues,

We are very happy to invite your to attend and contribute to the symposium "Evolutionary ecology of cooperation: theory and experiment" which will be held at the 15th European Society for Evolutionary Biology (ESEB) Meeting in Lausanne, Switzerland, 10th - 14th August 2015. We are excited about the opportunity to bring together scientist who use either theoretical or experimental approaches (or ideally both!) to study the ecology and evolution of cooperation. We hope this will allow us to to mak connections between our lines of research and start a productive dialog on research questions of common interest. You can see the full symposium description below.

We have two excellent invited speakers confirmed:

Ashleigh Griffin, University of Oxford http://www.zoo.ox.ac.uk/group/griffin Jeff Gore, MIT http://gorelab.homestead.com Ours is the symposium 9 in this list: http://www3.unil.ch/wpmu/eseb2015/symposium_list/ The call for abstract and registration are officially open, and the deadline for submission is 10th January 2015. http://www3.unil.ch/wpmu/eseb2015/registration/ Please be sure to state your preference for a talk or a poster when submitting your abstract.

Do not hesitate to contact either one of us with any further questions. Sorry i you are receiving this email multiple times and feel free to forward it to any colleagues who may be interested.

Looking forward to seeing many of you in Lausanne!

Your symposium organizers,

Dusan Misevic & Sam Brown

<dule@alife.org> <sam.brown@ed.ac.uk>

Symposium description:

Understanding the ecology and evolution of cooperation remains one of the great challenges in biology. Why do individuals help others at a personal cost? How do patterns of social interaction emerge from behavioral, evolutionary, and ecological processes? What are the selective forces that maintain multi-species cooperative interactions within communities?

Theory has been a vital driver in answering these and other questions, especially when engaged with data. Making the data-theory connections is often complex, as cooperation is studied in the lab, the field and the clinic, at all levels of biological complexity, in natural systems that range from cancerous cells and pathogenic microbes to birds, bees and humans. Robotic and other in silico computational systems have a potential to act as an intermediary between the different approaches to cooperation research. During the symposium we aim to move beyond ineffective debates over kin versus group selection, and focus instead on theory as a problem-solving tool, both fully driven by data and directly informing future experiments.

Testable theoretical predictions and theoretical frameworks based on real-world data are essential for moving the field forward. More than just an overview of theory, simulations, and experiments about cooperation, at this symposium we wish to bring together researchers who aim to make connections between these approaches, refocus our joint efforts, and move the field forward.

dule@alife.org

Lausanne ESEB EvolutionBehavioralVariation Aug10-14

Dear colleagues

We are pleased to invite submissions for the ESEB 2015 symposium:

"EVOLUTION OF BEHAVIORAL VARIATION"

The symposium will be part of the ESEB conference held in Lausanne (Switzerland) from August 10-14, 2015. Abstract submission deadline is due January 10, 2015. You can either apply for a talk (17 minutes including discussion) or a poster. Further details on the conference and about how to submit an abstract can be found here:

http://www3.unil.ch/wpmu/eseb2015/ The goal of this symposium is to synthesize the most recent experimental, genomic and theoretical work on individual behavioral variation.

SYMPOSIUM ABSTRACT

During the last decade, it has become increasingly clear, that individuals of a single species differ consistently in behavior over time and across different contexts. Recently, researchers started to explore the evolution of this behavioral variation and its fitness consequences, for example in studies on animal personalities or on behavioral castes in social animals. It also becomes evident that standardized lab experiments are valuable to characterize different behavioral types whereas experimental field studies are needed to characterize their performance in an ecological context. Moreover, advances both in statistical methods as well as in genomic tools now allow to disentangle and to identify different sources of behavioral variance. We still know little about behavioral genes and their regulatory mechanisms, how conserved these genes are between species and how behavioral variance is mediated on a genetic level. In this symposium, we plan to bring together scientists from various disciplines to develop a broad picture on the current research on the evolution of behavioral variation and its genetic underpinning.

INVITED SPEAKERS

Seirian Sumner (University of Bristol)

Denis Réale (University of Québec at Montréal)

SYMPOSIUM CONTACT

In case of any symposium-specific questions, feel free to contact us:

Susanne Foitzik (foitzik@uni-mainz.de; University of Mainz)

Barbara Feldmeyer (_feldmeye@uni-mainz.de_; University of Mainz)

We are looking forward to an inspiring symposium and hope to see you in Lausanne next year!

The symposium organizers,

Barbara & Susanne

Evolutionary Biology University of Mainz (http://-www.bio.uni-mainz.de/zoo/evobio/index_ENG.php)

feldmeye@uni-mainz.de

Lausanne ESEB EvolutionHostDefence Aug10-14

Dear colleagues,

We are pleased to invite submissions for the ESEB 2015 symposium:

HOST DEFENSE IN A PARASITIZED WORLD: SELECTION, EVOLUTION AND THE MAINTENANCE OF VARIATION

SYMPOSIUM DESCRIPTION:

Infectious diseases are assumed to be among the most important selective forces in nature. Yet, phenotypic traits involved in host defense against parasites and pathogens, and their underlying genes, often exhibit considerable variation. This symposium aims to integrate studies of selection on host defense at the phenotypic and molecular genetic level across diverse taxa to advance our understanding of how defense mechanisms evolve and how parasite- and pathogen-mediated selection can maintain variation in host defense, both at the level of the individual and the population.

The symposium will take place during the 15th Congress of the European Society for Evolutionary Biology (ESEB 2015, August 10-14, Lausanne, Switzerland).

REGISTRATION:

Deadline: 10 January 2015

http://www3.unil.ch/wpmu/eseb2015 INVITED SPEAKERS:

ANDREA L: GRAHAM (Princeton University, USA)

http://www.princeton.edu/ ˜ algraham/-people_agraham.htm BRIAN P. LAZZARO (Cornell University, USA)

http://www.lazzaro.entomology.cornell.edu/ ABSTRACT SUBMISSION:

When submitting your abstract, please state your preference for a talk or a poster. Abstracts will be selected by early March. Should you have any question, please, do not hesitate to contact the organizers:

Barbara Tschirren (barbara.tschirren@ieu.uzh.ch)

Lars Råberg (lars.raberg@biol.lu.se)

We are looking forward to seeing you in Lausanne!

Barbara & Lars

Barbara Tschirren Institute of Evolutionary Biology and Environmental Studies University of Zurich, Switzerland

Lars Råberg Department of Biology Lund University, Sweden

barbara.tschirren@ieu.uzh.ch

Lausanne ESEB EvolutionSex Aug10-14

ESEB symposium on ECOLOGY AND THE EVOLUTION OF SEX

We would like to invite you to contribute to the ESEB symposium Ecology and Evolution of Sex, which will take place at the 15th Congress of the European Society for Evolutionary Biology (ESEB), in Lausanne, Switzerland, 10 - 14 August 2015.

Invited speaker: Sally Otto (UBC) and Levi Morran (Emory University)

Organizer: Hanna Koch and Lutz Becks (Max Planck Institute for Evolutionary Biology)

SYMPOSIUM DESCRIPTION: We are still missing the answer to one of the important questions in evolutionary biology: Why sex? Despite the high prevalence of sexual reproduction in nature, understanding its evolution and maintenance is still not that straightforward. The reason lays partly in the scarcity of experimental tests and theory that account for ecological dynamics and their direct consequences, i.e. population cycling and thus changes in strength and/or direction of selection. An important step towards solving the mystery of sex is to include ecological dynamics in experimental, theoretical as well as genomic studies. With this proposed symposium, we hope to start a rapid growing discussion on how to further integrate the role of ecology into the field of the evolution of sexual reproduction.

WEBSITE (see symposium 1): http://www3.unil.ch/-wpmu/eseb2015/symposium_list/ The site for registration for the ESEB meeting and for abstract submission for this symposium is now open at: http:/-/www3.unil.ch/wpmu/eseb2015/ DEADLINE for abstract submission for contributed talks and posters: 10 January 2015.

Abstracts will be evaluated by the symposium organizers and will be selected for either oral or poster presentation by early March. When submitting your abstract please state your preference (talk, poster). Submitted talks will be 17 min each, including discussion, plus 3 min to change rooms. The overall time window allotted to each symposium will be decided by the congress committee, depending on the number and quality of submissions.

Lutz Becks & Hanna Koch

Max Planck Institute for Evolutionary Biology August Thienemann Str. 2 24306 Plön, Germany

Lutz Becks <lbecks@evolbio.mpg.de>

Lausanne ESEB ExptEvolutionOfEcosystems Aug10-14

Conference: Lausanne ESEB2015 ExperimentalEvolutionOfEcosystems Aug10-14

Dear evoldir members,

We would like to announce the symposium evolution and ecology of (microbial and other) ecosystems at the ESEB 2015 conference and would like to invite abstract submissions.

This symposium aims at showcasing recent studies and bringing together ecological and (experimental) evolutionary approaches to study the evolution of ecosys-

tems.

In natural systems, organisms and species evolve not in isolation but embedded into ecosystems. Several models describe such relationships, for example the Red Queen and niche construction theories as well as metabolism-based models. Such models have shown that evolutionary processes on the ecosystem level can be highly complex. To investigate this phenomenon experimentally, laboratory approaches have simplified the situation by studying evolutionary dynamics using a (very) limited number of strains at a time under controlled laboratory conditions in the powerful approach of experimental evolution. Others studies have utilized a more ecological approach by observing and describing complex systems and how organisms and species can V or cannot V co-exist over time.

Increasingly, research has been initiated that combines these two approaches by tracking evolutionary changes of complex ecosystems in laboratory and natural conditions. Examples include studies of the dynamics of species composition in (microbial) ecosystems over space and time and in response to various stresses, the evolution of social interaction between microbes, and long-term co-evolutionary studies between different (sets of) species or genotypes. For this symposium, we invite submissions of experimental and theoretical studies in this area.

* Invited speakers: Susi Remold (University of Louisville) http://louisville.edu/biology/faculty-information/remold/ Tom Bell (Imperial College London) http://www.imperial.ac.uk/people/thomas.bell * Organisers: Sijmen Schoustra (Wageningen University and University of Zambia) and Susanne Kraemer (University of Edinburgh).

* Deadline for submission for abstracts for contributed talks and posters is 10th January 2015. More information can be found at http://www3.unil.ch/wpmu/-eseb2015/abstract- submission/ .

We look forward to receiving your submissions and to seeing you at the conference and our symposium.

Dr Sijmen E Schoustra Laboratory of Genetics, Wageningen University, the Netherlands & Department of Food Science and Nutrition, University of Zambia

Phone: +31 317 483142 and +260 974 572686 http://www.wageningenur.nl/en/Persons/-Sijmen-Schoustra.htm "Schoustra, Sijmen" <sijmen.schoustra@wur.nl>

Lausanne ESEB GeneticsOfSexSpecificVariation Aug10-14

Dear colleagues,

We would like to invite abstract submissions for the symposium "Novel insights in the genetics of sex-specific variation" at the ESEB 2015 conference in Lausanne.

Invited speakers: - Daphne Fairbairn (UC Riverside) - Tim Connalon (Monash University)

Organisers: - Elina Immonen (Uppsala University) - Holger Schielzeth (Bielefeld University) - Arild Husby (University of Helsinki)

This symposium aims to bring together and showcase recent advances in our understanding of the genetics of sex-specific variation and its contribution to sexual dimorphism. Some of the specific areas of interest include identification of genetic basis for sexually dimorphic or sex-specific traits, the role of sex chromosomes in harboring sex-specific variance, the degree to which sex-specific evolution is constrained by intersexual genetic correlations and the link between sexual dimorphism at the molecular and phenotypic levels. Researchers using (quantitative) genetic, genomic and transcriptomic approaches in these fields are invited to contribute to the symposium.

Please see the symposium description (no 5) at the ESEB website: (http://www3.unil.ch/wpmu/-eseb2015/symposium_list/)

To register for the ESEB meeting and for abstract submission to this symposium please visit: https://meeting.artegis.com/event/eseb2015 Deadline for submission for contributed talks and posters is 10th January 2015. Submission guidelines can be found at http://www3.unil.ch/wpmu/eseb2015/files/-2014/03/Guidelines.pdf We look forward to receiving your submissions. If you have any questions do not hesitate to contact us.

Elina, Holger and Arild

Elina Immonen, Department of Ecology and Genetics Uppsala University, Norbyvägen 18D, 75236 Uppsala, Sweden e-mail: elina.immonen AT ebc.uu.se

Holger Schielzeth, Department of Evolutionary Biology

Bielefeld University Morgenbreede 45, 33615 Bielefeld, Germany e-mail: holger.schielzeth AT uni-bielefeld.de

Arild Husby, Department of Biosciences, University of Helsinki, PO Box 65, FI 00014 Helsinki, Finland e-mail: arild.husby AT helsinki.fi

Elina Immonen <elina.immonen@ebc.uu.se>

Lausanne ESEB GenomicsComplexity Aug10-14

Dear colleagues

We are looking forward to receiving submissions for the symposium entitled

"IGNORAMUS ET IGNORABIMUS? - HOW MUCH GENOME SCANS CAN AND SHOULD TELL US ABOUT EVOLUTION".

The symposium will be part of the ESEB conference held in Lausanne (Switzerland) from August 10-14, 2015. Abstract submission deadline is due January 10, 2015. You can either apply for a talk (17 minutes including discussion) or a poster. Further details on the conference and about how to submit an abstract can be found here: http://www3.unil.ch/wpmu/eseb2015/ SYMPOSIUM DESCRIPTION Our symposium focuses on the genomic complexity of adaptive evolution, and the many associated methodological and conceptual challenges. Abstract submissions may, for example, include high-quality genomic dissections of adaptation in natural populations; investigations of the genomic signatures of evolution under artificial selection; studies attempting to link quantitative genetics and genomics; work on the link between genomic evolution and fitness; or methodological advances in tackling signatures of polygenic adaptation. We explicitly encourage contributions from a wide variety of taxa, and from both the empirical and theoretical side.

SYMPOSIUM ABSTRACT The wave of genome-wide scans for molecular signatures of adaptation is starting to hit genetic non-model organisms. At the same time, such analyses performed in those organisms offering the most powerful genomic resources point to a fundamental issue in evolutionary genomics, already foreshadowed by a century of quantitative genetics: adaptation is highly complex at the genomic level, with many loci involved, most of them probably exhibiting an effect size challenging statistical detection. The goal of this symposium is to bring together contributions from empirical and theoretical genomics to address three main questions: (i) How can our methodological toolkit be optimized to capture the genomic complexity of adaptation? (ii) Where are our limits to understanding and interpreting patterns revealed by genome scans? (iii) How much molecular detail do we need to illuminate for an adequate understanding of adaptive evolution? This symposium thus has a strong methodological, conceptual, and philosophical orientation. Given the enormous amount of financial and human resources currently being directed to genome scans in genetic model and non-model systems - at the expense of more traditional evolutionary investigations - we believe that this symposium will be of outstanding relevance to the development of evolutionary genomics, and to evolutionary biology in general.

INVITED SPEAKERS > Matthew Rockman (New York University) > Rasmus Nielsen (UC Berkeley) We are delighted to have Matthew and Rasmus as our invited speakers!

SYMPOSIUM CONTACT In case of any symposium-specific questions, feel free to contact us: > Daniel Berner (Daniel.berner@unibas.ch; University of Basel) > Marius Roesti (marius.roesti@unibas.ch; University of Basel)

We are looking forward to an inspiring symposium and hope to see you in Lausanne next year!

The symposium organizers, Daniel & Marius

Marius Rösti <marius.roesti@unibas.ch>

Lausanne ESEB HostParasiteAdaptation Aug10-14

Dear colleagues,

We are pleased to invite submissions for the ESEB 2015 symposium:

"Adaptation in heterogeneous environments: insights from host-parasite systems".

The goal of this symposium is to synthesize the most recent experimental and theoretical work on host-parasite coevolution.

The symposium will take place during the 15th Congress of the European Society for Evolutionary Biology (ESEB 2015, August 10-14, Lausanne Switzerland).

REGISTRATION:

Deadine: 10 January 2015

http://www3.unil.ch/wpmu/eseb2015 INVITED SPEAKERS:

- Anna-Liisa Laine (University of Helsinki, Finland)

http://allaine.it.helsinki.fi/ - Alex Hall (ETH Zürich, Switzerland)

http://www.tb.ethz.ch/people/person-detail.html?persid=184543 SYMPOSIUM DESCRIPTION:

Understanding how species adapt to heterogeneous environments is a major challenge in evolutionary biology. In host-parasite systems, antagonistic coevolution generates highly heterogeneous selective pressures, both in time and space.

Recently, much progress has been made to characterize the process of coevolution in natural (e.g., plant-pathogen) and laboratory (e.g., phage-bacteria) populations. This work has shown that coevolution generates strong and changing selective pressures and potentially plays an important role in the dynamics and maintenance of genetic diversity.

Yet, progress in our understanding of host-pathogen dynamics is hindered by several conceptual challenges and limitations. First, one widely used approach to quantify adaptation consists in transferring populations in space or in time (local adaptation and time shift experiments). Such experiments provide indirect insights on the coevolutionary process, but their interpretation is uneasy because of environmental heterogeneities. Second, experimental work has revealed that the genetics of the interaction may be complex, time-dependent and environment-dependent. We lack theoretical predictions for the dynamics of coevolution in such scenarios. Third, we don't know the extent to which variation in host and parasite population sizes impact the coevolutionary process ("ecological feedbacks")..

The goal of this symposium is to address these challenges by synthesizing the most recent theoretical and experimental work on host-parasite coevolution.

ABSTRACT SUBMISSION:

When submitting your abstract, please state your preference for a talk or a poster session. Abstracts will be selected by early March. Should you have any question, please, do not hesitate to contact the organizers:

- François Blanquart (francois.blanquart@normalesup.org)

- Florence Débarre (florence.debarre@normalesup.org*)*

- Nicolas Rode (nicolas.o.rode@gmail.com*)*

We are looking forward to seeing you in Lausanne,

François, Flo and Nicolas

François Blanquart Department of Infectious Disease Epidemiology Imperial College London, UK

Florence Débarre Wissenschaftskolleg zu Berlin, Berlin, Germany

Nicolas Rode Department of Biology University of Ottawa, Canada

Nicolas Rode <nicolas.o.rode@gmail.com>

Lausanne ESEB LociAdaptation Aug10-14

ESEB SYMPOSIUM ON GENES AND ALLELES UNDERLYING ADAPTATION

Dear Colleagues:

We would like to invite you to attend and/or contribute to the ESEB symposium

'HOW TO IDENTIFY AND TEST THE LOCI AND ALLELES UNDERLYING ADAPTATION?'

which will take place at the 15th Congress of the European Society for Evolutionary Biology (ESEB), in Lausanne, Switzerland, 10 - 14 August 2015.

INVITED SPEAKERS: - Felicity Jones (FML, Max Planck Institute, Tübingen, Germany) - Alistair McGregor (Oxford Brookes University, Oxford, UK)

ORGANIZERS: - Paul Schmidt (University of Pennsylvania) - Thomas Flatt (University of Lausanne)

SYMPOSIUM DESCRIPTION: To understand the mechanisms underlying adaptation, causal molecular variants, genes and pathways must be identified, characterized and ultimately experimentally verified. To this end, various methods for outlier detection, QTL mapping, and association studies have provided a wealth of 'candidates' for phenotypes of interest, the response to artificial and natural selection, and adaptive differentiation within and among taxa. Recent advances in whole-genome sequencing allow an unprecedented, comprehensive evaluation of genotype-phenotype associations. However, one major issue with whole-genome screens is whether any given 'candidate'

actually represents a true positive: population structure and demography, the number of independent chromosomes, statistical power, and other complications are known to generate false positives. Thus, one of the emerging challenges in evolutionary genomics is to unambiguously identify and empirically validate candidates identified in omics-level screens. The goal of our symposium is to discuss and showcase how to best identify and validate candidate variants, genes, and pathways. Specifically, the symposium aims to (1) evaluate methods by which candidates are identified and investigated; (2) generate discussion regarding the significance of functional validation of identified candidates in quantitative, ecological and evolutionary genetics; and (3) present some of the best current research related to functional identification and validation.

WEBSITE (see symposium no. 18): http://-www3.unil.ch/wpmu/eseb2015/symposium_list/ The site for registration for the ESEB meeting and for abstract submission for this symposium is now open at: http://www3.unil.ch/wpmu/eseb2015/ DEADLINE for abstract submission for contributed talks and posters: 10 January 2015.

We are interested in receiving abstract submissions reporting studies that seek to identify AND validate ecologically and evolutionarily relevant phenotypic effects of candidate genes and alleles in the wild or the laboratory.

Abstracts will be evaluated by the symposium organizers and will be selected for either oral or poster presentation by early March. When submitting your abstract please state your preference (talk, poster) during the submission process. Submitted talks will be 17 min each, including discussion, plus 3 min to change rooms. The overall time window allotted to each symposium will be decided by the congress committee, depending on the number and quality of submissions.

We are looking forward to seeing you in beautiful Lausanne!

Paul & Thomas.

Paul S. Schmidt Department of Biology University of Pennsylvania Philadelphia PA 19104-6018 USA E-mail: schmidtp@sas.upenn.edu

Thomas Flatt Department of Ecology and Evolution University of Lausanne UNIL Sorge, Biophore CH-1015 Lausanne Switzerland E-mail: Thomas.Flatt@unil.ch

Book: Mechanisms of Life History Evolution http://-/ukcatalogue.oup.com/product/9780199568772.do schmidtp@sas.upenn.edu

Lausanne ESEBmeeting Aug10-14

Dear colleagues,

The registration and abstract submission to the next ESEB meeting (August 10-14 2015, Lausanne) are now open.

You will find all necessary information on our website: www.unil.ch/eseb2015 We look forward welcoming you in Lausanne!

Nicolas Perrin

Dept. Ecology & Evolution University of Lausanne (Switzerland) http://www.unil.ch/dee/-page5090_en.html Tel (0041) 21 692 41 84

New book (published 12 June 2014): The Evolution of Sex Determination Leo W Beukeboom & Nicolas Perrin Oxford University Press 978-0-19-965714-8 http://-ukcatalogue.oup.com/product/9780199657148.do Nicolas Perrin <Nicolas.Perrin@unil.ch>

Lausanne ESEB Melanism Aug10-14

ESEB SYMPOSIUM ON MELANISM: MACROPHYSIOLOGY TO MOLECULES

Dear Colleagues:

We would like to invite you to attend and/or contribute to the ESEB symposium

?Melanism: macrophysiology to molecules?

which will take place at the 15th Congress of the European Society for Evolutionary Biology (ESEB), in Lausanne, Switzerland, 10 - 14 August 2015.

INVITED SPEAKERS: - Chris Jiggins (University of Cambridge, U.K.) - Aya Takahashi (Tokyo Metropolitan University, JAPAN)

ORGANIZERS: - Subhash Rajpurohit (University of Pennsylvania, USA) - Paul Schmidt (University of Pennsylvania, USA)

SYMPOSIUM DESCRIPTION: In nature, organisms display extreme variation for multiple aspects of pigmentation phenotype; this is commonly observed both

within and among populations, as well as among taxa. Among populations across environmental gradients (at the macro-physiological level), pigmentation has been found to be associated with several fitness components such as mating ability, disease resistance, UV tolerance, thermal adaptation, and drought tolerance. From the molecular perspective, a number of genes and causal genetic changes underlying pigmentation phenotype have been identified in multiple taxa. The established connections between molecular variation, physiology, and fitness make this trait ideally suited for addressing fundamental questions at the crossroads of ecology, evolution and physiology. Comprehensively defining the connections between physiological processes, pathways and causative molecules is a major challenge in evolutionary physiology. The melanin formation pathway is a multistep and complicated process and its physiological nature is poorly understood. We take advantage of this symposium to address questions related to melanism and its adaptive nature.

WEBSITE (see symposium no. 31): http://-www3.unil.ch/wpmu/eseb2015/symposium_list/ The site for registration for the ESEB meeting and for abstract submission for this symposium is now open at: http://www3.unil.ch/wpmu/eseb2015/ DEADLINE for abstract submission for contributed talks and posters: 10 January 2015.

We are interested in receiving abstract submissions addressing eco-physiological significance of pigmentation in organisms in general.

Abstracts will be evaluated by the symposium organizers and will be selected for either oral or poster presentation by early March. When submitting your abstract please state your preference (talk, poster) during the submission process. Submitted talks will be 17 min each, including discussion, plus 3 min to change rooms. The overall time window allotted to each symposium will be decided by the congress committee, depending on the number and quality of submissions.

We are looking forward to seeing you in beautiful Lausanne!

Subhash & Paul

Subhash Rajpurohit Schmidt Laboratory Department of Biology University of Pennsylvania Philadelphia PA 19104-6018 USA E-mail: rsubhash@sas.upenn.edu Email: schmidtp@sas.upenn.edu http://subhash-rajpurohit.webs.com/ https://-www.bio.upenn.edu/people/paul-schmidt Subhash Rajpurohit <rsubhash@sas.upenn.edu>

Lausanne ESEB PolyploidEvolution Aug10-14

Dear colleagues,

We will be pleased to receive submissions for the ESEB 2015 symposium entitled:

"Polyploid Evolution: Integrating Ecological and Genomic Studies"

The symposium is part of the European Society for Evolutionary Biology (ESEB) to be held in Lausanne, Switzerland on 10-14 August 2015.

Our goal is to bring together researchers working on the ecology and/or genomics of polyploids, and foster new interactions and collaborations.

REGISTRATION AND ABSTRACT SUBMISSION:

http://www3.unil.ch/wpmu/eseb2015/ Deadline: 10 January 2015

INVITED SPEAKERS:

CHRISTIAN PARISOD (U. Neuchatel) works on the interface between genomic and ecological processes in polyploid plants, investigating the origin, and phenotypic consequences of genome re-organisation following polyploidisation in wild species.

http://www2.unine.ch/evobot/page-11460.html

ANDREA HARPER (U. York, UK) is an early career scientist who has developed novel methods to study polyploid systems in crop species. These methods hold great promise to be applied to natural polyploids.

http://www.york.ac.uk/biology/itsupport/cfm/-post_doc/profile.cfm?ID=3D982

SYMPOSIUM DESCRIPTION: Polyploidisation is a ubiquitous feature in the evolution of plants and animals, and has been associated with changes in the phenotype and ecology of organisms. We currently have a good understanding of the genomic consequences of polyploidisation, yet, few studies have attempted to bridge ecological and genomic analyses in polyploids. This limitation is due, in part, to the fact that genomic tools were not available for organisms suitable for ecological studies. The rapid development of genomic tools for non-model organisms, have dramatically changed this situation, making possible to work on integrating ecological and genomic studies in polyploid evolution.

Our proposal is to organise a symposium, which will bring together researchers studying the ecology and genomics of polyploids, and foster interactions and collaborations between groups working towards the understanding of how genomic changes during polyploidisation affect the evolution of phenotypic and ecological trait s in natural populations.

ORGANISER: Mario Vallejo-Marín. http://-www.plant-evolution.org

CO-ORGANISER: Richard Buggs. https://-evolve.sbcs.qmul.ac.uk/buggs/ The University of Stirling has been ranked in the top 12 of UK universities for graduate employment*. 94% of our 2012 graduates were in work and/or further study within six months of graduation. *The Telegraph The University of Stirling is a charity registered in Scotland, number SC 011159.

mario.vallejo@stir.ac.uk

Lausanne ESEB SelectionInMicrobialSystems Aug10-14

Dear evoldir members,

We would like to announce the symposium "Groups versus individuals: levels of selection in microbial systems" at the upcoming ESEB 2015 conference and would like to invite abstract submissions.

This symposium focuses on how different levels of selection shape the link between genotype and phenotype in microbial systems.

A number of recent discoveries have revolutionized our understanding of the molecular mechanisms that govern the expression of microbial phenotypes as well as the selective conditions that determine their evolution in the long-run. For example, microbes combine stochastic molecular processes with signals they receive from their environment and from conspecifics to produce phenotypic diversity in clonal populations, and to engage in behaviours that have selective consequences for themselves as well as for the group. Moreover, by combining metabolic functions among microorganisms of the same or different species, new group-level phenotypes can emerge that drastically impact selection acting on individual cells.

The aim of this symposium is to discuss how selection at different levels of biological organization affects the expression of phenotypes as well as to analyse how cell-level phenotypes can promote functionality at the level of groups. By drawing together empirical and theoretical contributions from evolutionary and quantitative biology, this interdisciplinary symposium will facilitate discussions among scientists that otherwise would not meet and help to identify future research avenues.

* Invited speakers:

Thierry Emonet (Yale University)

http://emonet.biology.yale.edu Martin Polz (Massachusetts Institute of Technology)

https://polzlab.mit.edu * Organisers:

Christian Kost (Max Planck Institute for Chemical Ecology)

https://www.ice.mpg.de/ext/633.html Martin Ackermann (ETH Zürich)

http://www.ibp.ethz.ch/research/-molecularmicrobialecology * Deadline for submission for abstracts for contributed talks and

posters is 10th January 2015. More information can be found at

http://www3.unil.ch/wpmu/eseb2015/abstract- submission/ .

We look forward to receiving your submissions and to seeing you at the

conference and our symposium.

Dr. Christian Kost VW Research group leader Experimental Ecology and Evolution Group Department of Bioorganic Chemistry Max Planck Institute for Chemical Ecology Beutenberg Campus Hans-Knöll-Straße 8 D-07745 Jena Germany

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Lausanne ESEB SexChromosomes Aug10-14

We would like to invite abstract submissions for a Symposium on

The Evolution of Sex Chromosomes

to be held during the next ESEB Congress, Lausanne, 10-14 August 2015

The evolution of sex determination is a major question in evolutionary biology. Until recently, however, our views on sex determination and on the mechanisms driving sex chromosome evolution have been heavily based on data from only a handful of classically studied model organisms (e.g. Mus, Drosophila, Caenorhabditis, Silene), with a focus on the evolutionary consequences of recombination arrest. With the recent advent of the genomic era, this field is now experiencing an empirical renaissance, expanding at an unprecedented pace. Next-generation tools have already led to a flurry of new discoveries. Attention has broadened to non-model organisms, including algae and fungi where sex is determined at the haploid level. Studies on fish, amphibians and reptiles are imposing the view that degeneration is not the ineluctable destiny of sex chromosomes, and that the old dichotomy between genetic and environmental sex determination should be reappraised. Most importantly, the mechanisms of sex determination appear now evolutionarily much more labile than thought just one decade ago. What drives the surprising dynamics of such a fundamental process that, at the end, always leads to the same and simple output, i.e. the production of males and females? With this Symposium, we hope to gather theoreticians and empiricists working on a diversity of systems, and interested in the molecular mechanisms, ultimate causes, and evolutionary consequences of sex chromosome evolution.

Our invited speakers are Doris Bachtrog (http://-/ib.berkeley.edu/labs/bachtrog/) and James Umen (http://dbbs.wustl.edu/faculty/Pages/-faculty_bio.aspx?SID=6317)

Registration to the meeting and abstract submission are processed through the site http://www.unil.ch/-eseb2015/. The deadline for submission is January 10, 2015.

The organizers:

Susana Coelho (coelho@sb-roscoff.fr) and Nicolas Perrin (nicolas.perrin@unil.ch).

Nicolas Perrin <Nicolas.Perrin@unil.ch>

Lausanne ESEB SexuallyAntagonisticSelection Aug10-14

ESEB 2015 Symposium on Sexually Antagonistic Selection

Dear colleagues,

We are pleased to invite contributions to the symposium

EVOLUTIONARY CONSEQUENCES OF SEXUALLY ANTAGONISTIC SELECTION

This symposium will be held at the 15th Congress of the European Society for Evolutionary Biology (ESEB) in Lausanne, Switzerland, August 10th-14th, 2015.

INVITED SPEAKERS

- William Rice (UC Santa Barbara)

https://www.eemb.ucsb.edu/people/faculty/rice - Steve Chenoweth (The University of Queensland)

http://researchers.uq.edu.au/researcher/1091 ORGANIZERS

- Göran Arnqvist (Uppsala University)

- Brian Hollis (University of Lausanne)

SYMPOSIUM DESCRIPTION

Males and females share a genome but are often subject to divergent selection. This simple fact results in tension between patterns of male and female adaptation. The aim of this symposium is to highlight phenotypes that experience intralocus sexual conflict as well as their genomic basis, in both laboratory and natural systems. This includes conflicts between the sexes in reproductive strategies, ecological niches, rates of aging, and gene expression, for example. We will also explore the larger significance of sexually antagonistic selection in the maintenance of genetic variation and the evolution of sex chromosomes.

Submissions are invited for either talks (17 minutes including discussion) or posters. The study of sexually antagonistic fitness effects is an active field, with major progress in the last few years, and we are especially keen for contributions from early career researchers.

Information about the conference and symposium, and registration and submission of abstracts, are now avail-

able at:

http://www3.unil.ch/wpmu/eseb2015/ The deadline for abstract submission is January 10th, 2015.

If you have any questions, feel free to contact either of us. We are looking forward to the symposium and hope to see you next year in Lausanne!

Göran Arnqvist

goran.arnqvist@ebc.uu.se

Brian Hollis

brian.hollis@unil.ch

Lausanne ESEB SpeciationGenomics Aug10-14

ESEB 2015 SYMPOSIUM ON SPECIATION GENOMICS

Dear colleagues,

We are pleased to invite you to attend/contribute to the symposium CHARTING THE GENOMIC LANDSCAPE OF SPECIATION which will be held at the 15th Congress of the European Society for Evolutionary Biology (ESEB) in Lausanne, Switzerland, 10th - 14th August 2015. We welcome contributions from both empiricists and theorists interested in understanding genomic patterns of speciation.

INVITED SPEAKERS - Nicolas Bierne (Institut de Sciences de l'Evolution-Montpellier, France) - Mohamed Noor (Duke University, USA)

ORGANIZERS - Anja Westram (Sheffield, UK) - Mark Ravinet (NIG, Japan) - Juan Galindo (Vigo, Spain) - Rui Faria (Porto, Portugal)

NB: Although only two organisers are officially listed, the idea for the symposium was conceived by a group of four people who are all contributing to its organisation.

WEBSITE (Symposium No. 34) http://www3.unil.ch/wpmu/eseb2015/symposium_list/
DESCRIPTION:

Understanding how speciation with gene flow works at the genomic level is currently a major focus of speciation biology. Genome scans between diverging populations have become widespread, demonstrating that the extent of differentiation can be quite variable across the genome. Highly differentiated regions are often interpreted as resulting from divergent selection, therefore playing an important role in speciation. This view is prominently expressed in the striking metaphor of âspeciation islands'. Yet some debate remains. Is differentiation generated by divergent natural selection acting as a barrier to otherwise homogenising gene flow? Or by recombination rate variation and/or intrinsic incompatibilities? Might differentiation occur when gene flow ceases and local adaptation increases the rate of lineage sorting in some parts of the genome but not others? And what genomic features affect homogenising gene flow? Being able to distinguish these alternative explanations is fundamental for understanding the genomic basis of speciation with gene flow. This symposium will explore this debate, bringing together empirical evidence from different perspectives and focusing on emerging approaches for identifying the processes that cause the rugged landscape of genomic differentiation.

DETAILS:

Registration for ESEB 2015 and abstract submission for all symposiums is now available at: http://www3.unil.ch/wpmu/eseb2015/ . Please be aware the deadline for submitting abstracts for both talk and posters is 10th January 2015. Please be sure to state your preference for a talk or poster when submitting your abstract. All four organisers will evaluate the submissions and we hope to finalise our selections by early March. When selecting presentations, we aim to take into account gender balance.

If you have any further questions, don't hesitate to contact us (mravinet@nig.ac.jp; a.westram@sheffield.ac.uk)

We look forward to reading your abstracts and discussing speciation with you at ESEB 2015!

Mark, Anja, Juan and Rui

mravinet@nig.ac.jp

Lausanne ESEB VariationInNaturalSelection Aug10-14

Conference: Lausanne ESEB2015 VariationInNaturalSelection Aug10-14

Dear evoldir members,

You have probably noticed that you can now register for the XVth ESEB Meeting which will be held in Lausanne on August 10th-14th 2015. If you are

interested in how natural and sexual selection vary in time and space, from an evolutionary or ecological perspective, using theoretical or empirical tools, please check out our symposium n28: Variation in natural selection: patterns, causes, and consequences A more detailed abstract for this symposium can be found below and on the ESEB website: http://-www3.unil.ch/wpmu/eseb2015/symposium_list/ (n28) ** Our invited speakers: Dr Christina Caruso (University of Guelph, http://www.uoguelph.ca/ib/-people/faculty/caruso.shtml) Dr Luis-Miguel Chevin (CNRS, Montpellier, https://sites.google.com/site/-luismiguelchevin/profil-scientifique) ** Deadline for abstract submission (for contributed talks and posters): 10th January 2015. http://www3.unil.ch/wpmu/-eseb2015/abstract- submission/.

We look forward to receiving your contributions and discussing this subject in Lausanne, Anne Charmantier & Michael Morrissey

Dr Anne Charmantier CNRS, Montpellier, France anne.charmantier@cefe.cnrs.fr

Dr Michael Morrissey University of St Andrews, UK michael.morrissey@st-andrews.ac.uk

Symposium Title : Variation in natural selection: patterns, causes, and consequences

Despite longstanding interest in the dynamics of selection in space and time and its impact on adaptive evolution, the topic has been remarkably resistant to general empirical progress. This symposium will gather contributions that address the following fundamental questions using theoretical, empirical and experimental approaches:

How much does natural/sexual selection vary in time and space?

What is the evolutionary importance of fluctuating selection? In particular, can variation in selection explain evolutionary stasis, that is, the absence of microevolution in traits that are heritable and appear under strong directional selection?

What are causes (ecological drivers) of variation in selection?

Under what conditions does spatial variation in selection lead to local adaptation? These long-standing questions may remain unresolved in part because of a lack of a conceptual framework to guide empirical studies. Recent theoretical and synthetic studies have begun to provide such a framework. We will bring together theoreticians and empiricists, and people who have recently been developing methods specific to understanding variation in selection. The symposium with therefore be particularly timely in moving this topic forward.

CHARMANTIER Anne <Anne.CHARMANTIER@cefe.cnrs.fr>

Lausanne ProteinEvolution ESEB2015 Aug10-14

Dear colleagues,

we are delighted to invite submissions for the ESEB 2015 symposium

“PROTEIN EVOLUTION: STRUCTURAL AND FUNCTIONAL PERSPECTIVE”.

The symposium will focus on protein evolution in broad terms, including protein conservation and adaption, detection of positive selection and co-evolution, structural evolution and stability constraints. We welcome submissions integrating studies on protein evolution with biochemistry and functional/structural genomics.

The symposium will take place during the 15th Congress of the European Society for Evolutionary Biology (ESEB) on 10 - 14 August 2015 in Lausanne, Switzerland.

REGISTRATION: Deadline: 10 January 2015 http:/-/www3.unil.ch/wpmu/eseb2015 INVITED SPEAKERS: Dan Tawfik, Weizmann Institute of Science, Israel Richard Goldstein, University College London, UK

SYMPOSIUM DESCRIPTION: Proteins evolve by the replacement of amino acids (substitutions) or the insertion/deletion of fragments (indels). For the protein, mutations may be deleterious or beneficial, governed by the laws of natural selection. Beneficial mutations increase the fitness of the phenotype and are more likely to become fixed in the genome (positive selection). Proteins are not robust to drastic changes (i.e. important changes in stability) and mutations that favour an adaptive functional change are generally accompanied by other coevolving mutations that insure the integrity of the 3D structure (compensatory effect). All these biophysical properties are paving the way for protein evolution. Traditionally, there was little if any crosstalk between the fields of protein biophysics, protein structure-function and molecular evolution. The last several years have seen some exciting development in merging these areas to obtain an in-depth understanding of how proteins evolve. For example, a better

understanding of how structural constraints affect protein evolution will greatly help to optimise stochastic models of sequence evolution. The symposium aims at exploring this new synthesis.

Abstracts will be selected for presentation by early March. When submitting your abstract please state your preference (talk, poster) during the submission process. With questions please contact the symposium organizers:

* Romain Studer (rstuder@ebi.ac.uk) * Maria Anisimova (maria.anisimova@zhaw.ch)

We are looking forward to seeing you at ESEB 2015!

Romain and Maria

Romain Studer European Bioinformatics Institute Wellcome Trust Genome Campus, UK

Maria Anisimova Institute of Applied Simulations Zurich University of Applied Sciences Switzerland

Evolutionary Genomics: Vol 1: http://-www.springer.com/biomed/human+genetics/book/-978-1-61779-581-7 Vol 2: http://www.springer.com/-biomed/human+genetics/book/978-1-61779-584-8 anis@zhaw.ch

Lichtenfels CentralEuropeanIUSSI Mar26-29

THE REGISTRATION DEADLINE IS NIGH

###IV Central European Meeting of IUSSI 2015 in Lichtenfels###

We are slowly, but steadily approaching the deadline for the registration to the IUSSI 2015 in Lichtenfels. Therefore, we would once again like to draw your attention to next year's Central European Meeting of the International Union for the Study of Social Insects, which will be held on 26th to 29th March 2015 in Lichtenfels, Germany. We welcome presentations on any aspect of the evolution, ecology, and/or conservation of social insects.

OUR WEBSITE https://www.bayceer.uni-bayreuth.de/iussi2015/ ***INVITED SPEAKERS*** - Audrey Dussutour, University of Toulouse, France - Christoph Grüter, University of Lausanne, Switzerland.

IMPORTANT DATES Registration is open until 30th November 2014 The deadline for abstract submission of oral and poster presentations will be midnight (CET) of 31st December 2014.

HIGH COST EFFECTIVENESS Registration fees include accommodation in a double room and catering Non-member 320 EUR Full member 290 EUR Student member 260 EUR

Single rooms will be an extra 10 EUR per night!

VENUE We will discuss, eat and sleep at "Schloss Schney", once a castle now a conference centre run by the Frankenakademie (http://www.franken-akademie.de). Lichtenfels (http://www.lichtenfels-city.de) is a picturesque town in the upper valley of the river Main with a convenient connection to the high-speed ICE train system of the Deutsche Bahn.

We are looking forward to seeing you in Lichtenfels!

Organizing Committee

Heike Feldhaar, University of Bayreuth Simon Tragust, University of Bayreuth Oliver Otti, University of Bayreuth

If you have any questions concerning the meeting please do not hesitate to e-mail us: iussi2015@bayceer.uni-bayreuth.de

Dr. Oliver Otti Animal Population Ecology Animal Ecology I University of Bayreuth Universitätsstrasse 30 95440 Bayreuth Germany

phone: +49921552646 e-mail: oliver.otti@uni-bayreuth.de

web: Otti's homepage < http://www.bayceer.uni-bayreuth.de/toek1/de/mitarbeiter/mit/-mitarbeiter_detail.php?id_obj=106154 >

We are organising the next Central European IUSSI meeting, go and have look at it here: http://-www.bayceer.uni-bayreuth.de/iussi2015 Oliver Otti <oliver.otti@uni-bayreuth.de>

Lichtenfels CentralEuropeanIUSSI Mar26-29 Deadline

THE REGISTRATION DEADLINE IS THIS COMING SUNDAY, 30TH NOVEMBER

PLEASE REGISTER IF YOU HAVE NOT DONE IT YET!

###IV Central European Meeting of IUSSI 2015 in Lichtenfels###

Four days are remaining to register to the IUSSI 2015 in Lichtenfels. Therefore, we would once again like to draw your attention to next year's Central European Meeting of the International Union for the Study of Social Insects, which will be held on 26th to 29th March 2015 in Lichtenfels, Germany. We welcome presentations on any aspect of the evolution, ecology, and/or conservation of social insects.

OUR WEBSITE https://www.bayceer.uni-bayreuth.de/iussi2015/ ***INVITED SPEAKERS*** - Audrey Dussutour, University of Toulouse, France - Christoph Grüter, University of Lausanne, Switzerland.

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We are looking forward to seeing you in Lichtenfels!

Organizing Committee

Heike Feldhaar, University of Bayreuth Simon Tragust, University of Bayreuth Oliver Otti, University of Bayreuth

If you have any questions concerning the meeting please do not hesitate to e-mail us: iussi2015@bayceer.uni-bayreuth.de

Dr. Oliver Otti Animal Population Ecology Animal Ecology I University of Bayreuth Universitätsstrasse 30 95440 Bayreuth Germany

phone: +49921552646 e-mail: oliver.otti@uni-bayreuth.de

web: Otti's homepage < http://www.bayceer.uni-bayreuth.de/toek1/de/mitarbeiter/mit/-mitarbeiter_detail.php?id_obj=106154 >

We are organising the next Central European IUSSI meeting, go and have look at it here: http://-www.bayceer.uni-bayreuth.de/iussi2015 Oliver Otti <oliver.otti@uni-bayreuth.de>

Lisbon EvolutionaryBiol Dec22

Dear colleagues and friends,

Only one week left for abstract submission (December 2, 2014)! Please register at http://www.apbe.pt/-enbe2014/ The X Portuguese Evolutionary Biology Meeting (ENBE) will be held on December 22, 2014, at the Museu Nacional de História Natural e da Ciência in Lisbon, Portugal.

Contributions are especially welcome from students, as we will give prizes for students for the Best Oral and Poster Communication.

We have confirmed plenary talks by Mónica Dias and Manuel Santos, which will present their latest work and discuss the integration of Evolutionary Biology with other areas of Biology and Medicine.

The general elections for the APBE board (2015-2016) will take place during the meeting.

Book launch at the meeting: Professor Carlos Almaça (1934-2010) "Estado da arte em áreas científicas do seu interesse.

On Saturday, prior to the meeting, there will be a workshop for Science Teachers, organized by the Núcleo de Educação e Divulgação de Evolução da APBE.

Looking forward to meet you all!

The X ENBE organizing committee.

nelson.e.v.martins@gmail.com

Lisbon Portugal Evolution Dec22

First Announcement

Dear colleagues and friends,

We are happy to announce that the X Portuguese Evolutionary Biology Meeting (ENBE) will be held on December 22, 2014, at the Museu Nacional de História Natural e da Ciência in Lisbon, Portugal.

Registration is now open, and can be made through the following link: http://www.apbe.pt/enbe2014/ . The

deadline for registration and abstract submission is December 2, 2014. Please forward this email to anyone you know that might be interested in participating.

Looking forward to meet you all!

The X ENBE organizing committee.

Caros colegas,

É com muito gosto que anunciamos que se encontram abertas as inscrições para o X Encontro Nacional de Biologia Evolutiva, a realizar a 22 de Dezembro, 2014, no Museu Nacional de História Natural e da Ciência, em Lisboa.

O registo pode ser feito através do site http://-www.apbe.pt/enbe2014/. A data límite para registro é no dia 2 de Dezembro de 2014.

Saudações evolutivas!

Comité organizador do X ENBE.

roberto.kellerperez@gmail.com

Luasanne ESEBBacterialEvolution Aug10-14

Registration for the 2015 European Society for Evolutionary Biology Meeting and Abstract Submission for the "Real-time Bacterial Evolution in Vivo and in Vitro" Symposium are now open. ESEB 2015 is taking place in Lausanne, Switzerland, 10-14 August. Register at the early bird rate now through the ESEB 2015 website (www.unil.ch/eseb2015). DEADLINE FOR EARLY BIRD REGISTRATION IS MARCH 31st, 2015

Real-time bacterial evolution in vivo and in vitro

Bacterial microevolution is important in determining host-pathogen interactions, informing microbial forensics, and characterizing the emerging threat of antibiotic resistance. Genomics is affording unprecedented insights into these problems by casting light on the adaptive and non-adaptive processes driving short-term evolution of bacterial populations. The aim of this symposium is to synthesize the recent profusion of experimental and observational work in real-time bacterial evolution, and to prompt a synergistic approach to understanding the selective forces driving bacterial evolution in the laboratory and within the host.

Confirmed speakers: Sebastien Gagneux, Tami Lieberman Symposium organizers: Craig MacLean, Danny Wilson

danny.wilson.list@gmail.com

MasseyU SystematicBotany Nov24-28

Australasian Systematic Botany Society (ASBS) conference

24-28 November 2014

Massey University

Palmerston North

New Zealand

We look forward to welcoming you to the 2014 ASBS meeting at the Massey University campus in Palmerston North, New Zealand. Our theme for the meeting will be 'Next-generation Systematics' which includes approaching systematics from different perspectives, the use of new technologies, and even training the next generation of practicing plant systematists. We look forward to diverse presentations of projects from Australasia and around the world.

Draft program is now available: http://-www.massey.ac.nz/ ~ jtate/ASBS2014NZ.htm Registration deadline is 20 November.

Oral sessions include Paleobotany, Taxonomy, Species Limits, Biogeography and Phylogeny, E-floras, Hybridization and Polyploidy.

Plenary speakers: Dr. Heidi Meudt (Museum of New Zealand, Te Papa Tongarewa): "Next-generation, integrative, collaborative systematics"

Dr. Peter Weston (Royal Botanic Gardens Sydney, Nancy Burbidge Medal recipient): "Problems and progress in plant systematics since Nancy Burbidge"

Dr. Phil Novis (Landcare Research), "Next-generation systematics and the algae: the importance of character evolution"

Abstracts for poster presentations will be accepted until 7 November. Please email Jennifer Tate (j.tate@massey.ac.nz) if you would like to submit an abstract for consideration.

Jennifer A. Tate, Ph.D. Senior Lecturer in Plant Systematics and Evolution Curator, Dame Ella Campbell Herbarium (MPN) < http://www.massey.ac.nz/-

herbarium > Massey University Institute of Fundamental Sciences Private Bag 11222 Palmerston North New Zealand

Phone: 64-6-350-5515 ext. 84718 FAX: 64-6-350-5682

Homepage < http://www.massey.ac.nz/ ~ jtate/-index.htm >

ASBS2014 conference website < http://-www.massey.ac.nz/~jtate/ASBS2014NZ.htm >

j.tate@massey.ac.nz j.tate@massey.ac.nz

MNHN Paris YoungNatHistoryScientists Feb4-6 2

2nd Young Natural History scientists' Meeting 2nd Circular 4th - 6th February 2015 Muséum national d'Histoire naturelle (Paris, France)

The Bureau des Doctorants et EÌtudiants du MuseÌum (association for students and young researchers working at the MuseÌum national d'Histoire naturelle, Paris), Doc'up (association for PhD students working at UniversiteÌ Pierre et Marie Curie) and Timarcha (association for young naturalists) are pleased to announce the opening of the registration and abstract submission to the second

Young Natural History scientists' Meeting

hosted at the MNHN, Paris, France on February 4th-6th, 2015.

We invite submissions for oral and poster presentations on this website < http://ynhm.sciencesconf.org/-submission/submit?lang=en > on all aspects of natural history within four broad themes:

- Biodiversity Dynamics and Conservation

- Earth and Planetary Sciences

- Mankind, Prehistory, Nature and Societies

- Systematics, Evolution and Comparative Anatomy

Submission deadline: 30th November

More information can be found in the circular < http://ynhm.sciencesconf.org/conference/ynhm/-YNHM_2ndcircular.pdf >:

http://ynhm.sciencesconf.org/conference/ynhm/-YNHM_2ndcircular.pdf Please feel free to circulate to colleagues who may be interested in attending, and don't hesitate to get in touch if you have any questions about the meeting (assobdem@mnhn.fr).

We look forward to meeting you in Paris!

Kind regards,

The BDEM, Doc'up and Timarcha

Christie Le Coeur <christielecoeur@gmail.com>

Modena Italy TardigradaEvolution Jun23-26

Dear Colleagues and Friends,

We are pleased to welcome you to the 13th International Symposium on Tardigrada, which will take place in Modena, Italy, from the 23rd to the 26th of June, 2015.

Tardigrada Symposia take place every three years. They offer unique opportunities for scientific researchers, students and other tardigrade enthusiasts from all over the world to get together and to promote scientific exchange and friendship.

The 13th International Symposium on Tardigrada is the scientific forum to provide an up-to-date perspective on the biology of tardigrades. Lectures and posters will cover a broad spectrum of themes such as evolution, taxonomy, phylogeny, biogeography, reproductive and development biology, biochemistry, physiology, genetics, molecular biology, extreme stress resistance and further topics on these fascinating water bears.

We plan to make it a truly memorable meeting, and we are looking forward to welcomingyou in Modena, thirty years since the 4th Symposium on Tardigrada in 1985.

All the information about the symposium is available at www.tardigrada2015.it The deadline for the payment of the Symposium Registration Fee and the submission of the Registration Form is 8th March 2015 (after 8th March an extra charge will be required).

The deadline for the submission of abstract/s is 8th March 2015.

We plan to make it a truly memorable meeting, and we are looking forward to welcoming you in Modena, thirty years since the 4th Symposium on Tardigrada in 1985.

Please forward this message to anyone who might be interested.

Kind regards,

The Organizing Committee

Lorena Rebecchi (Università di Modena e Reggio Emilia)

Tiziana Altiero (Università di Modena e Reggio Emilia)

Roberto Bertolani (Università di Modena e Reggio Emilia)

Michele Cesari (Università di Modena e Reggio Emilia)

Michele d'Errico (Università di Modena e Reggio Emilia)

Ilaria Giovannini (Università di Modena e Reggio Emilia)

Roberto Guidetti (Università di Modena e Reggio Emilia)

Maria Agnese Sabatini (Università di Modena e Reggio Emilia)

Matteo Vecchi (Università di Modena e Reggio Emilia)

Leonardo Latella (Museo Civico di Storia Naturale, Verona)

Sandra J. McInnes (British Antarctic Survey, Cambridge, UK)

Diane R. Nelson (East Tennessee State University, USA)

Lorena Rebecchi, PhD Professore Associato di Zoologia Dipartimento di Scienze della Vita Università di Modena e Reggio Emilia Via Campi 213/D - 41125 Modena, Italia Tel: +39 059 2055553 Fax: +39 059 2055548 e-mail: lorena.rebecchi@unimore.it

http://www.tardigrada.modena.unimo.it/ rebecchi lorena <rebecchi.lorena@unimore.it>

Porquerolles France MathCompEvolBiol Jun21-25

Conference: MCEB - Mathematical and Computational Evolutionary Biology 21-25 June 2015 - Porquerolles Island, South of France.

Webpage: http://www.lirmm.fr/mceb2015/ Preregistration deadline: February 10th Notification to applicants: February 28th Final list of attendees: April 1st

WHAT/Scope: Mathematical and computational tools and concepts form an essential basis for modern evolutionary studies. The goal of the MCEB conference (at its 7th 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. The theme of this year's edition will be new data, new questions, new methods. New generation sequencing techniques have multiplied not just the amount, but also the types of genetic data produced, giving rise to new questions, and new methodologies to answer them. These methodologies are often cross-disciplinary, with applications to diverse research topics. General concepts, models, methods and algorithms will also be presented and discussed, just as during the previous conference editions.

WHERE and WHEN: Porquerolles Island, near Hyères, in the South of France, 21-25 June 2015.

Cost: Conference fees including accommodation for four nights, meals, coffee breaks, etc., will be between 300 euro and 630 euro , all inclusive, and will vary depending on the room. PhD students and postdocs will benefit of the cheapest rooms.

Keynote speakers (to be completed):

David Bryant - http://www.maths.otago.ac.nz/-˜dbryant/ University of Otago, NZ

Jukka Corander - http://www.helsinki.fi/bsg/ Bayesian Statistics Group, University of Helsinki, FI

Asger Hobolth - http://www.daimi.au.dk/ ˜ asger/- Bioinformatics Research Center (BiRC), Aarhus University, DK

Philippe Lemey https://rega.kuleuven.be/cev/ecv/lab-members/PhilippeLemey.html Rega Institute, Clinical and Epidemiological Virology, BE

Bernard Moret - http://lcbb.epfl.ch/ Laboratory for Computational Biology and Bioinformatics, EPFL, CH

Ludovic Orlando http://geogenetics.ku.dk/-research_groups/palaeomix_group/ Center for GeoGenetics, Natural History Museum of Denmark, DK

Molly Przeworski - http://-przeworski.c2b2.columbia.edu/ Columbia University, New york, USA

For more information, visit the website at: http:/-/www.lirmm.fr/mceb2015/ Please forward this announcement.

raphael.leblois@supagro.inra.fr

Tuscany QuantGenomics Feb21-27

We're inviting applications for the 2015 Quantitative Genetics & Genomics Gordon Research Seminar (February 21-22 in Tuscany, Italy), followed by the Quantitative Genetics & Genomics Gordon Research Conference (February 22-27).

http://www.grc.org/programs.aspx?id=3D15733 The seminar will feature 10 talks by outstanding PhD students and post-docs, selected from abstracts submitted by 21 November. The talks at the conference are given by world-renowned scientists - the topics and speakers are listed below.

Both the seminar and conference provide a unique forum for young researchers to interact with each other and with leaders in genetics of human, animal, plant, model organism, and natural populations. To this end, attendance at the conference is capped at 180 participants. This means you really get a chance to talk to everyone from breakfast to the drinks after dinner - interaction is key at this meeting.

Apply to the Gordon Research Seminar before 21 November to give a talk. The best talk will be awarded a prize in recognition.

We hope to see you at the seminar!

2015 Quantitative Genetics & Genomics Gordon Research Seminar Chairs Julia Steinberg (University of Oxford) Frank Albert (UCLA)

Program for the 2015 Quantitative Genetics & Genomics Gordon Research Seminar

- Keynote by Peter Visscher (The University of Queensland, Australia)

- 10 Speakers To Be Selected from Submitted Abstracts

- Discussion leaders: Kathleen Donohue (Duke University), Michel Georges (University of Liege, Belgium), James Holland (North Carolina State University), Tuuli Lappalainen (New York Genome Center).

Additional Discussion Leaders May Be Selected from Submitted Abstracts

Program for the 2015 Quantitative Genetics & Genomics Gordon Research Conference

Genomic Architecture of Complex Traits - Uncovering Missing Heritability (Ed Buckler / Alkes Price / Jian Yang)

From Correlation to Causation I - Identifying Causative Variants Underlying Complex Traits (Manolis Dermitzakis / Jim Holland / Hailiang Huang / Gil McVean / Augustin Kong)

From Correlation to Causation II - Identifying Causative Genes Underlying Complex Traits (Manolis Dermitzakis / Jonathan Pritchard / Tuuli Lappalainen)

From Correlation to Causation III - Identifying Networks Underlying Complex Traits (Ann Stapleton / Stig Omholt / Ines Thiele / Marc Vidal / Dana Pe'Er)

Population Genomics of Complex Traits (Bruce Walsh / Piter Bijma / Molly Przeworski)

Evolutionary Genomics of Complex Traits (Bruce Walsh / Leif Andersson / Kathleen Donohue / Peter Andolfatto / David Stern)

Genomics of Host Pathogen Interactions (Daniel Pomp / Jeroen Raes / Ran Blekhman)

Epigenomics of Complex Traits (Vincent Colot / Richard Mott / Erik Miska / Frank Johannes / Sonia Shah)

Translational Genomics for Complex Traits (Chris Schoen / Mike Goddard / Laurence Moreau / Atul Butte)

FAlbert@mednet.ucla.edu

UHamburg BehaviouralEvolution Feb11-14

*The registration to the 10th topical meeting of the Ethological Society: "Causes and consequences of social behaviour" is now open (and closes on 18th December 2014). The conference will be held at the University of Hamburg 11th-14th February 2015. *

For further information and registration please visit our website:

http://www.ethology-hamburg-2015.de/index.html or contact us under info(at)ethology-hamburg-2015.de

wiebkesch@googlemail.com

UMichigan ECSS Microbiome Ecol Evol Mar27-29

CALL FOR NOMINATIONS

11th ANNUAL EARLY CAREER SCIENTISTS SYMPOSIUM

Ecosystems within organisms: Ecology and evolution of the microbiome

The Department of Ecology and Evolutionary Biology at the University of Michigan invites nominations of outstanding scientists early in their careers to participate in an exciting international symposium about the ecological and evolutionary processes of the microbiome. The symposium events will take place from 27-29 March 2015, in Ann Arbor, Michigan.

Seven early career scientists, alongside two keynote speakers, will be selected to present their work and to participate in panel discussions. We welcome nominations of early career scientists who are studying ecosystems within organisms. Potential topics include the role of the microbiome in disease processes, microevolution, or development, meta-community theory in host-associated communities, multi-host multi-parasite systems, and eco-immunology. The research focus can range from bacteria to metazoans and from fitness effects on host organisms or their microbiota to the downstream effects of microbiomes on ecosystems. We are interested in scientists with diverse expertise (including anthropology, medicine, veterinary medicine, oceanography, geobiology, virology, computer science, philosophy of science).

Early career scientists are considered 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.

The nomination consists of a brief letter of recommendation addressing the nominee's scientific promise and ability to give a compelling 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, please) to eeb-ecss-nomination@umich.edu using the nominee's name as the subject line (last name first). More information is available at http://sites.lsa.umich.edu/ecss/ . Review of nominations will begin on December 15, 2014.

Selected participants will be contacted by January 6, 2015, 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.

The 2015 Early Career Scientists Symposium scientific committee includes: Tim James (chair) Chelsea Wood Kevin Theis Marian Schmidt Thomas Jenkinson Cindy Carl

The University of Michigan EEB website is http://-www.lsa.umich.edu/eeb/ tyjames@umich.edu

USaskatchewan CSEE Nov1 CallSymposia

The organizing committee of the 2015 CSEE Annual Meeting in Saskatoon invite proposals for symposia for the meeting (May 21-25). We anticipate featuring six half-day symposia occurring on the mornings of May 22-24 (two concurrent symposia each day). The theme of the meeting is 'Ecology and evolution in managed landscapes'. We encourage symposia reflecting this theme, but will consider exceptional symposia from across ecology and evolution. If you are interested in organizing a symposium please submit the following information to Jeff Lane <jeffrey.lane@usask.ca> by November 1, 2014.

1. Title 2. Description of symposium (200-250 words) 3. List of 6 suggested speakers, their affiliations, and tentative presentation titles 4. An indication of whether the speaker has confirmed their participation.

Each symposium organizer will have a budget of $1200 that can be used to defray speaker conference registration fees and/or travel. For more information please contact Jeff or visit the conference website at http:/-/csee2015.usask.ca/index.php Dr. Jeffrey Lane Assistant Professor Department of Biology University of Saskatchewan www.lanelab.ca jeffrey.lane@usask.ca

USheffield Popgroup Jan6-9 Registration

Dear all,

Popgroup 2015 is fast approaching and the deadline for registration and abstract submission is only 10 days away!

The registration includes all lunch and evening catering from the first evening on Tuesday 6th January up to and including lunch on Friday 9th January; the conference banquet is even included in the package! The standard registration is £240 and there are concessionary rates for Genetic Society members and for students. We have also arranged a one-day rate for those wishing to attend one day only.

For more information on how to register, visit our registration webpage http://-www.populationgeneticsgroup.org/index.php?page=-registration Presentation slots are first-come, first-served and going fast - although there are still a few talk slots left, so please do register and submit your abstracts as soon as possible and before the *deadline 30 November 2014*.

There is more information on the conference itself on the Popgroup website http://-www.populationgeneticsgroup.org/ We are looking forward to welcoming you to Sheffield next year!

Celine on behalf of Popgroup 2015 Organising Committee

on behalf of the Popgroup 2015 Conference Organising Committee Sheffield, Tuesday 6th to Friday 9th January 2015 University of Sheffield Department of Animal & Plant Sciences http://www.populationgeneticsgroup.org/ c.pagnier@sheffield.ac.uk

Vienna SMBE2015 Jul12-16 CallSymposia

Reminder: Call for Symposia closing on October 19, 2014

Dear Colleague,

The Society for Molecular Biology and Evolution is now accepting proposals for symposium topics for the 2015 annual meeting, taking place in Vienna July 12th-16th 2015.

For each accepted symposium the society provides substantial financial support to facilitate symposia organizers to attract outstanding invited speakers (up two invited speakers per symposium):

- free registration for invited speakers

- free accommodation for invited speakers

- up to 1900 euro travel support

To submit your proposal please follow the instructions in the guide to applicants available at: http://smbe2015.univie.ac.at/program/call-for-symposia/ Return your completed submission to office@smbe2015.at by Sunday October 19, 2014. The subject line should read: Symposium submission

Successful applications will be confirmed by December 5, 2014 and a call for abstracts will follow.

We hope to see you all in Vienna!

Kind regards,

Julia Hosp On behalf of the local organizing committee Website: http://smbe2015.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 http://www.vetmeduni.ac.at/en/-population-genetics/ Tel: +43 1 25077 4338 Fax: +43 1 25077 4390

SMBE 2015 in Vienna http://smbe2015.at julia.hosp@gmail.com

GradStudentPositions

ArizonaStateU InsectDiversityManagement

Graduate Research Opportunity " Insect Diversity in Mormon Cricket Ecosystems

Graduate Student Opportunity " M.Sc. in Biology

Franz Lab and Hasbrouck Insect Collection, School of Life Science, Arizona State University

http://taxonbytes.org/graduate-research-opportunity-insect-diversity-in-mormon-cricket-ecosystems/ Our lab (http://taxonbytes.org/) has an opening for a funded M.Sc. research project involving biodiversity surveys and information products related to rangeland grasshoppers and Mormon cricket pests and associated non-target organisms from the grasshopper and Mormon cricket ecosystem. The project will be co-advised by research entomologists of the USDA Center for Plant Health Science and Technology in Phoenix, Arizona, under the leadership of Dr. Larry Jech. A central research objective is to characterize the effects of a new insecticide, chlorantraniliprole, on diverse non-target arthropods in rangeland ecosystems in 17 western states, with emphasis on orthopteran groups.

The selected candidate will be broadly trained in insect biodiversity science, informatics, and applied entomology. Interested candidates are strongly encouraged to contact Dr. Nico Franz (e-mail: nico.franz@asu.edu) to learn more about this opportunity. Applications to the M.Sc. in Biology program should be submitted on-line at: https://sols.asu.edu/graduate/ biology-masters-and-phd- programs.

The application submission deadline is December 15, 2014.

Submitted by Nico Franz

Nico M. Franz, Ph.D. Associate Professor & Curator of Insects

School of Life Sciences PO Box 874501 Arizona State University Tempe, AZ 85287-4501

Lab: (480) 965-2850

Collection:(480) 965-2036 Fax: (480) 965-6899 E-mail: nico.franz@asu.edu

Website: http://taxonbytes.org Twitter: https://twitter.com/taxonbytes ASUHIC: http://symbiota4.acis.ufl.edu/scan/portal/collections/misc/collprofiles.php?collid=1 WoNA: http://symbiota4.acis.ufl.edu/scan/portal/checklists/checklist.php?cl=1 nmfranz@asu.edu

BaylorU Behavior Evolution Genomics

The Danley Lab at Baylor University (http://sites.baylor.edu/danleylab/) seeks a Ph.D. student broadly interested in evolutionary biology using East African cichlid fish as a model system. The exact nature of the research will be developed by the student in collaboration with Pat Danley though it should relate to the lab's previous research on sexual selection (mate choice, aggression), phylogeography, and speciation.

Applicants with a background in behavioral, phylogenetic, and genomic methods are encouraged to apply. Applicants experienced with R, Perl, and Python are a plus. Applicants should possess an M.S. degree or substantial undergraduate research experience, GRE Verbal and Quantitative Reasoning scores at or above the 70th percentile, GRE Analytical Writing score of 4.5 or greater, and undergraduate and graduate (if applicable) GPA of 3.5 or higher. Please review additional departmental admission guidelines (http://www.baylor.edu/biology/index.php?id=68418). Applicants must be able to begin by the fall of 2015.

The successful applicant will be admitted to the Department of Biology's Ph.D. program which provides 5 years of 12 month stipend ($21,000, plus possible enhancements for outstanding students). Admission also includes full tuition remission (up to a 20 credits per year), health insurance benefits (80% of cost of premium covered; cost to student ~$450/y in 2015), and additional funding opportunities to travel to professional meetings.

The Baylor's Department of Biology has an active graduate community of over 50 students and possesses strengthens in the areas of integrative organismal biology and aquatic ecology. Waco, home of Baylor University, is conveniently located 90 minutes from both Dallas and Austin and was recently ranked as one of America's Awesomest (sic) Cheap Cities making it a perfect home for would be graduate students. http://www.wisebread.com/10-of-americas-awesomest-cheap-cities To apply, please send an email describing your background and interests to Dr.Patrick Danley (patrick_danley@baylor.edu). No application will be considered without previous interaction by email and telephone/skype with Dr. Danley. Complete applications need to be submitted to the Graduate School by January 25, 2015 to be eligible for all-expenses paid campus visit for the most qualified applicants. Applications will not be considered after February 15, 2015.

Patrick Danley, Ph.D. Associate Professor Department of Biology Baylor University

http://sites.baylor.edu/danleylab/
Patrick_Danley@baylor.edu

BostonU EvoDevo

The Warkentin Lab at Boston University seeks applications for a PhD student to work on our NSF-funded project, 'The Development of Adaptive Embryo Behavior.'

Project Overview

When to hatch is an essential decision embryos make, based on environmental cues. Hatching is also a physical feat that embryos perform. The ability to assess cues, exit the egg, and survive outside the egg all change as embryos develop. Thus, under the same external conditions, both what embryos can do and what they should do to survive change developmentally. The overall project examines the development and regulation of environmentally cued hatching in red-eyed treefrogs, /Agalychnis callidryas/. These embryos hatch up to 40% prematurely to escape from threats to the egg, using cues in at least two sensory modalities, and multiple selective trade-offs shaping hatching timing are known. The project integrates work on hatching mechanisms and performance, sensory system development, and hatching decision rules for responses to simple hypoxia cues and complex mechanosensory cues, to examine why and how development changes behavior. It will improve our understanding of embryo lives, behavioral development, and how animals use different kinds of information to make decisions.

Position Description

The student will participate in multiple aspects of the project and be mentored to develop a dissertation that builds on some component of the project and extends to address independent questions. The student will be based in the Ecology, Behavior, and Evolution group at BU, conduct field research at the Smithsonian Tropical Research Institute in Gamboa, Panama and, depending on specific interests, may be co-mentored by mechanical engineer Greg McDaniel.

For more information see the lab website:

sites.bu.edu/warkentinlab/people/prospective-students/

For specific inquiries about the position, email Karen Warkentin (kwarken@bu.edu). Include your CV, transcript, and a statement of why you are interested in this position and how it relates to your overall goals and prior experience. Formal applications to the graduate school are due 7 December.

Karen Warkentin Associate Professor of Biology Boston University and Research Associate Smithsonian Tropical Research Institute

kwarken@bu.edu

BremenU WaspMateChoice

PhD position: Genetic incompatibility and mate choice in parasitoid wasps - A182/14 -

A PhD position is available for 3 years (payment 50% TV-L E13) in the population ecology and evolutionary ecology group, headed by Prof. Dr. Thomas S. Hoffmeister, at the University of Bremen, Germany. The University of Bremen comprises 19,000 students and supports a broad range of academic disciplines. The ambition and success of its research strategy is reflected in its being one of eleven universities, selected within the German "Excellence Initiative".

Project outline: Allelic incompatibility between individuals of the same species should select for mate choice based on the genetic make-up of both partners at loci that influence offspring fitness. Therefore, mate choice may be an important driver of allelic diversity. A complementary sex determination (CSD) system is responsible for intraspecific allelic incompatibility in many species of ants, bees, and wasps. CSD may thus favour disassortative mating and in this, resembles the MHC of the vertebrate immune system, or the self-incompatibility (SI) system of higher plants. The aim of this project is to analyse mate choice behaviour in the parasitic wasp Bracon brevicornis (Hymenoptera, Braconidae), thereby disentangling the impact of indirect (kin recognition) and direct (allele recognition) influences of the genetic composition of mating partners. The project will focus on proximate and ultimate cues of mating preferences alike and consist of fieldwork as well as laboratory experiments and molecular work.

There is flexibility in the programme and the precise direction and emphasis of the project will be determined by collaboration between the student and the supervisors.

Applicants must have a master's degree, or equivalent, in a relevant subject, e.g. ecology, animal behaviour, entomology and/or evolutionary biology. We expect an excellent knowledge of the English language in both writing and speaking. The successful candidate will

receive high quality training in all relevant skills, conduct innovative research in a lively and active research group, and participate in teaching activities at the BSc or MSc level. The University of Bremen has received a number of awards for its diversity policies and offers a family friendly working environment. We strive to increase the number of international researchers and particularly solicit applications from suitably qualified candidates. Applications from female candidates and applications of academics with a migration background are explicitly welcome. Disabled persons with the same professional and personal qualifications will be given preference.

Applications should be sent include a scan of the Master's diploma, a transcript of records, a CV, and a short proposal explaining how the applicant would approach the project, including specific hypotheses (maximum 1 page including references). Two potential researchers should be mentioned in the cover letter who are willing to supply letters of reference.

Applications should be sent by email in a single pdf to Mrs. Inae Kim-Frommherz (inaekf@uni-bremen.de) until 31.12.2014

Informal inquiries to the position can be directed to Dr. Andra Thiel (thiel@uni-bremen.de).

Inae Kim-Frommherz <inaekf@uni-bremen.de>

CABI Switzerland InvasiveSpecies

Assessing non-target risks of candidates for the biological control of Ambrosia artemisiifolia in Europe

The North American plant Ambrosia artemisiifolia, common ragweed, has become one of the flagship invasive alien species in Europe, causing severe health issues (allergies) and yield reductions in agriculture. While herbicides and mechanical control are well suited as local and short-term measures to control A. artemisiifolia, sustainable control strategies to reduce its abundance and spread as well as its pollen production in badly infested areas are lacking in Europe. One of the main objectives of the recently launched European COST action SMARTER ('Sustainable management of Ambrosia artemisiifolia in Europe'; ragweed.eu) is to develop sustainable control strategies such as biological control (BC), an approach which has been successfully implemented against A. artemisiifolia in other continents.

Within this project, an exciting PhD position funded by the Swiss State Secretariat for Education and Research (SER) is available at CABI in Switzerland (cabi.org/about-cabi/cabi-centres/Switzerland), with the coordinator of the Working Group 1 (Biological Control) in SMARTER. The PhD aims to conduct biosafety studies with exotic insect species that are considered for BC of A. artemisiifolia in Europe. The goal is to combine standard biosafety tests (assessment of fundamental host-range) with new, innovative approaches that will strengthen the scientific quality of non-target risk assessment, specifically with regard to i) host-range testing under open-field conditions, and ii) prediction of the population dynamics of BC candidates prior to their release into a new environment, and iii) their impact on the population dynamics and spread of common ragweed.

The student will be based at the CABI Centre in Delémont, Switzerland, and registered at the University of Fribourg (www.unifr.ch). He/she will be closely collaborating with the research group of Prof. Heinz Müller-Schärer (University of Fribourg; www.unifr.ch/-ecology/groupmueller, Action chair of SMARTER) and conduct field work in North America and Israel.

Required competences:

* Master in natural science or related fields, preferably with a background in insect-plant interactions or biological invasions

* Good skills in statistical analysis

* Experiences with population modelling are an asset

* High social competences in interacting with other research colleagues and stakeholders

* Excellent skills in oral and written communications (English)

* Highly dedicated and motivated student

What the research project offers:

* Work in a strong international and interdisciplinary team

* PhD salary according to Swiss National Science Foundation standards during 3 years

* Field expenses, travel allowances

* Close collaboration with research partners and stakeholders of the European COST action SMARTER (presently 180 participants from 33 countries, cf. ragweed.eu).

Application: Please send a CV, academic transcript, contact details for at least two academic references, and a brief outline of research interests to: Dr Urs Schaffner

(u.schaffner@cabi.org), by 31 December 2014. Informal inquiries are welcome. Review of applications will begin immediately, and short-listed candidates will be interviewed. The envisaged start date for the project is 1 February 2015.

Please let me know in case I should post this information on EvolDir myself. With best regards, Urs Schaffner

Urs Schaffner Head Ecosystems Management CABI Rue des Grillons 1 CH-2800 Delémont Switzerland

Telephone: +41 (0)32 421 4877 Fax: +41 (0)32 421 4871 Email: u.schaffner@cabi.org Visit us at www.cabi.org Our centre annual report 2012 is available at www.cabi.org/about-cabi/cabi-centres/switzerland CABI improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment

Urs Schaffner <u.schaffner@cabi.org>

CardiffU GenomicsLocalAdaptation

Start date of the PhD: 1st October 2015

Duration of the PhD: 3.5 years

Supervisors: Dr Pablo Orozco-terWengel http://-www.cardiff.ac.uk/biosi/contactsandpeople/stafflist/-m-p/orozcoterwengel-pablo-dr-overview_new.html Co-Supervisor: Prof Mark Beaumont http://-www.bristol.ac.uk/biology/people/mark-a-beaumont/-overview.html Understanding how species adapt to the environment they live in is a major goal in evolutionary biology. This is of particular value in light of climate change, where extant species will have to adapt to warmer and potentially harsher conditions relatively fast. However, identifying the genomic regions involved in local adaptation has been a challenging problem because the tools to survey species genomes have only become available in the last two decades, e.g. SNP arrays and whole genome sequencing. The aim of this project is to analyse British sheep occurring in contrasting environments (mountain vs. lowland) using the Ovine HD SNP chip (~700,000 SNPs) to identify genetic variation linked to local adaptation in the UKs heterogeneous agricultural landscape. Additionally, the SNP chip data will be analysed in combination with whole genome data for a population of Iranian wild mouflon (the sheeps ancestor) and Iranian sheep from the domestication centre in order to identify genetic signatures of selection specific to the domestication event.

The PhD student will be based 80% at Cardiff University, where the research group specialises in identifying signatures of selection using next generation sequencing in livestock and wildlife, and 20% at Bristol University, a world leader in the development of statistical approaches to study demographic history using genetic data. For this project the PhD student will be trained in sample preparation for SNP chip analysis and bioinformatics analyses (e.g. data quality filtering, demographic analyses, and identifying signatures of selection). This experimental design will allow the PhD student to compare populations of British mountain vs. lowland sheep, in the equivalent of a replicated experiment, to identify specific signatures of local adaptation to the environment where these populations live in, while controlling for confounding factors such as the demographic history (to be simulated with approximate Bayesian computation) and the selection signature left by the domestication process (to be accounted for by comparing domestic sheep against Iranian wild mouflon).

Informal enquiries are also encouraged. Please contact Dr. Pablo Orozco-terWengel at'Orozco-terWengelPA@cardiff.ac.uk'.

Further information can be found at:http://www.cardiff.ac.uk/biosi/research/-organismsandenvironment/index.html Funding Notes: Applications are invited from graduates who possess at least 2.1 Honours or Masters degree in biology, ecology, bioinformatics or other relevant discipline.

To apply, please email your CV, 2 referees and relevant academic qualifications along with a covering letter to Dr. Pablo Orozco-terWengel 'orozco-terwengelpa@cardiff.ac.uk' AND also submit an online application at the following University's online portal by selecting 'Doctor of Philosophy (Biosciences) October Start - 01 Oct 2015' :http://www.cardiff.ac.uk/-regis/general/applyonline/biosipgr.html This project is funded through NERC GW4+ DTP and is open for Home/EU students only. EU students who do not meet the residency criteria are eligible for fees only award.

Pablo Orozco-terWengel <orozco_terwengel@yahoo.com>

CardiffU NGS SlugsWeeds

BBSRC South West Doctoral Training Partnership, UK Topic: Analysis of interactions between slugs and weeds in arable crops using next generation sequencing

Main supervisor:Prof. William O.C. Symondson(School of Biosciences, Cardiff University)

Second supervisor: Dr Ian P. Vaughan (School of Biosciences, Cardiff University)

Dr Pablo A. Orozco-terWengel (School of Biosciences, Cardiff University)

Dr James R Bell (North Wyke, Rothamsted Research)

Slugs are major crop pests throughout the temperate world, especially in the UK where the climate fosters high densities, threatening profits and food security. They are ecosystem engineers, having hierarchies of preference for the seedlings of different weed and crop species that alter subsequent plant community composition. Removal of weeds (with herbicides) results in greater slug damage to the crop while slug control (with molluscicides) is highly weather-dependent and slugs persist. Better understanding of the preferences of slugs for different weed species offers the opportunity to be more selective in the management of weeds and slugs in major crops such as wheat and oilseed rape. Selective herbicides can remove weed species less palatable to slugs, that are likely to be major competitors (e.g. monocots like Blackgrass) with the crop, while leaving seedlings that are palatable unharmed to potentially divert slugs from consuming the crop.

Next Generation Sequencing will be used to analyse plant DNA in gut and faecal samples collected from slugs to determine their weed/crop preferences. We will target the ITS2 gene, exploiting the near comprehensive database of Welsh and UK sequences that now exists. Ratios of different plant species in the slugs will be compared with the abundances of weeds and crop plants in fields using Monte Carlo simulations and co-occurrence modelling to determine preferences. Plots trials will calibrate our field results and test the viability of selective weed control to protect crops.

The multidisciplinary team of supervisors will ensure major training opportunities. WOCS will provide training in molecular analysis of herbivory, using NGS; POTW will provide bioinformatics training (NGS output); IPV will supervise Monte Carlo model development for herbivory and JRB will advise on co-occurrence networks (for slug-weed interactions).

Rotations:1) NGS of gut contents requires comprehensive barcode databases for sequence identification. The student will be provided with a self-contained set of material to barcode from ongoing work into the diets of endangered species (supervisor WOCS). Expertise will be acquired in both practical molecular analyses and tree construction. 2) A major problem in diet analyses is differential DNA survival during digestion of sequences from different species, compounded by factors such as amplicon size and gene copy number. Feeding trials (using project-relevant slugs and weeds) will be conducted and decay curves will be incorporated into new Monte Carlo plant choice models (supervisor IPV). Training will be in conducting trials and model development, both directly relevant to the PhD.For information please contactSymondson, William O.C., Prof

| Symondson, William O.C., ProfInformation about a member of staff at the School of Biosciences, Cardiff University, Cardiff, Wales, UK. |

Pablo Orozco-terWengel <orozco_terwengel@yahoo.com>

CaseWesternReserveU AdaptiveEvolution

A PhD position is available in the lab of Ryan Martin (http://biology.case.edu/faculty/ryan-martin/) in the Department of Biology at Case Western Reserve University. Research in the lab is broadly focused on understanding how biotic interactions and environmental variation drive adaptive evolution and diversification. Specific research topics of the lab include the evolution of resource polymorphism; causes and consequences of disruptive selection; the evolution of character displacement; and signal evolution in heterogeneous environments. We primarily investigate these topics in desert amphibians, and freshwater fishes.

The students and faculty of the Department of Biology at Case Western Reserve comprise a collegial, interactive and dynamic group. Faculty research programs in Ecology and Evolutionary Biology span interests in amphibian ecology, evolution and conservation (Mike Benard), theoretical ecology (Karen Abbott and Robin Snyder), plant community ecology and phylogenetics (Jean Burns), and ecological and evolutionary consequences of global change (Sarah Diamond).

Case Western Reserve University is an excellent place for graduate research. In addition to CWRU, there are several nearby institutions with top-tier lab facilities and ecologically diverse field sites, including the University Farm, Holden Arboretum, and the Cleveland

Metropark System. Students in the lab will also have opportunities to conduct research at the Southwestern Research Station, located in the sky islands of Southeastern Arizona.

Case Western Reserve is a private research university (RU/VH Carnegie classification) located in the culturally vibrant University Circle neighborhood of Cleveland, Ohio; University Circle is also home to a world-class symphony orchestra, botanical gardens and, several art and natural history museums. Cleveland has fantastic food, art, theatre and music scenes, combined with a low cost of living.

Students interested in pursuing graduate research in the lab should email me at ryan.a.martin[at]case[dot]edu and include the following information: a summary of your educational and research experience, research interests, and potential areas of research you would like to pursue in the lab. Further information regarding the Biology Graduate Program can be found at http://biology.case.edu/graduate/admission/
ram225@case.edu

ClarkU MA EvolutionaryGenomics

The Gibbons lab (https://wordpress.clarku.edu/-jgibbons/) in the Department of Biology at Clark University is accepting applications for PhD students to start in August 2015.

The overarching research theme of our lab is to understand how evolutionary forces shape the genome and how these changes influence phenotype. More specifically, our lab studies (i) how selection alters the structure and function of fungal genomes and, (ii) how copy number variation influences genome architecture, and gene expression. To gain a comprehensive understanding of these topics, we heavily utilize whole genome Next Generation Sequencing data to characterize patterns of genomic variation. Additionally, we pair these computational analyses with functional experiments spanning the realms of transcriptomics, proteomics, and metabolomics. Applicants interested in fungal biology will also have opportunities to interact and collaborate with the Hibbett lab (http://www.clarku.edu/-faculty/dhibbett/). Clark University is a vibrant and supportive small liberal arts research university located in Worcester, MA. The Biology Department at Clark has particular strengths in Evolutionary Biology, Genomics, and Molecular Biology. PhD students are guaranteed funding for five years, with a possible extension through teaching and research assistantships. For more information please visit our departmental web page (http://www.clarku.edu/departments/biology/).

Please email a brief description of why you are interested in the position and a current resume or CV to jgibbons@clarku.edu

John G. Gibbons Assistant Professor of Biology Clark University 950 Main Street Worcester, MA 01610 Email: jgibbons@clarku.edu Tel: 508.793.7129 https://wordpress.clarku.edu/jgibbons/
JGibbons@clarku.edu

CUNY NewYork ComparativePopulationGenetics

The Hickerson lab at the City University of New York has an opening for a PhD student who is interested in community-level population genetics and comparative phylogeography. The group is focusing on developing and implementing population genetic methods for understanding the evolutionary and demographic histories of species assemblages. The ideal candidate will have a strong interest or aptitude in quantitative biology, modeling, and programming as well as an interest in evolutionary genetics and biogeography. The lab welcomes qualified applicants with diverse backgrounds, including biology, anthropology, mathematics, physics, computer science, and related fields. This opening offers an opportunity for independent research in joint quantitative and empirical labs that now have 2 post-doctoral researchers, 3 PhD students and access to a wide array of population genomic datasets. We are in active collaboration with the lab of Ana Carnaval (CCNY) on an NSF-funded Dimensions of Biodiversity project (www.afbiota.org) focusing on the Atlantic Forest ecosystem of Brazil. There is a tight collaboration with the Kyle McDonalds group at City College of New York as well as with the research groups of Michelangeli and Thomas at the New York Botanical Garden. Through our 5 year NSF CAREER grant (http://-1.usa.gov/1uM3lCZ), our group is also in close collaboration with the research groups led by Konrad Lohse (http://lohse.bio.ed.ac.uk/) and Graham Stone at the University of Edinburgh (http://bit.ly/1AedKuC), as well as with Elizabeth Derryberry (Tulane; http://-bit.ly/1EWRzHp) and curator Brian Smith from the nearby American museum of Natural History (http://-

bit.ly/1xkZwWq).

The lab benefits from a thriving academic environment in New York City and has close ties with other biogeographically focused labs at CUNY and the American Museum of Natural History, as well as being part of the CUNY subprogram in Evolution, Ecology and Behavior (http://bit.ly/1F0kpZc). We anticipate that the position would start in the Fall of 2015. If interested please contact Mike Hickerson (mhickersion âat' ccny.cuny.edu). Note that applications for Fall 2015 to the CUNY EEB subprogram must be received before January 1rst. For more information visit: http://-bit.ly/1a2oJFK

Mike Hickerson Associate Professor City College of New York - Biology Department; City University of New York Ecology, Evolution and Behavior Sub-Program 160 Convent Ave New York, NY 10031 phone 212-650-8530 lab 212-650-3457 Research Associate - Division of Invertebrate Zoology American Museum of Natural History http://hickerlab.wordpress.com/ mhickerson@ccny.cuny.edu

CUNY NewYork ComparativePopulationGenetics 2

CUNY.NewYork.ComparativePopulationGenetics

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Mike Hickerson <mhickerson@gmail.com>

DartmouthC NewHampshire MicrobialEvolution

Graduate Student Position in Microbial Evolution at Dartmouth

Olga Zhaxybayeva is looking for a highly motivated individual interested in pursuing a Ph.D. in Evolutionary Biology. Research focus of Zhaxybayeva's lab is microbial evolution. We are computational group that takes advantage of the avalanche of genomic data to learn how microbes evolve and adapt to their environments. The work in the lab is necessarily cross-disciplinary and collaborative, with graduate students facing extensive training in molecular evolution, programming, data analysis, mathematical modeling, and use of high-performance computing facilities. For more

information about the lab and specific projects, visit http://www.dartmouth.edu/ ˜ ecglab/ The Graduate Program in Ecology and Evolutionary Biology at Dartmouth College offers a wide range of training opportunities, and our core group of enthusiastic faculty, graduate students and post-docs provide an exciting environment in which to pursue a Ph.D. Generous support is available in the form of fellowships, health care, and discretionary funds for research and travel.

Detailed information about the program, and access to online applications, are available at http://biology.dartmouth.edu/graduate/ecology-and-evolutionary-biology. Deadline for Fall 2015 application is December 1, 2014. Interested individuals are encouraged to contact Olga Zhaxybayeva directly by email (olgazh@dartmouth.edu) before applying and to send CV and a description of research interests, experience, and goals.

– Olga Zhaxybayeva, Ph.D. Simons Foundation Investigator in Mathematical Modeling of Living Systems Assistant Professor, Department of Biological Sciences Adjunct Assistant Professor, Department of Computer Science

Dartmouth College 026 LSC 78 College Street Hanover, NH 03755 USA

Office: (603) 646-8616 Lab: (603) 646-9397 Email: olgazh@dartmouth.edu Web: http://www.dartmouth.edu/ ˜ ecglab/ http://-dartmouth.edu/faculty-directory/olga-zhaxybayeva Olga.Zhaxybayeva@dartmouth.edu

Durham PopulationGenetics

PhD opportunities in the Molecular Ecology Group in Durham, UK (see https://www.dur.ac.uk/-biosciences/ for information about the department and University)

Projects:

1) Evolution of habitat specialisation in the Arctic char

The evolution of multiple divergent phenotypes in post-glacial lakes has occurred repeatedly and independently in many fish taxa including salmonids (e.g. Salmo, Oncorhynchus, & Salvelinus species), the three-spined stickleback (Gasterosteus aculeatus), and smelt (Osmerus species). In this study next generation sequencing methodologies will be applied to understanding the evolution of char (Salvelinus alpinus) ecotypes in British lakes, comparing multiple sympatric morphs in separate lake systems.

2) The relative contribution of genetic drift and natural selection on founder populations of deer

Population bottlenecks and founder events are an important part of evolutionary process, generating stochastic variation among populations and potentially changing evolutionary trajectories. Natural selection is a weak force compared to genetic drift when population size is very small, yet strong selection could overcome this. In this study founder populations of reindeer (Rangifer tarandus) on South Georgia and roe deer (Capreolus capreolus) in the UK will be investigated using next generation sequencing methodologies to better understand the relative importance of drift and selection following founder events.

3) Role of habitat boundaries in the evolution of population genetic structure in marine systems

A long-standing objective in evolutionary biology is understanding the mechanisms and drivers that determine the patterns and rate of differentiation, and eventual speciation among populations. Connectivity (the realized potential for gene flow among populations) is key, but there are various interacting factors that determine the spatial and temporal pattern of movement. In this study the student will take advantage of a well-studied system where there is suspected to be an important interaction between prey choice and gene flow for the bottlenose dolphin (Tursiops truncatus). While based in Durham, this project will be co-supervised by Oscar Gaggiotti in St. Andrews and Per Berggren in Newcastle.

For further information please contact Rus Hoelzel (a.r.hoelzel@dur.ac.uk).

The application deadline is 9 Jan 2015 for projects 1&2, and 2 Feb 2015 for project 3. To apply please identify the project you are interested in, send a cover letter explaining why you are a good fit to that project, include your c.v. and university transcripts, and have at least 2 letters of recommendation sent. Project 2 is open to all nationalities, but projects 1&3 are for UK nationals only.

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

FordhamU EvolutionaryBiology

Graduate Fellowships in Ecology, Evolution, and Conservation at Fordham University

The Graduate Ecology program at Fordham University has new research opportunities and both teaching and research fellowships available for well-qualified students interested in pursuing a M.S. or Ph.D. starting in Fall 2015. Research opportunities through our graduate program link scientists at our main campus, the Louis Calder Center Biological Station, the New York Botanical Garden, and the Wildlife Conservation Society. Students can also work through our Center for Urban Ecology (CUE).

Accepted MS and PhD students are eligible to receive stipends in the range of $29,000 per year, plus full tuition remission. Students may work in many areas of ecology and evolution, as well as applied areas such as conservation of endangered species, urbanization effects on terrestrial and aquatic ecosystems, and responses of plants and animals to climate change.

Specific research areas of our faculty include:

- Biodiversity, biogeography, and ecology of freshwater algae

- Bird vocalizations

- Climate change effects on hibernation and survival of mammals

- Conservation of endangered species

- Disease ecology of White-nose syndrome (WNS) in bats

- Ecology and epidemiology of vector-borne diseases

- Ecology of invasive species

- Ecology, evolution, and population genomics of urban wildlife

- Ectomycorrhizal fungal diversity and species function

- Evolution of animal social behavior

- Ecological and evolutionary responses to global change

- Freshwater food webs and water quality in streams and rivers

- Penguin breeding ecology and conservation

- Urban ecology

Interested students should contact relevant faculty members or research scientists to discuss mutual research interests via the following websites.

Biology faculty: http://www.fordham.edu/-academics/programs_at_fordham_/biological_sciences/-fa culty/index.asp

Louis Calder Biological Field Station: http://-www.fordham.edu/calder_center Opportunities at the New York Botanical Garden: http://sciweb.nybg.org/-science2/GraduateStudies.asp Opportunities at the Wildlife Conservation Society: http://www.wcs.org/- The deadline for applications is January 7, 2015. Online applications are available from: http://-www.fordham.edu/gsas For any questions, please contact Dr. J.D. Lewis by email: jdlewis@fordham.edu

Steven J Franks <franks.steve@gmail.com>

GeorgeWashingtonU Systematics

Systematics and Herpetology in Washington, D.C.

The Pyron Lab at The George Washington University seeks a doctoral student for the Fall of 2015 who is interested in historical biogeography, phylogeography, and the theory and practice of systematics. This position is available under the new NSF Genealogy of Life project 'VertLife Terrestrial: A complete, global assembly of phylogenetic, trait, spatial and environment characteristics for a model clade.' The position will be based in the Biological Sciences Department at The George Washington University (http://www.gwu.edu/).

I am looking for a student with an interest in macroevolution and macroecology, and with superior skills in phylogenetic analysis and models of trait evolution and diversification. Additional background in spatial analysis and informatics tools development is highly welcome. This position will primarily focus on reptiles and amphibians.

Terrestrial Vertebrates comprise ca. 33,000 species with a wide range of life histories and ecological adaptations. The VertLife Terrestrial project will undertake concerted phylogenetic and trait data assembling efforts that will advance the species-level completeness of key evolutionary and ecological attributes. It aims to help establish terrestrial vertebrates as a global model system for macroevolution, macroecology, comparative biology, and global change research. Online analysis and visualization tools are planned that will connect to existing projects such as Map of Life. The postdoc is expected to develop and address macroevolutionary and macroecological questions building on these resources. For additional information see http://www.nsf.gov/-news/news_summ.jsp?cntn_id=132716 . Graduate students will be part of the Robert Weintraub Program in Systematics and Evolution in the Department of Bi-

ological Sciences, a joint graduate program of GWU and the National Museum of Natural History at the Smithsonian. The program at GWU offers fantastic opportunities for anyone interested in systematics and evolutionary biology. In addition to my research, faculty in the department work on a wide variety of topics in evolution. The Weintraub program is affiliated with the Smithsonian's National Museum of Natural History, providing for SI curators to co-advise students, and access to one of the best natural history collections in the world.

If you are interested, please go to my website (http://-/www.colubroid.org/) for more information. Various funding opportunities are available for well-qualified applicants. Experience with molecular, computational, and field collection techniques is an important consideration. Interested persons should email me with a CV, research interests, and GRE scores. Application information is available here: http://-/biology.columbian.gwu.edu/apply-now-graduate/ R. Alexander Pyron, Ph.D. Robert F. Griggs Assistant Professor of Biology Department of Biological Sciences The George Washington University 2023 G St. NW, Lisner Hall 345 Washington, D.C. 20052 Phone: 202-994-6616 http://www.colubroid.org/ rpyron@colubroid.org

GhentU AvianBiodiversity

The Department of Biology at Ghent University is seeking to fill a full-time PhD position vacancy (m/f) on Avian Foodweb Ecology in Fragmented Landscapes

Background

While habitat fragmentation is increasingly recognized as one of the prime drivers underlying the current global biodiversity crisis, changes in foodweb dynamics resulting from habitat fragmentation have so far received scant attention in functional biodiversity studies. By applying state-of-the-art tools from ecological, forestry and epidemiological research disciplines within a unique plot design, biologists, bio-engineers and wildlife vets of Ghent University aim to fill this gap by scaling up functional biodiversity research from a classical plot to a landscape level, and from producer dynamics to predator fitness. The research consortium that conducts this ambitious, 6 year research program will host 6 PhD students, each focusing on particular components of the terrestrial food web.

Project

This PhD project focuses on how tree diversity and the spatial configuration of broad-leaved forest fragments affect the ecology, health and performance of a secondary avian predator (great tit, Parus major), and how this shapes its predatory impact on arthropod populations (herbivore control). Higher nutritional quality in more diverse forests is thereby predicted to improve health by facilitating a better development of avian immunity and thereby reducing disease susceptibility. A highly fragmented habitat, in turn, is predicted to reduce health through an increase in the use of anthropogenic (lower quality) food and pathogen exposure at forest boundaries, owing to increased contact with human habitation. The successful applicant will implement a variety of field-, aviary- and lab-tools, and will work closely together with other PhD students, field assistants and postdocs.

Profile

You hold a Master degree in Biology or an equivalent Life Sciences degree, with a strong background in population and community ecology.

You are an enthusiastic and motivated student who can deal with long hours in the field, aviary and lab.

You have excellent organizational, writing and presentation skills and are capable of working both independently and within a multidisciplinary team.

Prior experience with ornithology and/or foodweb ecology is highly recommended but not restrictive.

Offer

A Ph.D. scholarship for one year (starting between 1 Jan and 1 Feb 2015) with a three-year extension after positive evaluation.

Enrolment in the Ghent Doctoral School training program that offers various courses, training programs and conferences within and outside the university.

Membership of the Terrestrial Ecology Unit, a dynamic research group that combines field, lab and modelling approaches to study various questions in ecological and evolutionary research (http://www.ecology.ugent.be/-terec/index.php).

Interested?

Please send (i) a detailed curriculum vitae, (ii) a brief statement of your research interests and motivation for this project (max 250 words), and (iii) contact information of two referees who can supply letters of recommendation upon request, as a single PDF file to luc.lens@ugent.be.

The deadline for application is Friday 14 November 2014, 17 pm; interviews of short-listed candidates will start soon afterwards.

For more information, contact Luc Lens (luc.lens@ugent.be) or Liesbeth De Neve (liesbeth.deneve@ugent.be).

Luc Lens <Luc.Lens@ugent.be>

Groningen MarineMammalEvolution

Dear all,

We have a phD position in our lab (MarECon, University of Groningen, NL) to work on ecological and evolutionary genomics of marine mammals. The full description of the the PhD position can be found using this URL: http://www.rug.nl/about-us/work-with-us/job-opportunities/overview?details=-00347-02S00048SP Complete applications should be submitted using the online application link "Apply" (at the bottom of the advertise) before 14 November 2014.

Information on the PhD can be found in the advertise (http://www.rug.nl/about-us/work-with-us/job-opportunities/overview?details=00347-02S00048SP) and by emailing to me (m.c.fontaine@rug.nl, DO NOT use for applications)

Groningen, Netherlands: http://www.rug.nl/-education/why-choose-groningen The University of Groningen (RuG): http://www.rug.nl/about-us/-work-with-us CEES: http://www.rug.nl/research/cees MarECon: http://www.rug.nl/research/marine-evolution-and-conservation Best regards, Michael C Fontaine –

Marine Evolution and Conservation Centre for Ecological and Evolutionary Studies University of Groningen Nijenborgh 7 9747 AG Groningen The Netherlands

Office phone: (+31) (0)50 363 2146 Email: m.c.fontaine@rug.nl Google scholar profile Researcher-ID (G-5350-2011) http://-michaelcfontaine.wordpress.com m.c.fontaine@rug.nl

HarvardU EvolutionRegeneration

Graduate student positions are available in the lab of Mansi Srivastava at the Department of Organismic and Evolutionary Biology, Harvard University (http://-/oeb.harvard.edu/faculty/Srivastava/srivastava-oeb.html).

Prospective graduate students interested in studying regenerative and evolutionary developmental biology should contact Mansi via email (mansi@oeb.harvard.edu) to learn more about the application process. The deadline for applications to Harvard University's graduate program in Organismic and Evolutionary Biology is December 1, 2014 (http://www.gsas.harvard.edu/hils/apply.php).

Research Summary:

Most animals are able to repair wounds and many can regenerate extensively, re-growing organs or even entire body plans from small fragments. Very little is known about how wounding results in repair and/or regeneration, or whether these mechanisms are similar across diverse animal species. The lab will take an integrative approach for studying wound response and stem cell biology during regeneration in an evolutionary framework by using a broad range of techniques including transcriptional profiling and lineage tracing.

A major focus of the lab will be the three-banded panther worm, Hofstenia miamia, an acoel species that is a new model system for studies of regeneration and development. Acoels are likely to be the earliest lineage of animals with bilateral symmetry (bilaterians), and are therefore in a phylogenetically informative position for understanding the evolution of regenerative mechanisms. Hofstenia has many advantages as a model regenerative species, for example: RNAi that can be administered by soaking; tools for studying gene function; and the ability to isolate stem cells. Hofstenia also produces accessible embryos that enable comparisons of regeneration and development, and provide a unique opportunity to use gene-delivery and genome-editing tools to study regeneration.

Various projects are available for studying genetic and cellular mechanisms underlying the wound response and regulation of stem cells in Hofstenia as well as for comparing regeneration between different regenerative animal species including cnidarians and planarians. In

addition to uncovering new mechanisms, these studies will aim to learn which aspects of animal regeneration are conserved, and which evolved independently along different animal lineages.

mansi@oeb.harvard.edu

ISTAustria EvolutionaryBiology

The Graduate School at IST Austria invites applicants from all countries to its PhD program. The program covers a wide range of fields, with a strong component from evolutionary biology. Current faculty include Nick Barton (evolutionary theory/hybrid zones), Sylvia Cremer (disease in social insects), Jon Bollback (experimental evolution/statistical genomics), and Beatriz Vicoso (sex-chromosome evolution). For details, see www.ist.ac.at The PhD program includes a first year of cross-disciplinary coursework and rotations, followed by 3-4 years of research. The language of the Graduate School is English. IST Austria offers internationally competitive PhD salaries. Applicants must hold either a Bachelor's or Master's degree or equivalent.

For students wishing to enter the program in the fall of 2015, the deadline for application is January 15, 2015.

Nick Barton www.ist-austria.ac.at Nick.Barton@ist.ac.at

Leicester GenomicImprinting

Dear evoldir

A PhD studentship starting October 2015 is available by competition to study the role of genomic imprinting in social insect biology, jointly supervised by me (Dr Eamonn Mallon ebm3@le.ac.uk) and Dr. Ezio Rosato at the University of Leicester. Further details at http://www2.warwick.ac.uk/fac/cross_fac/mibtp/-pgstudy/phd_opportunities/gene_expression Project outline:

This project will attempt to establish the role of genomic imprinting in the important pollinator species, the bumblebee Bombus terrestris. Genomic imprinting is the differential expression of alleles in diploid individuals, with the expression being dependent upon the sex of the parent from which it was inherited. Genomic imprinting is an important area of research in plant breeding and in evolutionary biology and has relevance to some human cancers and developmental syndromes. Bees are potentially a model for genomic imprinting because theyhave a small, sparsely methylated genome.

The PhD student will carry out all experiments and bioinformatic analysis under the guidance of the supervisory team. They will be provided with training in R, a powerful and increasing popular statistical programming language, Python, a general-purpose, high-level programming language widely used in bioinformatics, molecular biology, RNA-seq, anatomical dissection and neuroanatomy, in situ hybridisation, confocal microscopy and bee husbandry as required.

References

Amarasinghe, H. E., Clayton, C. I. & Mallon, E. B. (2014) Methylation and worker reproduction in the bumble-bee(Bombus terrestris). /Proc. R. Soc. B Biol. Sci/. 281, 20132502

Yan et al (2014) Eusocial insects as emerging models for behavioural epigenetics. /Nat Rev Genet/ advance online publication.

This project is available for a PhD studentship is available as part of the Midlands Integrative Biosciences Training Partnership, http://www2.warwick.ac.uk/-fac/cross_fac/mibtp/about_mibtp/ Eligibility: British nationals who have lived in the UK all their lives are eligible. Also eligible are non-British nationals who have settled status AND have been resident in the UK for 3 years immediately prior to the date of the start of the course. EU nationals who have been ordinarily resident in the UK and Islands for three years immediately prior to the date of start of the course; *EU nationals not resident in the UK are eligible* *for matched funding studentships.*

To apply formally please see https://-www2.le.ac.uk/colleges/medbiopsych/research/-Postgraduate%20Opportunities/mitbp-at-the-university-of-leicester/application. Application deadline the 31/1/2015

Please contact me (ebm3@le.ac.uk) if you would like to discuss the project informally

Dr Eamonn Mallon Lecturer in Evolutionary Biology Room 220 Department of Biology University of Leicester LE1 7RH UK

Tel 01162523488 Email ebm3@le.ac.uk

"Mallon, Eamonn B" <ebm3@leicester.ac.uk>

Leicester SocialInsect GenomicImprinting

Dear evoldir

A PhD studentship starting October 2015 is available by competition to study the role of genomic imprinting in social insect biology, jointly supervised by me (Dr Eamonn Mallon ebm3@le.ac.uk) and Dr. Ezio Rosato at the University of Leicester. Further details at http://www2.warwick.ac.uk/fac/cross_fac/mibtp/-pgstudy/phd_opportunities/gene_expression Project outline: This project will attempt to establish the role of genomic imprinting in the important pollinator species, the bumblebee Bombus terrestris. Genomic imprinting is the differential expression of alleles in diploid individuals, with the expression being dependent upon the sex of the parent from which it was inherited. Genomic imprinting is an important area of research in plant breeding and in evolutionary biology and has relevance to some human cancers and developmental syndromes. Bees are potentially a model for genomic imprinting because theyhave a small, sparsely methylated genome.

The PhD student will carry out all experiments and bioinformatic analysis under the guidance of the supervisory team. They will be provided with training in R, a powerful and increasing popular statistical programming language, Python, a general-purpose, high-level programming language widely used in bioinformatics, molecular biology, RNA-seq, anatomical dissection and neuroanatomy, in situ hybridisation, confocal microscopy and bee husbandry as required.

References Amarasinghe, H. E., Clayton, C. I. & Mallon, E. B. (2014) Methylation and worker reproduction in the bumble-bee(Bombus terrestris). Proc. R. Soc. B Biol. Sci. 281, 20132502

Yan et al (2014) Eusocial insects as emerging models for behavioural epigenetics. Nat Rev Genet advance online publication.

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To apply formally please see https://-www2.le.ac.uk/colleges/medbiopsych/research/-Postgraduate%20Opportunities/mitbp-at-the-university-of-leicester/application .Application deadline the 31/1/2015

Please contact me (ebm3@le.ac.uk) if you would like to discuss the project informally

Dr Eamonn Mallon Lecturer in Evolutionary Biology Room 220 Department of Biology University of Leicester LE1 7RH UK

Tel 01162523488 Email ebm3@le.ac.uk

"Mallon, Eamonn B. (Dr.)" <ebm3@leicester.ac.uk>

MaxPlanck GenomicsOfMigration

Opening for a PhD student Genomics of Migration

My group combines several biological disciplines including behavioural observation, evolutionary genomics, molecular ecology, and bioinformatics, and utilises emergent technologies to identify the genetic basis of migratory traits.

Here we focus on identifying the genes and signalling pathways behind the components shaping the migratory phenotype in the blackcap, a well characterized migratory songbird species. We will complement the sequencing approach with gene expression profiling and characterisation of chromatin modification to investigate the extent of phenotypic variation manifested by expression differences, either through slight genetic differences or epigenetic processes.

Within this project that is funded through a Max Planck Research Group Grant, I am offering a PhD position. Project start is January 2015 and the ideal starting date for the PhD is April 2015.

The ideal candidate for this position has a biological training, a background in using next-generation sequencing data to answer evolutionary questions, and is eager to learn and master new skills and tools to understand the genetic architecture of behavioural traits. Ex-

perience in genome assembly or annotation, and skills in programming are a bonus. The core project focuses on various levels of genomic analysis, but the focus of the PhD project is flexible and can be tailored to both skills and interest of the successful candidate, and could cover genome assembly and annotation, or comparison of the genomic makeup and underlying signaling pathways of different populations with various migratory phenotypes, and may also involve behavioural experiments and field work.

PhD candidates at the institute have the opportunity to become member of the International Max Planck Research School (IMPRS) for Evolutionary Biology in collaboration with the nearby Christian Albrechts University of Kiel (for more information see: http://-www.evolbio.mpg.de/14849/aboutIMPRS)

We offer an English speaking and ambitious working environment at the Max Planck Institute for Evolutionary Biology in Plön, Germany. Cutting edge infrastructure is available at all levels, including high-performance computer clusters and next-generation sequencing core facility. The Institutes main fields of work include evolutionary ecology (Prof. Dr. M. Milinski), evolutionary genetics (Prof. Dr. D. Tautz) and evolutionary theory (Prof. Dr. A. Traulsen) and hosts a number of research groups providing ample opportunities for collaborations and interactions.

The Max Planck Society is committed to also employing handicapped individuals and especially encourages them to apply. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Applications should include 1) a cover letter outlining your motivation to work on this project as well as relevant experience, 2) a detailed curriculum vitae and copies of certificates, and 3) the contact details of three academic referees. Please send the above as a single .pdf file to liedvogel@evolbio.mpg.de.

Review of applications will start on January 1st 2015, but candidates will be considered until the position is filled. For more information, feel free to contact me!

Dr. Miriam Liedvogel liedvogel@evolbio.mpg.de

Max Planck Research Group Behavioural Genomics Max-Planck-Institute for Evolutionary Biology August-Thienemann-Straße 2 24306 Plön, Germany

www.evolbio.mpg.de/3004473/-group_behaviouralgenomics Miriam Liedvogel <liedvogel@evolbio.mpg.de>

MaxPlanck Plon EnvironmentalGenomics

*A PhD position *is available. In**the Max Planck Research Group "Environmental genomics"headed by Pr. Dr. Eva H. Stukenbrock and affiliated with the Christian-Albrechts University of Kiel and the Max Planck Institute for Evolutionary Biology, Plön, Germany.

This position at payment class TV-L 13 (dependent on qualifications) is at 65% level and includes teaching. Start of the position is February 2015.

The dual affiliation of the group provides a unique opportunity to benefit from two distinct environments and develop relationships with departments from both institutes. The candidate will have a contract with the Christian-Albrechts University of Kiel.

/Background/

The group works on adaptation of parasites to their host and host driven speciation using different plant pathogenic fungi. A main goal of our research is to understand the underlying molecular mechanism of species divergence and adaptive processes in host-pathogen systems. To this end, we combine molecular biology, microscopic and bioinformatic approaches. A recent topic in the group is the importance of histone modifications in host-pathogen interactions as well as genome dynamics.

/Relevant papers/

Soyer JL et al., PLoS Genet., 2014 Giraldo MC & Valent B, Nat. Rev. Microbiol., 2013 Stukenbrock EH et al., Genome Res., 2011 de Jonge et al., 2011 Curr. Opinion Plant Biology, 2011

/Objectives/

This PhD project will focus on the characterization of effector candidate genes in the fungal wheat pathogen /Zymoseptoria tritici/. The PhD student will select promising candidate effector genes by combined analysis of "omics" datasets (transcriptomes, genomes and genome wide histone maps) generated in the team. A functional characterization of these candidate genes will be the main objective of the PhD project. This work will include gene deletions, in-vitro and in-planta assays, expression analyses and protein characterization. The project will further aim to understand the role of

the particular candidate genes in host specialization by analyses of orthologs of the candidate genes in closely related species of /Z. tritici/.

/Prerequisites/

We are looking for a highly motivated and autonomous candidate, with good communication skills. The daily language in the group is mainly English. Candidates with solid knowledge in molecular biology, molecular evolution and phytopathology are strongly encouraged to apply. Interests for epigenetics and / or experience for analyses of high-throughput "omics" data will be an advantage.

The PhD candidate is expected to become a member of the International Max Planck Research School for Evolutionary Biology (see _http://www.evolbio.mpg.de/-6269/aboutIMPRS_).

Kiel University is an equal opportunity employer and is committed to increasing the proportion of female scientists in research and teaching, and strongly encourages female applicants. Women will be given preference in case of equal suitability, competence, and professional performance. The University is also committed to the employment of disabled persons, and such individuals will be accorded preference if suitable. Applications by people with a migration background are particularly welcomed. Please refrain from submitting application photos.

/Contact/

Application should be sent as a single pdf file by e-mail to Pr. Dr. Eva H. Stukenbrock stukenbrock@evolbio.mpg.de, cc. Dr. Jessica L. Soyer soyer@evolbio.mpg.de before December 15th. The position will however remain open until filled.

The application should include a short CV, names and contact information of two referees, report of previous research (4 pages max.) and results of the Master degree.

"Jessica L. Soyer" <soyer@evolbio.mpg.de>

McGillU PlantEvolution

Graduate student positions in Plant Evolution at McGill University, Montreal.

Position 1. Self-incompatibility is the most effective method by which flowering plants enforce outcrossing and maintain a system of mating that the negative consequences of inbreeding depression in progeny. The self-incompatibility system in the Brassicaceae is perhaps the best characterized one. We have recently found exciting evidence suggesting that this system has evolved more than once within the family (http://www.plosbiology.org/article/-info%3Adoi%2F10.1371%2Fjournal.pbio.1001560). We are looking to recruit a graduate student (M.Sc. or Ph.D. level) to assist us in furthering this investigation.

Position 2. Climate change is producing new ecological challenges for plants in this century (e.g., temperature, water stress conditions). When phenotypic plasticity is insufficient for plants to cope with such challenges, they must either adapt evolutionarily or face local extinction. We are exploring how next generation sequencing approaches can help us to better understand the underlying genetics and evolutionary genomics of this process. We would like to recruit a graduate student (Ph.D. level) to work on this problem in our lab.

Please send me your CV and a brief statement detailing: (1) which position you are interested in applying for; (2) why you are interested in the position and any relevant experience you may have; and (3) the names of 3 people we may write to for letters of reference. This information should be sent to Prof. Daniel Schoen: schoenlab@gmail.com by 15 February 2015 (for Canadian students) and 30 December 2014 (for non-Canadian students).

dan.schoen@mcgill.ca

MichiganStateU GenomicsAnimalCommunication

The relative contribution of divergent natural selection and sexual selection on communication signals in the evolution of reproductive isolation is a central question in biology. Â Progress is limited by poor knowledge of how divergent communication signals originate at the genetic, cellular, and morphological levels, as well as difficulty connecting population level processes prior to speciation with the macroevolutionary patterns of diversity observed after speciation is completed. Â The more than 200 nominal species of mormyrids are ideally suited for circumventing such problems, producing easily measured and quantified electric discharge signals (EODs), which have a discrete anatomical and physiological basis. Â EOD signals are typically species-specific and have been demon-

strated to be a necessary component of courtship behavior, particularly for a rapidly evolved "species flock" of mormyrids in the genus Paramormyrops. Â The Electric Fish Lab at Michigan State University (http://efish.zoology.msu.edu) has recently focused on linking these macroevolutionary patterns of electric signal diversity to population-level processes. Â We have identified a key species to use newly developed techniques in evolutionary genomics to identify genes responsible for macroevolutionary patterns of electric signal diversity, critical in the speciation process.

Ideal candidates for this position are high achieving, creative, and independent. Â Training will combine cutting edge techniques in genomics, bioinformatics molecular biology and animal behavior. Â Michigan State University (MSU) is a world-class research university, providing world-class computing and genomics resources. ÂSet in the college town of East Lansing, the area features a low cost of living as well as ideal surroundings for nature lovers and sports fanatics alike. Â Prospective applicants can be supported through several interdepartmental graduate programs, including a top-ranked program in Ecology, Evolutionary Biology and Behavior (http://eebb.msu.edu), as well as genetics (http://genetics.msu.edu). Â Students will be encouraged to participate in a one-of-a-kind NSF-sponsored BEACON center for the study of evolution in action (http://beacon-center.org), for which MSU is the host institution. Â Successful candidates will be supported through a combination of research assistantships and teaching assistantships, and highly qualified may be eligible for additional support through competitive fellowships at the University level.

Applications to MSU either graduate program in Biomolecular Science or Zoology are due December 1st, 2014. ÂInterested candidates are strongly encouraged to send inquiries in advance of this deadline to Dr. Jason Gallant (jgallant@msu.edu) for more information concerning this position, as well as guidance on the most appropriate graduate program to apply through. Â

Jason Gallant <jason.r.gallant@gmail.com>

NewcastleU 2 EvolutionaryBiol

Newcastle University is looking for excellent applicants for PhD projects funded through the NERC funded Doctoral Training Partnership IAPETUS. Two Evolutionary Genetics projects are available:

Living on the edge: can adaptation at the edge of a species range accommodate rapid climatic change in a long-lived species? http://www.iapetus.ac.uk/wp-content/uploads/2014/11/IAP_14_44-NEW-Wolff.pdf Mating system evolution in a grassland species: self-compatibility and male sterility http://www.iapetus.ac.uk/wp-content/uploads/2014/11/IAP_14_43-NEW-Wolff.pdf These two studentships are part of the NERC funded Doctoral Training Partnership IAPETUS. This has 12-16 PhD studentships available, with competition between a large number of projects. For full details of requirements and details how to apply: http://www.iapetus.ac.uk/aboutstudentships/ Please note that IAPETUS is only able to consider applications from Home/European Union candidates. International (non-EU) candidates are not eligible to be considered. Also, a candidate from another EU country who has not been resident in the UK for 3 years or more prior to the commencement of their studies with IAPETUS, will only be eligible for a fees-only studentship

Interested students are advised to apply early, the ultimate application deadline is 2nd February 2015.

For further information on the two projects mentioned above: Dr Kirsten Wolff Reader in Evolutionary Genetics Newcastle University, School of Biology Devonshire Building 5th floor Newcastle NE1 7RU, UK Phone: 0191 208 4852 email: kirsten.wolff@ncl.ac.uk www.staff.ncl.ac.uk/kirsten.wolff/ kirsten.wolff@newcastle.ac.uk

NorthwesternU ChicagoBotanicGarden PlantEvolution

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

gion provides an excellent community at the forefront of research in conservation and sustainability. Faculty research areas include:

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

Graduate Program: http://-www.plantbiology.northwestern.edu/ Plant Science Center: http://www.chicagobotanic.org/research/-labs.php?expanddiv=plant_conservation Application deadlines: PhD: December 31, 2014 MS (thesis-based): February 15, 2015 MS (internship-based) Applications will be reviewed beginning February 15 and review will continue through April 30, 2014, and admissions are on a rolling basis.

Nyree J C Zerega <n-zerega@northwestern.edu>

NTNU Norway EvolutionaryAdaptation

PhD position in statistics/biology

A PhD position is available at the Centre for Biodiversity Dynamics (CBD) / Department of Mathematical Sciences, NTNU. The appointment is for a period of 3 years.

Information about the Department of Mathematical Sciences: www.math.ntnu.no Information about CBD: www.ntnu.no/cbd

Job description Evolutionary responses to anthropogenic global warming, and more fundamentally, changing stochastic environmental conditions, is currently an active area of biological research. Recent theoretical developments provide predictions for the relative role of Darwinian genetic evolution and adaptive phenotypic plasticity in temporally autocorrelated environment. Whereas phenotypic plasticity alone makes the phenotypic mean of a population dependent on the environment at time of development only, phenotypic fluctuations resulting from genetic evolution can be seen as an exponential moving average process, smoothing out underlying environmental fluctuations. This make the main aim of the present PhD-project, estimating the relative role of genetic evolution and phenotypic plasticity from phenotypic time series data treating the underlying environmental as a partially latent process, feasible.

Qualifications The applicant must have a MSc (or equivalent) in statistics and a strong interest in evolutionary biology, quantitative genetics, time series analysis or latent Gaussian models. Candidates with a MSc (or equivalent) in biology with sufficient programming skills and background in mathematics or statistics may also be considered. The successful candidate must be self-motivated, curious and creative and satisfy the requirement for entering the PhD-program at NTNU. See http://www.ime.ntnu.no/forskning/phd for information about the PhD-program at NTNU.

For more information about the project, please contact jarle.tufto@math.ntnu.no .

NTNUs PhD-regulations require a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale from A to E for passing grades (A best). Candidates from universities outside of Norway are kindly requested to send a Diploma Supplement or similar documentation, which describes in detail the study, the grade system, and the rights for further studies associated with the obtained degree.

The PhD-fellowships are placed in salary code 1017, pay scale level 50 - 62, gross income NOK 429 700 to 528 800 per year. From this salary 2% will be deducted for mandatory membership in the National Pension Fund. Starting salary is expected to be at salary level 50.

The appointment will be made in accordance with current regulations with supplementary rules for research fellowship appointments in universities and polytechnics. Applicants must agree to participate in organized doctoral study programs within the period of the appointment. The successful applicant must agree to the conditions laid down for public employees.

Candidates will be required to enroll in a PhD program within the period of employment, and must sign a contract regulating the starting date and duration of employment as well as the mandatory work.

The positions adhere to the Norwegian Government's policy of balanced ethnicity, age and gender. NTNU wishes to increase the number of women in its workforce, and female candidates are therefore encouraged to apply.

The application must include information about education, exams and earlier experience. Certified copies of academic diplomas and transcripts must be enclosed. Relevant scientific works should be included. Joint work will be considered provided that a short summary outlining the applicant's contributions is attached.

Applications are to be submitted electronically through the following web-page

http://www.jobbnorge.no/ledige-stillinger/stilling/-107002/phd-position-in-statistics-biology Preferably, the attachments should be submitted as a single file.

Reference no: IME 047-2014.

Closing date: 2014-11-27.

Jarle Tufto <jarle.tufto@math.ntnu.no>

PennStateU EvolutionaryGenomics

The Assis lab (http://www.personal.psu.edu/rua15/-index.html) at Penn State is recruiting several highly motivated Ph.D. students to start in Fall 2015.

Our lab uses computational approaches to study the origin of genotypic and phenotypic innovation. We are broadly interested in a number of problems in evolutionary genomics. One current focus of our research is on gene duplication, which is a major contributor of new gene functions. Potential projects related to gene duplication include examining the role of natural selection in the origin of new functions, elucidating the genic and functional targets of natural selection, comparing functions that arise under different evolutionary scenarios, and applying mathematical models to study gene expression evolution. There are also opportunities to study the origin and evolution of small RNAs, enhancers, and other noncoding functional elements in the genome.

The above lists only serve as examples, and candidates interested in alternative research projects in evolutionary genomics are encouraged to apply. Also, note that our lab is solely computational. While prior knowledge of a programming language is not necessary, candidates should have strong quantitative skills and the drive to learn how to program.

If you are interested in joining the lab, please email Raquel Assis (rassis@psu.edu) a current CV and description of your research interests.

In addition, candidates must submit a formal application to one of the following three Ph.D. programs: Biology (http://bio.psu.edu/graduate-portal/join-our-program), Bioinformatics and Genomics (http://www.huck.psu.edu/education/-bioinformatics-and-genomics/apply), or Molecular, Cellular, and Integrative Biosciences (http://-www.huck.psu.edu/education/molecular-cellular-and-integrative-biosciences/education/molecular-cellular-and-integrative-biosciences/about/for-prospective-students/apply). Application deadlines for Fall 2015 admission to these programs are in December and January, with earlier applications encouraged.

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

rassis7@gmail.com

StockholmU PlantEcoEvolutionaryDynamics

Position for one PhD student in Plant Eco-Evolutionary Dynamics at Stockholm University, Sweden

We seek a PhD candidate to join a project examining how adaptive genetic variation and demographic processes influence evolutionary response and population dynamics in a changing environment. The research uses the perennial herb Primula farinosa as a model system, and focuses on the importance of variation in floral traits and life history in relation to differences in abiotic conditions, the intensity of biotic interactions, and climate. The project will combine demographic studies, field experiments, and population modeling, to address three main questions: (1) How is population viability influenced by local environmental conditions, grazing intensity and climatic variation?, (2) How does variation in abiotic environmental factors and grazing influence the genetic structure of plant populations?, and (3) How does the presence of genetic variation in traits of adaptive significance and evolutionary responses influence population viability in a changing environment? Specific subprojects can be tailored to the skills and interests of the successful candidate.

The project is a collaboration between the labs of prof Johan Ehrlén at the Department of Ecology, Environment and Plant Sciences, Stockholm University and prof Jon Ågren at the Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University. We are currently recruiting one PhD student to be placed at Stockholm University and a postdoc to be placed at Uppsala University.

We are looking for a candidate with a keen interest in population biology and eco-evolutionary dynamics. Previous experience of modelling, and field or experi-

mental work is desirable. Proficiency in English is a requirement.

The successful PhD student candidate should have a degree in Biology at the advanced level (e.g. Masters) of at least 240 credits, and will receive a postgraduate position for four years of full-time studies.

Deadline for application is 20 November 2014

Please find the announcement, with all information about how to apply, at:

http://www.su.se/english/about/vacancies/-phd-studies/phd-student-position-in-plant-eco-evolutionary-dynamics-1.205740 For informal enquiries, please contact Johan Ehrlén johan.ehrlen@su.se, +46-8-16 12 02, or Jon Ågren, jon.agren@ebc.uu.se, +46-18-471 2860.

Jon Ågren Plant Ecology and Evolution Department of Ecology and Genetics, EBC Uppsala University Norbyvägen 18 D SE-752 36 Uppsala Sweden

Jon Ågren <jon.agren@ebc.uu.se>

TempleU PlantEcologyEvolutionaryBiology

I am currently recruiting motivated graduate students to join my lab in the Biology Department at Temple University. Our research addresses a broad range of questions in plant reproductive ecology and evolution, exploring how ecological, demographic, and genetic factors influence plant mating patterns and shape the evolution of reproductive traits. Current foci in the lab are (1) the effects of habitat fragmentation on plant-pollinator interactions, mating system dynamics, and floral trait evolution and (2) the evolution of mixed-mating and of the selfing syndrome. Additional interests include the evolution of plant sexual systems such as dioecy. We use a variety of approaches including observational and experimental field studies, population and quantitative genetics, demographic modeling, and greenhouse studies.

I am looking for a PhD student to join the lab who is broadly interested in plant ecology and evolution and looking to develop independent research questions that complement my own. If interested, please send a cover letter describing your research interests and background, a CV including GPA, GRE scores (if known), and contact information for three references to Rachel Spigler at rachel.spigler@temple.edu. Applicants must have a Bachelor's degree in ecology or a related field, prior research experience, and meet Temple's requirements for admission. A Master's degree is preferred. Interested applicants should contact me as soon as possible; Temple's deadline for admission is January 15, 2015.

For additional information about my research and the Biology Department at Temple University please visit:

http://rachelspigler.weebly.com/ https://-bio.cst.temple.edu/ *About the Biology Department at Temple University*

Temple University is a large, comprehensive public research university in Philadelphia, PA, with more than 37,000 undergraduate, graduate, and professional students enrolled in over 400 academic degrees. The Biology Department at Temple University represents an active research community with strengths in ecology, genomics, conservation, and evolutionary biology. The Biology Department is also home to the newly formed Center for Biodiversity (http://cst.temple.edu/research/-centers-and-institutes/center-biodiversity), Center for Computational Genetics and Genomics (https:/-/bio.cst.temple.edu/ ~ hey/CCGG/), and Institute for Genomics and Evolutionary Medicine (http://-igem.temple.edu/).

Philadelphia is the fifth largest city in the US, rich in history, known for its arts and culture, and is brimming with a vibrant science community. There are approximately 90 colleges and universities in the Greater Philadelphia region, with plenty of opportunities for collaboration. Recreational science activities abound, including 'Science on Tap', a monthly science cafeÂ© that features a brief, informal presentation by a scientist or other expert followed by lively conversation, the Academy of Natural Sciences, the Wagner Free Institute of Science, and the annual Philadelphia Science Festival. Philadelphia is also home to Fairmount Park, one of the world's largest city park systems.

tuf10949@temple.edu

TexasAM CorpusChristi HawaiianStreamFishEcology

The Hogan Lab in the Department of Life Sciences at Texas A&M - Corpus Christi has opportunities for

1 graduate student at either the M.S. or Ph.D. level to start in Fall 2015. We are looking for an enthusiastic, conscientious and highly self-motivated student to work on a funded project investigating the consequences of invasive species removal for native Hawaiian stream fishes.

The successful candidate will be responsible for evaluating the changes in growth rates and life-history patterns, including rates of oceanic migrations in response to the removal of invasive predators and competitors. Strong written, verbal and computational skills are essential. We are particularly interested in applicants that have experience with otolith microstructure and/or microchemistry analysis.

Prior experience participating in or leading field research is desired. Successful applicants will be expected to work independently as well as collaboratively as an active member of a research group, conduct field work in variable weather conditions, and perform detailed laboratory analyses with a high level of precision. The position will require time spent in the field in Hawaii.

Texas A&M - Corpus Christi offers competitive graduate teaching assistantships and in-state tuition rates for out-of-state and international graduate students. We highly encourage Hawaiian residents, Pacific Islanders and Hispanic students to apply. Texas A&M University is a Hispanic-serving institution and additional funds may be available to support Hispanic students.

For full consideration, applications should be submitted by December 1st 2014. Interested students should contact Dr. J. Derek Hogan; email: James.Hogan@tamucc.edu, website: http://-derekhoganresearch.wordpress.com/ .To apply, please submit (1) a letter of interest describing your career goals and research interests, (2) CV, including past research experiences and prior publications, include GPA and GRE scores and (3) contact information for two or three references.

james.hogan@tamucc.edu

TulaneU EvolutionaryBiol

The Ecology and Evolutionary Biology department at Tulane University is seeking an outstanding candidate for one Board of Regents (BoR) Graduate Research Fellowship.The fellowship includes a yearly salary of $30,000, and a yearly stipend for professional travel and/or research support.The fellowship is for one year.We *strongly* encourage applications from underrepresented minority students. Interested candidates should contact either the faculty representative for the BoR fellowships (Elizabeth Derryberry, ederrybe@tulane.edu) or a faculty member whose research aligns with that of the candidate (Faculty websites: http://tulane.edu/sse/eebio/faculty-and-staff/-faculty/).

Review of applications will begin January 15ˆth for matriculation in Fall 2015. Applicants should follow guidelines of standard graduate school applications, found at (http://tulane.edu/sse/eebio/academics/graduate/-apply.cfm). Applicants are encouraged to identify a faculty mentor prior to submitting an application.

The Tulane EEBIO department emphasizes three main areas of academic inquiry: tropical biology, wetlands ecology, and global change biology. We study organisms, populations, communities, ecosystems and global systems as we focus our efforts on conservation biology, ecosystem ecology, environmental biology, evolutionary biology, global change, tropical ecology, and systematics. Our research is centered geographically in the subtropics — especially Louisiana — and the tropics, although we explore life in other regions of the Earth as well. Graduate students are important contributors to our effort to create and disseminate knowledge about organisms and their environments.

Tulane University is an Affirmative Action/Equal Employment Opportunity/ADA Employer committed to excellence through diversity. All eligible candidates are encouraged to apply.

– Elizabeth Derryberry, Ph.D. Assistant Professor Ken and Ruth Arnold Early Career Professor in Earth & Ecological Science Department of Ecology & Evolutionary Biology Tulane University New Orleans, LA 70118 504-862-8285 (office) 504-862-8706 (fax) elizabethderryberry.tulane.edu

Elizabeth Derryberry <ederrybe@tulane.edu>

UAberdeen NicheEvolution

Title: PhD-ship at the University of Aberdeen (UK), on Niche Evolution in a Warming World

This PhD project is being advertised as part of a competitive scheme, and is only available to UK nationals and residents– please see restrictions below

Deadline for application: January 16, 2015 To apply: http://www.findaphd.com/search/-ProjectDetails.aspx?PJID=58671&LID Supervisors: Dr Lesley Lancaster, Professor Michael Ritchie (St Andrews) and Professor Jorgen Ripa (Lund) ââ

Description: Many organisms are currently responding to climate change with dramatic shifts in their geographic ranges and ecological niches. However, the mechanisms underlying these biotic consequences of rapidly changing climates remain poorly understood. It is critical to improve our understanding in this area of research, as many pests and disease-carrying species are currently expanding under global climate change, while other, less rapidly evolving species face extinction. In this PhD project, the student will investigate a number of hypothetical evolutionary trajectories that could underlie or constrain rapid niche shifts occurring during climate-induced range expansions. This represents an exciting opportunity to contribute to scientific understanding of evolution under environmental change and to develop knowledge to inform conservation and management. Specifically, the project will investigate how shifts in a species' resource use traits, climate tolerances, and dispersal abilities contribute to niche evolution, and will seek to characterise evolutionary trade-offs among these traits that my constrain a species' ability to adapt to a rapidly-changing world. There will be ample opportunity for the student to propose and test their own hypotheses for niche evolution mechanisms, incorporating additional processes and effects such as mating system evolution, indirect genetic effects, epigenetics, etc., following the research interests of the student. ÂâThe PhD project offers opportunity to learn a variety of important methods in evolutionary biology, including experimental evolution/quantitative genetics in lab-based organisms (using seed beetles, a currently evolving global crop pest), individual-based modelling approaches, and offers opportunities for field ecology approaches in northeast Scotland, to allow the student to become familiar with evolutionary and ecological dynamics in wild, evolving insect systems.

Funding Notes: This project is eligible for the EASTBIO Doctoral Training Partnership: http://-www.eastscotbiodtp.ac.uk/ .This opportunity is only open to UK nationals (or EU students who have been resident in the UK for at least three years immediately prior to the programme start date) due to restrictions imposed by the funding body.

References:

1. Bebber, D.P. et al. (2013) Crop pests and pathogens move polewards in a warming world. Nature Climate Change 3: 985-988.

2. Ackerly, D.D. et al. (2006) Niche evolution and adaptive radiation: Testing the order of trait divergence. ââ

3. Tuda, M. et al. (2006) Evolutionary diversification of the bean beetle Callosobruchus (Coleoptera: Bruchidae): traits associated with stored-product pest status. Molecular Ecology 15: 3541-3551.

Contact: Please contact lead supervisor Dr. Lesley Lancaster with any pre-application inquiries: lesleylancaster@abdn.ac.uk

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

"Lancaster, Lesley" <lesleylancaster@abdn.ac.uk>

UAlberta EvolutionSexPersonality

I am looking for a graduate student to work on my NSERC-funded research on the relationship between variation in sexual differentiation and personality.

Research in the Hurd lab (aka the Sex and Violence Lab) centres on questions relating to the evolution of genetic, epigenetic and environmental influences on sexual development and their long-term effect on personality (along the lines spelled out in/Trends in Ecology and Evolution/.*29*:581V589 - doi:10.1016/j.tree.2014.07.008 < http://dx.doi.org/-10.1016/j.tree.2014.07.008 >). The current opening is for a MSc or PhD project investigating social and environmental influences on gene regulation related to sexual differentiation during early life and subsequent life-long, and intergenerational, individual differences in brain and behaviour in a cichlid fish model. Broadly, lab members have interests in neuroscience, behavioural ecology, and/or comparative psychology, with some human personality psychology and behavioural genetics interests as well. Prospective students are expected to have a background including coursework or research experience within these fields, with behavioural ecology, neuroscience and/or genetics of particular value. Opportunities exist to pursue related side-projects related to genetics and epigenetics of sex and personality in human subjects as well.

The official application deadline is 15 January 2015 for admission in September 2015, however applications will be reviewed as soon as they are complete. Earlier can-

didates will also have an advantage in competing for the usual departmental and University prizes and inducements. Please refer to our departmental web pages for information about our graduate program (http://www.psych.ualberta.ca), and to my own web page (http://www.psych.ualberta.ca/~phurd/) for more detailed recent information research in my laboratory.

Peter L. Hurd Associate Chair, Undergrad Associate Professor Department of Psychology Centre for Neuroscience University of Alberta phurd@ualberta.ca Edmonton, Alberta www.psych.ualberta.ca/~phurd T6G 2E9 Canada

"Peter L. Hurd" <phurd@ualberta.ca>

UAuckland EvolutionaryEpigenetics

PhD Project in Ecological / Evolutionary Epigenetics (fully-funded)

We seek a highly-motivated student for a fully-funded PhD scholarship position commencing in 2015. The project will investigate environmental stress induction of epigenetic variation in colonial tunicates. More broadly, the project seeks to determine if epigenetic changes provide an evolutionary 'buffer' against rapid environmental change and a mechanism to compensate for low levels of conventional genetic variation.

The student will be enrolled at the University of Auckland (www.auckland.ac.nz) but will be based at the Cawthron Institute, Nelson, New Zealand (www.cawthron.org.nz). The successful applicant will have a sound background in both molecular and population genetics along with a good grasp of bioinformatics theory. The student must be comfortable with learning new software for bioinformatic and statistical analyses. An ecological background would also be advantageous.

Applicants should hold a relevant Hons / Master's degree and must be eligible to enrol in the University of Auckland's PhD programme. This PhD scholarship has an annual stipend of NZ$25,000 (tax free) plus student fees for a period of 3 years subject to satisfactory progress. International (i.e. non-New Zealand resident) students are welcome and encouraged to apply.

For more details contact Dr Kirsty Smith (kirsty.smith@cawthron.org.nz).

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

UBern BehaviouralEvolution

3 PhD POSITIONS IN BEHAVIOURAL ECOLOGY Institute of Ecology and Evolution, University of Bern, Switzerland

Organisation

The Institute of Ecology & Evolution at the University of Bern offers excellent opportunities and infrastructure for theoretical and experimental research in the field of ecology and evolution. It hosts six chairs, several associated professors and junior group leaders with complementary, yet overlapping and linked areas of scholarship. It is home to a large number of post-doctoral researchers, PhD and MSc students from different countries worldwide.

Research at the chair of Behavioural Ecology focuses on the evolution of sociality and cooperation, within-population individual variation of behaviour and life history pathways, and the influence of early experience on life-long and transgenerational traits and decisions. In addition to theoretical modelling, our research uses cichlid fishes from Lake Tanganyika, ambrosia beetles and Norway rats as model systems. We combine sophisticated behavioural experiments in the laboratory and field with long-term monitoring of individual life histories in nature, develop theoretical models of evolutionary mechanisms underlying behaviour, and study molecular mechanisms by transcriptome profiling and hormone manipulations. Currently the division comprises roughly 30 staff and student members.

Job descriptions

1st project: Integration of early environmental information within and across generations in a cooperative breeder

Early life conditions can have life-long effects on the phenotypic development of animals. Most research in developmental plasticity focuses only on a single environmental trigger or ontogenetic stage. However, natural environments are usually complex. If we aim to understand the development of well-integrated adult phenotypes, we must consider effects of multiple ecological factors during multiple ontogenetic stages. The highly social cichlid Neolamprologus pulcher is a unique model system to study the development of integrated phenotypes, because it uses environmental cues to specialize on one of two life history strategies during ontogeny,

namely early own reproduction or delayed dispersal to help rearing offspring of dominant breeders. N. pulcher is a well-studied model system of social evolution that is exceptionally suited to experiments in the field and laboratory. Within this project, two PhD positions are currently available:

Position 1: "Environmental influences on development during different ontogenetic stages" The aim of this PhD-project is to investigate the relative significance of four important environmental influences for the development of helping and dispersal propensities of N. pulcher: prenatal maternal effects, brood care, early juvenile and late juvenile environments. Position 2: "Long-term effects of early environment within and across generations" This PhD project investigates whether the early environment influences adult life histories and reproductive performance, and whether it affects the phenotypes of successive generations through epigenetic inheritance. Both PhD projects will pursue a multidisciplinary approach involving behavioural experiments in the laboratory, field work, ecological genomics and/or quantitative meta-analysis. Eligible candidates will have a master$B!G(Bs degree (or equivalent) in Biology and research experience in animal behaviour and a genuine understanding of evolutionary theory. Practical skills in molecular genetics techniques, the application of statistical models and empirical work with fish would be beneficial, but they are not a precondition. The project will be mostly based in Bern, but will involve collaboration with Nadia Aubin-Horth (University Laval, Canada) for the molecular analyses and with Shinishi Nakagawa (University of Otago, New Zealand) for meta-analysis. Supervisor: Barbara Taborsky.

2nd project: The use of information in social decisions

Position 3: $B!H(BConditional decisions to stay or disperse in fungus tending ambrosia beetles$B!I(B When deciding to stay or disperse from the natal territory, information about the quality of potential dispersal areas may be limited and costly to obtain. Modelling results imply that the stage before dispersal decisions are made is of particular interest to understand social evolution. Ambrosia beetles are cooperative breeders cultivating fungi for food. Individual dispersal is timed in dependence of the need for cooperative care in the natal colony. Here we ask whether and how dispersal decisions depend on (i) the body condition of beetles, (ii) the microbial condition in the natal gallery, and (iii) the sustainability of the substrate in which they live. Experiments will show how beetles respond to the microbial composition of their gallery, including hygienic behaviour, allogrooming and fungal care, and their timing of dispersal. The utility of galleries will be manipulated to

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UBirmingham EvolutionaryBiol

Invitation to apply for a PhD position under the Birmingham BBSRC MIBTP programme: http://www.findaphd.com/search/ProjectDetails.aspx?PJIDX288 . This call is directed to UK and EU undergraduate students that wish to apply for a PhD programme at the University of Birmingham, UK.

A consortium of Universities including the University of Birmingham, the University of Leister and the University of Warwick offers 30 PhD positions, 9 of which at the University of Birmingham. Prospective candidates are evaluated by a panel of experts across the consortium of Universities. Candidates passing this selection, will be offered a four years PhD training. The first year will consist of formative courses taken at the consortium Universities and in a work placement in academia, industry or governmental agencies. The following three years will be focused on research at the University of Birmingham. The PhD projects promoted here is under the supervision of Dr Orsini at the School of Bioscience http://www.birmingham.ac.uk/schools/biosciences/staff/profile.aspx?ReferenceIdc090&Name=dr-luisa-orsini . Details of the offered PhD programme are below and can also be found herehttp://www.findaphd.com/search/ProjectDetails.aspx?PJIDX288. If you are interested, contact Dr Luisa Orsini prior to apply at*l.orsini[at]bham.ac.uk* and provide a cover letter, a short CV, a motivation letter and the name of three referees.

Please note that agreement from the PI to apply is not a guarantee that you will be offered the PhD position. Selection of candidates is based on merit and done by a committee of representatives from the consortium Universities.

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PhD project

A system biology approach to study mechanisms of response to anthropogenic stress in aquatic ecosystems using Daphnia as emerging model system

The decline of water quality due to anthropogenic changes (e.g. climate change, land use, sewage inflow, chemical pollution) is a recognized threat to ecosystem services and to the economy. However, the causes and effects of such changes occur over many decades, and are therefore difficult to measure and hence difficult to regulate. The growing application of genomics to species with well-studied ecologies has helped to identify mechanisms of adaptation, including variation in gene regulatory regions, genic polymorphism and copy number variation [1 <#_ENREF_1>]. */However,/* */we have yet to understand the mechanisms of adaptation of natural species to anthropogenic stress. This limits our ability to assess the resilience of natural systems to human-driven changes, with severe implication for ecosystem services and the economy/. *Accurate measurements of the effects of human driven changes on natural populations and communities is critical for gauging the effects of ecological drift, anthropogenic or otherwise, on biodiversity. To date, such changes have been poorly documented, owing, in part, to the paucity of datasets spanning long periods of time (e.g. several decades or centuries). To design a study across the time-span of multiple human careers, */we propose a revolutionary approach that dramatically advances the state-of-the-art to generate longitudinal data within the scope of a single research project/*. Propagules from sedimented biological archives offer the unique opportunity to go beyond time-scales determined by human life- and career-spans [2 <#_ENREF_2>]. Stratified banks can be sampled (cored) preserving their temporal arrangements and accurately dated, thereby aligning their local population and community histories to known changes in the environment, or to environmental changes inferred from analyses of the sediments or soils. Species of the genus /Daphnia/ are by far the best studied metazoans in the practise of "resurrection ecology" (study of evolutionary and ecological features of animals hatched from resting stages)[3 <#_ENREF_3>]. They are keystone species (playing a central role in food-webs) in still water environments and sentinel species for water quality (this species has been used for decades in ecotoxicology to test water quality), as well as key models in the study of adaptive responses to environmental change[4 <#_ENREF_4>,5 <#_ENREF_5>].

The main objective of this project is to identify mechanisms of adaption to anthropogenic stress to identify environmental tipping points for key European water bodies. To meet this goal the current project will identify gene networks that are the most frequent targets of natural selection. By comparing the evolutionary trajectory of alleles in

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UBristol UExeter 2 ClimateAdaptation

Applications are invited for two PhD studentships eligible for NERC funding:

(1) Evolutionary rescue in the face of climate change? Testing for local adaptation at the southern range margins of European butterflies

(Supervisors; Dr Jon Bridle, University of Bristol, Dr Rob Wilson, University of Exeter)

(2) The role of habitat heterogeneity in climate-proofing conservation: integrating effects of microclimate on population dynamics and local adaptation

(Supervisors: Dr Rob Wilson, University of Exeter, Dr Jon Bridle, University of Bristol)

Please see: http://www.bristol.ac.uk/gw4plusdtp/-projects/ and http://www.exeter.ac.uk/studying/-funding/award/?id=1544 and below for more details of these projects, and the application procedure.

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

The deadline for applications is 15th January 2015.

Please contact Jon Bridle (jon.bridle@bristol.ac.uk) or Rob Wilson (R.J.Wilson@exeter.ac.uk) in the first instance for informal discussion.

(1) Evolutionary rescue in the face of climate change? Testing for local adaptation at the southern range margins of European butterflies

We are looking for a highly-motivated student to test the ecological effects of climate change on butterfly communities, and the role of evolution in increasing their resilience. Profound effects on ecosystem function are predicted as climate change generates rapid shifts

in species geographical distributions. Many organisms have already contracted their ranges at equatorial margins to higher altitudes, and expanded their ranges as their poleward margins become increasingly habitable. However, these responses seem limited by rates of evolution. Although most generalist species have shifted their ranges, most specialist species remain trapped in increasingly fragmented habitats, apparently because they cannot adapt to local conditions at their ecological margins. Defining critical levels of environmental change therefore depends on understanding how easily (and how quickly) evolutionary rescue can occur at ecological margins.

This project will explore evolution in European butterflies at their southern (contacting) margins in comparison to that observed at their northern (expanding) margins. Adaptive divergence may be easier at contracting margins because population sizes are initially high, making genetic variation locally available. By contrast, at expanding margins evolution may require the spread of novel mutations from distant populations, or may cause the rapid loss of adaptive variation.

You will: (i) conduct butterfly and host plant surveys in central Spain, and comparing their thermal niches to our previous data; (ii) Use population genomics to test for local adaptation at contracting range margins in comparison to those involved in poleward expansions; (iii) conduct field transplant experiments to test for adaptive divergence in maternal behaviour and larval survival and and by testing larval growth rate at different altitudes.

You will be based at the University of Bristol, with periods at the University of Exeter, and two field seasons in Madrid. You will receive expert training in population ecology and genomics, spatial ecology, and the application of evolutionary theory to conservation policy.

(2) The role of habitat heterogeneity in climate-proofing conservation: integrating effects of microclimate on population dynamics and local adaptation

There is an urgent need to understand and predict where species will persist under climate change. Conventional bioclimate models neglect the capacity of local variation in habitat (topography and vegetation structure) to drive the regional dynamics and distributions of species through their effects on local adaptation and population dynamics. This project will combine empirical databases and modelling with field and experimental work to test the importance of habitat heterogeneity for the conservation of an exemplar system, butterfly species breeding in fragmented habitats in Britain.

You will: (i) Use remotely-sensed and ground-truthed vegetation information combined with fine-resolution microclimate models to develop composite maps of habitat and microclimate for the Brown Argus and Silver-studded blue butterflies in South-West England; (ii) Analyse existing population monitoring databases to test effects of modelled spatial and temporal variation in habitat and microclimate on the population dynamics of these species for the past three decades; (iii) Carry out field sampling of egg-laying sites to detect the effects of habitat heterogeneity on local ecological specialisation, and genome scans

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UCalifornia Berkeley EvolutionaryEcology

GRADUATE POSITIONS AT UC BERKELEY

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

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

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

Project PIs and contributors at UC Berkeley are: Rosemary Gillespie, Patrick O'Grady, George Roderick & Kari Goodman in the Department of Environmental Science, Policy, and Management (ESPM); John Harte, Neo Martinez in the Energy and Resources Group, and Rasmus Nielsen in the Department of Integrative Biology (IB).

Other PIs and constirbutors are Dan Gruner (U Maryland) Don Price (U. Hawaii Hilo,), Kerry Shaw (Cornell), and Diana Percy (Natural History Museum, London)

Interested students should email Rosemary Gillespie <gillespie@berkeley.edu>

Applications to UC Berkeley for Fall 2015 must be received by Dec 1, 2014. For details see: http://ourenvironment.berkeley.edu/graduate-programs/admissions/ Rosemary G. Gillespie, Professor & Schlinger Chair in Systematic Entomology University of California Berkeley. Office: 221 Wellman Hall Mail: 130 Mulford Hall, Berkeley, CA 94720-3114 email: gillespie@berkeley.edu http://nature.berkeley.edu/~gillespie/ International Biogeography Society, http://www.biogeography.org/ gillespie@berkeley.edu

UCopenhagen HostPathogenInteractions

Two PhD scholarships in host-pathogen interactions and insect immunocompetence

Department of Plant and Environmental Sciences, Faculty of Science at the University of Copenhagen (UCPH) is offering two PhD scholarships in host-pathogen interactions, one commencing on the 1st of April, and the other on the 1st of May 2015. The application deadline for both positions is the 1st of January 2015.

Project description

Organisms in most ecosystems are exposed to parasites and pathogens, increasingly in combination with chronic exposure to sub-lethal concentrations of pesticides. Recent studies indicate that combined exposure to pathogenic and chemical stress may lead to more profound disease manifestation. An interdisciplinary research project at UCPH headed by Associate Professor Brian Lund Fredensborg is developing a conceptual insect-pathogen model to explore the impact of chemical stress on host and pathogen parameters.

The successful applicants will join a dynamic team working on unraveling the mechanisms behind the combined effects of low doses of pesticides (pyrethroids and azoles) and two different pathogens, a fungus and a tapeworm, on the beetle Tenebrio molitor. The project provides an excellent opportunity to gain a broad set of state-of-the-art laboratory skills, and for interdisciplinary collaborations.

PhD student 1: Host-Pathogen interactions

Starting date: 1st of April 2015

The main task is to experimentally quantify host and pathogen fitness parameters in relation to chemical stress from pesticides. The successful applicant preferably has a background in host-parasite or host-pathogen interactions using an experimental and ecological approach.

Information on applying for this position may be found on: http://employment.ku.dk/phd/?show=700643
PhD student 2: Insect immunocompetence

Starting date: 1st of May 2015

The main task is to identify and quantify host immune response parameters to pathogen infection in relation to chemical stress from pesticides. The successful applicant preferably has a background in host-pathogen interactions. Knowledge on the use of immunological and molecular methods is advantageous. Experience with invertebrate immune response to infection using an experimental approach is particularly relevant.

Information on applying for this position may be found on: http://employment.ku.dk/phd/?show=700746
Only electronic applications will be accepted. Inquiries are welcome and may be sent to Associate Professor Brian Lund Fredensborg, e-mail: blf@plen.ku.dk

Brian Lund Fredensborg, Ph.D. Associate Professor Head of Studies (MSc. Parasitology) Department of Plant & Environmental Sciences University of Copenhagen

MOB +45 31323860 blf@plen.ku.dk

Brian Lund Fredensborg <blf@plen.ku.dk>

UDelaware PoultryGenomics

A PhD position in poultry genetics and genomics is available (Fall 2015) in the Department of Animal and Food Sciences at the University of Delaware.

The primary goal for this position is to work on a next-generation sequencing project on poultry genetics and genomics. The project will primarily be focused on using the whole-genome sequence data (i) to discover and characterize polymorphisms within and among purebred populations and (ii) to characterize genomic landscape and relatedness of purebred populations.

We are looking for a self-motivated and enthusiastic person who possesses good interpersonal skills and willing to work in close collaboration with others. The individual is expected to interact with our industry partner and have determination to gain insight and publish papers in leading, international scientific journals.

The Research Assistantship includes a competitive stipend, as well as covering 100% of tuition, and funds for presenting the research results at regional, national and international scientific meetings. The student will also have opportunities to perform internships or on-site research with our industry partner in the U.S.

Candidates from different fields of biology are encouraged to apply; however, those with background in animal breeding and genetics with experience in analyzing large datasets are preferred. In your application, please include a letter of interest; a curriculum vita as well as the names and contact details of 3 references; GRE and TOEFL or ILTS (if foreign students whose primary language is not English) scores. The application materials should be sent to Dr. Behnam Abasht (abasht@UDel.edu) no later than November 15, 2014.

The University of Delaware is an equal opportunity employer, which encourages applications from minority group members and women.

"Abasht, Behnam" <abasht@udel.edu>

UExeter EvolutionOfFungalTrophicFunctions

Funded PhD Positions in Fungal Evolutionary Biology Supervised by Tom Richards & Ken Haynes Biosciences, University of Exeter, UK

Fungi make a living by secreting enzymes to breakdown complex material in the extra-cellular environment coupled with production of transporter proteins to import processed nutrients. These functions allow fungi to colonize different environments including plant and animal hosts and engage in resource competition through public goods games. The aim of this PhD project is to reconstruct the evolution of ecology defining transporter genes in yeast fungi, allowing comparison of how gene/genome changes have underpinned diversification in these microbes. The work will then use phenotype assays of extant and ancestral protein forms to investigate the evolution of transporter functions. This work will provide the basic science for understanding how different fungi, including important pathogens, make use of different environmental resources.

For further information see: http://www.exeter.ac.uk/-studying/funding/award/?id=1570 Or contact me at thomas.richards@exeter.ac.uk

"Richards, Thomas" <T.A.Richards@exeter.ac.uk>

UGeneva ComputationalHumanGenomics

A PhD position in computational human population genetics/genomics is available at the Laboratory of Anthropology, Genetics and Peopling history (AGP Lab) of the University of Geneva (Switzerland). This PhD will be under the supervision of Dr Mathias Currat and will consist in the analysis of genetic and genomic data (modern and ancient) using original computational methods, mainly through computer simulation. This PhD is integrated into a larger project aiming at reconstructing the evolution of European populations (http://ua.unige.ch/en/agp/-recherche/fns/31003A-156853/).

We are seeking a highly motivated person with a strong interest in human evolution, population genetics/genomics, computer tools and anthropology in general.

Requirements:

Master degree in biology or equivalent;

Good skills in biostatistics and bioinformatics;

Skills in modelling and programing are an advantage;

Collaboration and communication abilities.

Terms of employment:

Duration: 3 years, provided that the first year is successful (trial period); Start: the position is available from 1st February 2015.

Salary: SNSF salary scale for a candoc.

Other conditions:

The PhD student will participate to the teaching and other activities of the AGP Lab.

About the AGP lab

The Lab is hosted by the Department of Genetics and Evolution - Anthropology Unit at the University of Geneva, Switzerland. It offers a very stimulating scientific environment with several independent researchers, international collaborations and excellent computer resources. The Anthropology Unit is located in the heart of Geneva (Acacias) at walking distance from other University buildings. Both English and French are the working languages in the Lab.

More details about the Anthropology Unit may be found at http://ua.unige.ch/en/ How to apply

Applications should be sent as a single pdf file by email to Dr Mathias Currat (mathias.currat@unige.ch) by 10 December 2014. It should include a motivation letter, a detailed CV, contact information of two referees and a statement of past research in the domain (Master Thesis and others).

Dr Mathias Currat Senior Research Associate (MER)

Laboratory of Anthropology, Genetics and Peopling history (AGP lab) Department of Genetics and Evolution - Anthropology Unit University of Geneva 12, rue Gustave-Revilliod, 1227 Geneva, Switzerland

tel: +41 22 379 69 79

Mathias Currat <Mathias.Currat@unige.ch>

UGeorgia EvolutionaryBiol

Graduate study at UGA in Evolutionary Biology

The University of Georgia is recruiting new graduate students in evolutionary biology.

UGA is home to over 40 evolutionary biologists who study diverse questions about the mechanisms and processes of evolution. Many students who are interested in evolutionary biology are admitted through the Integrated Life Sciences program. This is a portal through which students enter and can complete rotations in nearly any life science department before choosing a home laboratory and department. Please find more information about the ILS program at http://-ils.uga.edu/ . Applications to the ILS program for Fall 2015 admission are due December 15, 2014.

We encourage potential students to explore the interests of our faculty, and to be in touch with faculty whose research they are interested in. For a list of evolutionary biology faculty associated with the ILS program, please see http://www.genetics.uga.edu/evolutionary/-evoecol.html .

Athens is a fun and affordable place to live, and is consistently ranked among the nation's top college towns.

Please contact us or any of the faculty in the ILS program with questions.

Kelly Dyer Evolution and Ecology ILS group representative Associate Professor of Genetics kdyer@uga.edu

Walter Schmidt Graduate Coordinator of the ILS program Associate Professor of Biochemistry and Molecular Biology wschmidt@uga.edu

Kelly Dyer <kdyer@uga.edu>

UGuelph AdaptiveDiversification

Graduate Opportunity - Adaptive Diversification in the Wild

What causes a population to diversify? How are the axes of diversification limited? What are the genetic bases of adaptive diversification in natural populations?

These questions are central to understanding the diversity of life and yet remain as key challenges in evolutionary biology. As part of an international collaboration, we attempt to answer such questions. There is an exciting opportunity for a promising graduate student to join us, at PhD or MSc level, in exploring the processes underlying adaptive diversification in nature.

Project overview: Adaptive diversification describes a process where a single population can split into two stable populations due to competitive interactions and despite gene flow. Our multifaceted approach to understanding these early stages of divergence involves disentangling the ecological and genetic mechanisms relevant in natural systems. We study the evolution of ecologically-specialised morphs of Icelandic Arctic charr (Salvelinus alpinus), where remarkable intralacustrine diversification repeatedly occurs along a benthic-limnetic continuum. This system allows us to investigate the roles of selection and genetic architecture in diversification under natural conditions.

Position description: We are seeking a motivated and talented graduate student with an interest in understanding the genetic basis of diversification. The position will involve a combination of fieldwork with exposure to state-of-the-art molecular techniques, with time spent both in Iceland and in Canada. Funding opportunities are available for Canadian or Icelandic students; students of other nationalities will be considered dependent on other sources of funding (e.g. Ontario Trillium Scholarship).

Further information: Interested students should send a statement of research interests and curriculum vitae to Dr. Moira Ferguson at mmfergus@uoguelph.ca.

Please also refer to: http://www.uoguelph.ca/ib/-people/faculty/ferguson.shtml and for a perspective from a current grad student: http://ofrankli.wix.com/-exploring . ofrankli@uoguelph.ca

UGuelph DaphniaMutationRate

A position for an MSc student is available starting in May or September 2015

Supervisor: Teresa Crease, Department of Integrative Biology, University of Guelph (http://-www.uoguelph.ca/~creaslab).

Co-supervisor: Melania Cristescu, Department of Biology, McGill University (http://biology.mcgill.ca/-faculty/cristescu).

The primary goals of this research project are to determine the impact of heavy metal contamination on rates of mutation and recombination in ribosomal DNA (rDNA) and transposon activity in Daphnia mutation accumulation lines.

The mutation lines have been maintained with and without exposure to copper and nickel for about 90 generations. The student will use next-generation sequencing and qPCR to assay sequence variation and copy number in the rDNA of a subset of lines from each treatment. Transposon display will be used to assay transposon copy number. The results will be compared to the results of fitness assays conducted on the lines as part of a related project.

This project is part of the NSERC CREATE Training Program in Aquatic Ecosystem Health: Integrative Approaches for Studying Multiple Stressors (ERASMUS). More information about ERASUMS can be found at http://www1.uwindsor.ca/erasmus-create . Students in the ERASMUS training program benefit from unique opportunities that involve exposure to multidisciplinary training through workshops, exchanges with participating institutions and/or internships with industrial and governmental partners.

More information about the MSc program at Guelph can be found at http://www.uoguelph.ca/ib/grad/-graduate.shtml Students who are interested in this position should send an email to Teresa Crease (tcrease@uoguelph.ca). Please include a short CV and the names and contact information of at least 2 faculty who could act as referees.

Teresa Crease, MSc, PhD Department of Integrative Biology University of Guelph 50 Stone Road East, Guelph, ON N1G 2W1

phone: 519-824-4120 x52723 FAX: 519-767-1656 email: tcrease@uoguelph.ca

tcrease@uoguelph.ca

UHamburg BehaviouralEvolution

We seek a motivated PhD student to work on the evolution of personality differences in a biparental cichlid. The 3-year position is funded by the German Science Foundation and will be based within the Animal Behaviour group of the University of Hamburg. Salary

level is TV-L 13 (65%, ca. 1400-1600 EURO/m after deductions).

The full ad can be found on: http://www.uni-hamburg.de/uhh/stellenangebote/wissenschaftliches-personal/Biologie_20-11-14_e.pdf Please apply by 20.11.2014.

For further information please contact Wiebke Schuett (wiebke.schuett@uni-hamburg.de).

Dr. Wiebke Schuett (PhD) Zoological Institute University of Hamburg Martin-Luther-King-Platz 3 20146 Hamburg Germany http://www.uni-hamburg.de/-biologie/BioZ/zis/vb/mitarbeiter/schuett_e.html wiebkesch@googlemail.com

UHamburg LemurConservation

Universitat Hamburg invites applications for a Research Associate in accordance with §28(1) of Hamburg's Higher Education Act (HmbHG*). The position commences on 01.01.2015.

It is remunerated at the salary level TV-L 13 and calls for 50% percentage of the regular weekly work hours of work per week. The short-term nature of this contract is based upon §2 of the Academic Short-Term Labor Contract Act (WissZeitVG). The initial fixed term is three years.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with Hamburg's Higher Education Act (HmbHG).

Tasks:

Associates will be expected primarily to teach and conduct research. The associate will also have the opportunity to pursue further academic qualifications, in particular a doctoral dissertation. At least one-third of set working hours will be made available for the associate's own academic work.

Area(s) of Responsibility:

The department "Animal Ecology and Conservation" offers a PhD-Position with the research focus on the 'Environmental and anthropogenic effects on the health status of lemur species: interaction of immune gene variation (MHC), the gut-microbiome and parasite loads in lemurs". The project will be carried out in collaboration with Prof. Dr. S. Sommer at the University of Ulm and aims at increasing our understanding of the effects of environmental, anthropogenic and immune genetic factors on the functionality of bacterial communities in lemur species, the role of MHC variation and the potential impact on wildlife health. The main part of the project consists of lab work. Field work with lemurs in Madagascar might also be required.

The position involves a teaching load of 2.25 hours per week during the semester term. Teaching will have to be done mostly in German.

Requirements:

A university degree in a relevant subject. Applicants should have a Master degree in Biology.

Candidates should have a strong background in evolutionary ecology and population genetics and interest in bioinformatic data processing. We seek a highly motivated and scientifically creative graduate student with the ability to work independently, team work abilities, social and organisational skills, and good skills in English (speaking and writing). Methods employed in the lab will include DNA extraction, PCR, library preparation and normalization, immune gene and microbiome sequencing on a next generation sequencing platform (Illumina) and bioinformatics data processing.

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Jörg Ganzhorn or consult our website at http://www.uni-hamburg.de/biologie/BioZ and http://www.uni-ulm.de/nawi/bio3/prof-drsimone-sommer.html . Applications should include cover letter, curriculum vitae, and copies of degree certificate(s).

The application deadline is November 21, 2014. Please send applications to:

Jörg U. Ganzhorn Tierökologie und Naturschutz Universitat Hamburg Martin-Luther-King Platz 3 20146 Hamburg Germany

Email: ganzhorn@uni-hamburg.de.

Prof. Dr. Simone Sommer University of Ulm Institute of Experimental Ecology Albert-Einstein Allee 11 D-89081 Ulm

Tel.: 0049-731-5022660 Tel.: 0049-731-5022661 (Secretary) Fax: 0049-731-5022683

Simone.Sommer@uni-ulm.de

"Prof. Dr. Simone Sommer" <simone.sommer@uni-ulm.de>

UHawaii MolecularEvolutionVision

Graduate student positions are available in Dr. Megan Porters Molecular Evolution Lab in the Department of Biological Sciences, University of Hawaii at Manoa (http://manoa.hawaii.edu/biology/) starting in Fall 2015.

I am looking for enthusiastic, dynamic, and independent students broadly interested in studying the interface between visual ecology, physiology, and molecular evolution. Students would ideally have a B.S. degree in Biology or related discipline and must be proficient in English. Candidates with additional knowledge of computer science and/or bioinformatics are encouraged to apply. My research focuses on non-model invertebrate study organisms, including mantis shrimp crustaceans. My current projects combine elements of molecular biology, biochemistry, next generation sequencing, bioinformatics, physiology, and molecular evolution to address questions related to the evolution of visual system form and function. This research requires good communication skills, and the ability to work collaboratively as part of a team. More information on my research is available at my website (http://www.usdbiology.com/porter/) or from my publication list (http://scholar.google.com/-citations?user=8tZrW7IAAAAJ&hl=en).

Interested students will be required to apply to the Graduate Program in the Department of Biology at UHM. To learn more about the application process, please go to the Department of Biology homepage (http://manoa.hawaii.edu/biology/) and look at the graduate admissions pages (http://manoa.hawaii.edu/-biology/graduate). The application deadline for the 2015-2016 academic year is January 15, 2015.

For more information on current research projects in the lab, applicants should contact Megan Porter directly at Megan.Porter@usd.edu (before Jan. 1, 2015) or mlporter@hawaii.edu (after Jan. 1, 2015) well before the January deadline. Please provide a brief description of your background, your research interests, and your reasons for considering the Porter lab for graduate training.

Megan Porter, Ph.D.

Assistant Professor

Department of Biology

University of Hawaii at Manoa

Honolulu, HI

Until Jan. 1 2015

email: Megan.Porter@usd.edu

phone: 605-677-6176

After Jan. 1 2015

email: mlporter@hawaii.edu

"Porter, Megan L" <Megan.Porter@usd.edu>

UIdaho CoevolutionaryBiol

Ph.D. position in coevolutionary biology at the University of Idaho

The Nuismer and Joyce labs at the University of Idaho are actively recruiting a Ph.D. student interested in developing novel statistical approaches for estimating the strength of coevolutionary selection within natural populations. Our overall goal is to develop Bayesian statistical tools that allow key parameters of existing coevolutionary models to be estimated using widely available data drawn from studies of phenotype matching and local adaptation. Through collaboration with Dr. Butch Brodie (University of Virginia), opportunities exist for developing and testing these new statistical tools using data on the well-studied interactions between toxic newts and their garter snake predators. Substantial scope also exists for student driven innovation and extension to other types of data.

Applicants with a strong background in mathematics, statistics, and computation are encouraged to apply. However, applications from students with a strong background in evolutionary biology or ecology who have a keen interest in learning to develop mathematical, statistical, and computational tools are also encouraged. Depending on the successful applicant's background and primary interests, graduate work will take place in the Department of Biology (http://www.uidaho.edu/-sci/biology), the Graduate Program in Bioinformatics and Computational Biology (http://www.uidaho.edu/-cogs/bcb), the Department of Mathematics (http:/-/www.uidaho.edu/sci/math), or the Department of Statistics (http://www.uidaho.edu/sci/stat). We anticipate that funding will be primarily through a research assistantship, beginning in fall, 2015.

To apply, please send an email describing your

background and interests to Dr. Scott Nuismer (snuismer@uidaho.edu) or Dr. Paul Joyce (joyce@uidaho.edu).

Scott Nuismer Professor Departments of Biological Sciences and Mathematics Program in Bioinformatics and Computational Biology University of Idaho Moscow, ID 83844

snuismer@uidaho.edu

UKentucky EvolutionaryBiol

Title

Ecology and Evolutionary Biology-University of Tennessee at Knoxville (PhD and Masters positions)

Description

The Department of Ecology and Evolutionary Biology at the University of Tennessee-Knoxville seeks motivated applicants for PhD and MS research degree programs. Our students explore a broad range of areas: evolutionary biology, evolutionary theory, behavioral and population genetics, animal behavior, plant biology, computational, mathematical and theoretical ecology, and more.

We provide funding to both Masters and PhD students and we only admit students when we are confident that funding will be available to cover their tuition fees, salary and health insurance throughout their course of study, provided the individual is making appropriate academic progress. Depending on the student, that funding would be provided through a fellowship, research assistantship or teaching assistantship.

Graduate students in EEB typically apply to work with a particular advisor. Applicants should contact potential advisors well in advance of the January 1 application deadline to talk about research interests and opportunities. If interested but unsure about which advisors might be a good match for your interests, please contact the current chair of Graduate Admission in the department, Paul Armsworth (p.armsworth@utk.edu).

More information about applying to EEB at UTK is at http://eeb.bio.utk.edu/graduate-studies/-application-information/ . "Ward, Shelby" <sburks3@vols.utk.edu>

UKentucky GenomicsPhylogenetics

The Weisrock Lab at the University of Kentucky (sweb.uky.edu/~dweis2) is recruiting a PhD student to begin graduate work in Fall 2015. We are a diverse research group working on evolutionary, population, and conservation biology projects using genetic data in a variety of taxa, including amphibians, primates, freshwater insects, and freshwater mussels.

Graduate students in the lab are encouraged to develop independent thesis projects. This year we will be especially interested in students who seek training in the computational analysis of genomic data, particularly in the fields of molecular evolution and phylogenetics. Students will have an opportunity to integrate into a recently funded NSF collaborative project investigating the evolution of gene trees across loci that exhibit different evolutionary and functional properties. This work, combining both salamander and lemur study systems, is in collaboration with Dr. Anne Yoder at Duke University, and PhD students participating in this project will interact with a team of graduate students, postdocs, and PIs across institutions. Research Assistant support is available for work on this project.

The Department of Biology at UK is home to multiple faculty with research programs in evolution and genomics. More information about the Department can be found at bio.as.uky.edu

Students interested in learning more about a potential PhD opportunity should contact Dr. David Weisrock (dweis2@uky.edu).

Department of Biology University of Kentucky 101 Thomas Hunt Morgan Building Lexington, KY 40506 859-257-2249 dweis2@uky.edu http://sweb.uky.edu/-~dweis2 david.weisrock@uky.edu

ULeicester TyrosineKinaseEvolution

Dear evoldir

A PhD studentship is available by competition to study the molecular evolution of tyrosine kinases, jointly

supervised by me (Dr Ed Hollox) and Prof Nick Brindle at the University of Leicester. Further details at http://www2.warwick.ac.uk/fac/cross_fac/mibtp/-pgstudy/phd_opportunities/gene_expression Project outline: Although multicellularity has evolved several times in eukaryotes, its evolution in metazoa is of particular interest, because of the range of distinct cell types observed in metazoans leading to highly complex and mobile organisms. Tyrosine kinases (Y kinases) are an important family of proteins involved in mediating cell-cell signalling. They evolved from serine-threonine kinases (ST kinases) around 600 million years ago and are found only in metazoans and choanoflagellates. Y kinases are thought to be critical in enabling the evolution of multicellularity in metazoans by developing an extra signalling space for cell-cell communication (1). It is not known how the tyrosine kinase signalling system evolved, and what biochemical constraints on the protein sequence space there were in the evolution of tyrosine kinases.

This multidisciplinary project combines bioinformatics, evolutionary genetic analysis, experimental evolution and biochemistry to determine how Y kinases evolved. The initial step, supervised by Ed Hollox, will infer ancestral pre-Y kinase and proto-Y kinase domain sequences from Kinbase, a highly curated database. The second step will be investigation of the biochemistry of the transition between pre-Y and proto-Y kinase domain using an in-vitro evolution system in the lab of Nick Brindle.

This project is available for a PhD studentship is available as part of the Midlands Integrative Biosciences Training Partnership, http://www2.warwick.ac.uk/-fac/cross_fac/mibtp/about_mibtp/ Eligibility: British nationals who have lived in the UK all their lives are eligible. Also eligible are non-British nationals who have settled status AND have been resident in the UK for 3 years immediately prior to the date of the start of the course. EU nationals who have been ordinarily resident in the UK and Islands for three years immediately prior to the date of start of the course; EU nationals not resident in the UK are eligible for matched funding studentships only.

Ed Hollox, PhD Lecturer in Genetics, University of Leicester

Research group pages http://tinyurl.com/hollox Departmental staff page http://www2.le.ac.uk/-departments/genetics/people/hollox Room G6, Department of Genetics, **** note new office *** Adrian Building University Road, Leicester LE1 7RH UK

Tel: +44 (0)116 252 3407 (office G6) +44 (0)116 223 1366 (lab G3)

"Hollox, Ed (Dr.)" <ejh33@leicester.ac.uk>

ULethbridge AvianEvolution

Researchers at the University of Lethbridge are seeking outstanding students interested in pursuing a graduate degree in evolutionary biology. The University of Lethbridge has a strong research program in evolutionary biology and a diverse group of researchers that are interested in recruiting outstanding MSc and PhD students for 2015. We offer MSc degrees in several fields as well as a specific PhD program in Ecology, Evolution and Behaviour. Graduate students are eligible for full funding packages through a combination of TAships and competitive internal scholarships (including tuition awards), and are encouraged to apply for external fellowships from a variety of Provincial and Federal sources. Opportunities also exist for collaborative projects among our researchers and with other institutions. Faculty members that are currently accepting graduate students include:

Theresa Burg, Department of Biology (http://-scholar.ulethbridge.ca/theresaburg/)

Topics: Evolution, evolutionary ecology, population genetics, landscape genetics, speciation

Methods: PCR, genotyping, sequencing. Field work is an important aspect of our research and preference will be given to applicants who have banding/ringing experience.

Andrew Iwaniuk, Department of Neuroscience (http://-/scholar.ulethbridge.ca/iwaniuk/)

Topics: evolutionary neurobiology, ornithology, comparative anatomy, animal behaviour

Methods: immunohistochemistry, histology, stereology, micro-CT, behavioural analysis, fieldwork, comparative methods

Drew Rendall, Department of Psychology (http://-people.uleth.ca/ ~ d.rendall < http://people.uleth.ca/-%7Ed.rendall >)

Topics: animal communication, social evolution, comparative cognition

Methods: fieldwork, behavioral and acoustic analysis, psycho-acoustic experimentation, comparative methods

Located in southern Alberta and very close to the

Rocky Mountains, Lethbridge offers a sunny, dry climate, which is surprisingly mild for the prairies, excellent recreational amenities, especially for outdoor enthusiasts, and a reasonable cost of living. The University of Lethbridge is a top-ranked Canadian university that is home to several major research centres, including the Canadian Centre for Behavioural Neuroscience and the Water Institute for Sustainable Environments as well as a field station in the Crown of the Continent region of the Rocky Mountains.

For more information or to apply, please contact one of the researchers listed above.

Admissions criteria and deadlines for application can be found on the School of Graduate Studies website (http://www.uleth.ca/graduatestudies/). List of internal funding opportunities:

http://www.uleth.ca/graduatestudies/content/sgs-tuition-award http://www.uleth.ca/graduatestudies/-content/sgs-deans-scholarship theresa.burg@uleth.ca

UMiami EvolutionaryBiology

Graduate Studies in Integrative Biology

The University of Miami, FL, USA

The University of Miami's Department of Biology is seeking outstanding graduate students in integrative biology. Our department's research strengths and foci include Neuroscience & Behavior, Development & Disease, Tropical Biology, and Ecology & Evolutionary Biology. Our graduate program promotes an interdisciplinary training in the biological sciences, that takes advantage of our diverse faculty, proximity to the Neotropics and strong partnerships with other departments and institutions. Our partner institutions and departments include the Departments of Mathematics, Physics, Computer Science and Psychology, as well as the Fairchild Tropical Botanic Garden, Miller School of Medicine, Rosenstiel School for Marine & Atmospheric Sciences, and the Abess Center for Environmental Science & Policy. Shared facilities available in the department include tissue culture, imaging, isotope, molecular core and zebrafish facilities.

The University of Miami is nestled in a vibrant and diverse community, minutes from downtown Miami and South Beach, and within an hour of natural areas such as the Everglades National Park and the Florida Keys. All PhD students are guaranteed 5 years of financial support and tuition waiver. Current sources of support include: university and college fellowships, HHMI/NIH fellowships, Fairchild Tropical Botanic Garden fellowships, and research & teaching assistantships.Applications for the 2015-2016 academic year close December 1ˆst 2014.

For more information on our program and our graduate faculty, please visit: http://www.as.miami.edu/-biology/ For additional information contact Al Uy, Graduate Program Director at uy@bio.miami.edu

J. Albert C. Uy Aresty Chair in Tropical Ecology Department of Biology University of Miami 1301 Memorial Drive 202/204 Cox Science Center Coral Gables, FL 33146, U.S.A.

Office: 305.284.8558 Lab: 305.284.3039

http://www.bio.miami.edu/uy/ uy@bio.miami.edu

UMinnesota FungalMetaboliteEvolution

Seeking outstanding students interested in evolutionary biology and chemistry to join the Bushley lab in fall 2015.

Fungal secondary metabolites are enigmatic small molecules that shape the interaction of fungi with plants and other organisms. Using a combination of next generation sequencing, natural products chemistry, molecular genetics, and metabolomics, we examine the evolution, diversity, and functions of these metabolites, with a focus on large modular proteins such as nonribosomal peptide synthetases (NRPSs) and polyketide synthetases (PKSs). Current research is focused on population genomic analyses and fine-scale evolution of NRPS secondary metabolites among strains of Tolypocladium inflatum, a fungal pathogen of beetles. Questions addressed include looking at how selection on secondary metabolite genes, together with horizontal transfer and transposition in fungal genomes shapes the evolution of new chemical compounds. Other projects in the lab include identification of regulatory networks involved in controlling secondary metabolism, characterizing genome features that allow fungi to interact with distinct hosts (insects, plants, and other fungi), and examining the roles of endophytic fungi and their metabolites in mediating plant resistance to insect and nematode pests.

The Bushley lab (http://www.cbs.umn.edu/plantbio/-faculty/kathrynbushley) in the Deptartment of Plant Biology at University of Minnesota is a diverse, interdisciplinary, and stimulating research environment that values ethnic, cultural, and gender diversity. The University is home to a vibrant academic community with strong expertise in mycology, genetics, host-microbe interactions, and natural products chemistry. The university recently hired 4 new faculty in mycology, adding additional expertise to an already strong program. Students will have the opportunity to interact with other mycology labs (Kennedy,May,Figuroa,Shilling,and Kistler) as well as strong programs in molecular and cellular biology and computational biology.

Students can apply through either The Department of Plant Biology (Application deadline 12/15/2014) or The Department of Ecology, Evolution, and Behavior (Application deadline 12/1/2014) which both offer competitive stipends, tuition waivers, and health benefits for full-time graduate students.

http://www.cbs.umn.edu/plantbio/gradprog/-prospective http://www.cbs.umn.edu/eeb/graduate/-applying-eeb Prospective students are expected to have a passion for fungi and interests in evolutionary biology, comparative genomics, and/or natural products chemistry. Research experience/interest in molecular biology, next-generation sequencing, and computational biology are a plus.

Please contact Dr. Kathryn Bushley (kbushley@umn.edu) for additional information. Please send a CV, a brief outline of your research interests and goals, and contact information for references.

Kathryn Bushley Assistant Professor University of Minnesota Department of Plant Biology 822 BioSci Bldg 1445 Gortner Avenue St. Paul, MN 55108

Kathryn Bushley <kbushley@umn.edu>

UMinnesota MicrobialPopulationBiology

Graduate opportunities in Microbial Population Biology at the University of Minnesota

The Microbial Population Biology research group (Micropop) at the University of Minnesota encourages graduate applications to the Ecology, Evolution & Behavior and Plant Biology graduate programs. Current research includes the causal bases of biological complexity, aging, cooperation, the evolution of multicellularity, and microbial community dynamics. We employ a variety of approaches, from Experimental Evolution, Molecular & Systems Biology, and Microbiology; using a broad diversity of microbes. Micropop members are highly interactive, and have interdisciplinary connections with the University of Minnesota BioTechnology Institute, Minnesota Center for the Philosophy of Science and Interdisciplinary Center for the study of Global Change.

Competitive graduate fellowships are available. Faculty Micropop members are:

Tony Dean: deanx024@umn.edu R. Ford Denison: denis036@umn.edu Will Harcombe: harcombe@umn.edu Michael Travisano: travisan@umn.edu

Please feel free to contact any of us with questions about the graduate programs or our individual labs. The application deadline for both graduate programs is December 1st. More information about the graduate programs can be found at: Ecology, Evolution and Behavior (http://www.cbs.umn.edu/-explore/departments/eeb) and Plant Biology (http:/-/www.cbs.umn.edu/explore/departments/plantbio).

Michael Travisano Associate Professor Director of Graduate Admissions | Ecology, Evolution & Behavior BioTechnology Institute Resident Fellow | Minnesota Center for the Philosophy of Science 1987 Upper Buford Circle, Ecology Bldg, Saint Paul, MN 55108 University of Minnesota

www.micropop.org

travisan@umn.edu

UMontana Astrobiology

New graduate student positions at the NASA Astrobiology Institute at the University of Montana (admitting for Fall 2015)

Overview:

The NASA Astrobiology Institute (NAI) at the University of Montana is seeking outstanding graduate students interested in pursuing research related to the evolution of biological complexity. Research assistantships (NIH scale) are available to work on projects led by Scott Miller, Matt Herron and Margie Kinnersley. NAI students will join the robust and collaborative Evolu-

tionary Genetics and Genomics Group, a diverse set of UM faculty using genetic and genomic approaches to investigate evolutionary processes in plants, animals, and microbes. Funding is also available for short- or long-term travel to the UM-NAI partner labs of Vaughan Cooper (U New Hampshire), Shelley Copley (U Colorado, Boulder), Gavin Sherlock (Stanford U), and Paul Sniegowski (U Pennsylvania). Students will also have the opportunity to interact with Montana NAI team leader Frank Rosenzweig, Montana NAI co-Investigator John McCutcheon, as well as with theoretical biologists Eric Smith (Santa Fe Institute) and Phil Gerrish (U New Mexico), who will be summer scholars-in-residence at Montana and Pennsylvania, respectively.

Program Description:

It is now widely recognized that not just competitive, but also cooperative interactions are fundamental features of biological systems ranging from enzymes to organelles, cells and societies of cells and organisms. The Montana NAI consists of eight projects organized around five questions related to how such interactions influenced major transitions in the history of Life: (1) How do enzymes and metabolic networks evolve? (2) How did the eukaryotic cell come to be, specifically the cell that contained a mitochondrion? (3) How do symbioses arise? (4) How does multicellularity evolve? and (5) How do pleiotropy, epistasis and mutation rate constrain the evolution of novel traits? A unifying theme underlying these questions is: how do cooperative vs. competitive interactions play out in driving major transitions that occur when independently replicating entities combine into a larger, more complex whole?

Project Descriptions:

Consequences of recA duplication for recombination, genome stability and fitness (PI Scott Miller; Scott.Miller@mso.umt.edu; www.cas.umt.edu/-dbs/labs/miller/):

Despite the importance of homologous recombination during the proliferation of biological diversity, we still have a poor understanding of the balance of its creative, stabilizing and destabilizing contributions to organismal fitness and genome evolution. Addressing this issue hinges on understanding the regulation of the expression and activity of the recombinase A (recA) gene family, an ancient gene family that plays a central role in HR-mediated processes in all three domains of life. We will use the extraordinary genetic variation exhibited by duplicated recA gene copies in the genomes of the cyanobacterium Acaryochloris as a model to address both the impact of recA copy number on recombination and fitness and whether Acaryochloris RecA paralogs have specialized for different sub-functions. With the recent development of genetic tools for these organisms that enables us to manipulate recA copy number, the Acaryochloris system presents a unique opportunity to gain novel insights on the fitness consequences that emerge from the interplay between HR-mediated maintenance of genome stability, selectively favored gene duplications and non-adaptive genomic rearrangements.

The evolution of complexity via multicellularity and cell differentiation (PI Matt Herron; matthew.herron@mso.umt.edu; rosenzweig.dbs.umt.edu/people/matthew-herron/):

How and why organismal complexity increases are central questions in evolutionary biology. Although the vast majority of life forms remain simple, both the maximum and the average levels of complexity have increased from the origin of life to the present day. Large increases in organismal complexity resulted from a series of events in which existing individuals combined to become parts of a new kind of individual with components specialized for various roles. Such events are known as major transitions and include the emergence of cellular life from groups of interacting molecular replicators, of eukaryotes from two prokaryotes, of multicellular organisms from unicells, and of eusocial 'superorganisms' from individual animals. Among such transitions, the evolution of multicellular organisms from single-celled ancestors set the stage for unprecedented increases in complexity, especially in land plants and animals. We have used the unicellular green alga Chlamydomonas reinhardtii to experimentally generate de novo origins of simple (undifferentiated) multicellularity in two separate experiments. Using these newly-evolved, multicellular Chlamydomonas, we plan to ascertain the genetic bases

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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

UNewHampshire Genomics

TheMacManes Labat The University of New Hampshire is in search of a talented PhD student to work on a project aimed at understanding the genomic underpinnings of parental care in the Rock Dove. This work, done in collaboration with the Calisi Lab at

Barnard College (Columbia University), will combine cutting edge techniques in neuroendocrinology with the analysis of high throughput sequencing data. Though this student will focus on genomics, receiving extensive training in bioinformatics, there will be opportunity for an extended visit to the Calisi lab to learn techniques in neuroendocrinology. I especially encourage students with diverse and non-traditional backgrounds to apply. The successful candidate may have an undergraduate degree in Biology, Computer Science, Statistics, Mathematics, or other disciplines. Applications are be submitted to the UNH graduate school (http://www.gradschool.unh.edu/ apply.php, Deadline January 15). Interested students are strongly encouraged to contact me at matthew.macmanes@unh.edu.

Here is the link to the announcement:http://-genomebio.org/grad-student-wanted/ Matthew MacManes, Ph.D. University of New Hampshire I Assistant Professor of Genome Enabled Biology Department of Molecular, Cellular, & Biomedical Sciences Durham, NH 03824 Phone: 603-862-4052 I Twitter:@PeroMHC| Web:genomebio.org Office: 189 Rudman Hall | Laboratory: 145 Rudman Hall

Matthew MacManes <macmanes@gmail.com>

UNewMexico PlantEvolEcol

Talented Ph.D. Students Wanted!

Ecology and evolution of plants and plant-animal interactions

My lab is broadly interested in the ecology and evolution of plants, often focusing on plant-animal interactions such as herbivory, seed predation, pollination, and seed dispersal. We use a combination of field, greenhouse, phylogenetic, experimental evolution, and molecular genetic approaches. Students are expected to develop their own independent projects, but will also have opportunities to collaborate on NSF-funded investigations of hybridization in wild sunflowers and the role of genetic diversity in invasions. The lab is also starting new projects in desert and alpine ecosystems at the Sevilleta National Wildlife Refuge and the Rocky Mountain Biological Lab. Students will be a part of a dynamic group of plant biology, ecology, and evolution researchers at UNM.

For more info please contact me (and send along a CV including GPA and GRE scores):

Ken Whitney Department of Biology University of New Mexico Websites: http://biology.unm.edu/whitney/-index.htm http://biology.unm.edu/whitneyrudgers/-index.html Email: whitneyk@unm.edu

Kenneth Whitney <whitneyk@unm.edu>

UNorthernBritishColumbia BeetleGenomics

Graduate Opportunity Spatial Genomic Analysis of North American Mountain Pine Beetle Outbreaks

We are recruiting a graduate student to investigate the spatial genomic patterns among outbreak populations of mountain pine beetle across North America. This will involve collaborative work among a number of Canada Universities and Canadian Forest Service conducted under funding to the TRIA project (see www.thetriaproject.ca). The work will build upon previous spatial genetic studies (e.g., Samarasekera et al 2012; Janes et al 2014) by using a genotype-by-sequencing approach to explore genomic differences among outbreak populations across North America and to identify loci under local selection. Results of this study will improve our understanding of the genetic differences among mountain pine beetle outbreaks and provide much needed information for the ongoing management and predictive modeling of future outbreaks.

The qualified student will conduct the majority of their course work and research at the Prince George campus of the University of Northern BC, but will also have the opportunity to engage in courses and meetings involving TRIA members from other Canadian Universities. UNBC is a small, dynamic research intensive university (www.unbc.ca). Situated in the geographic centre of British Columbia, the Prince George area offers an affordable quality of life and an abundant of summer and winter outdoor recreation activities. Please see our website for more information on the Natural Resources and Environmental Studies Graduate Program including degree requirements and expectations (www.unbc.ca/nres/).

Qualifications: This is a challenging, but rewarding project requiring a range of interests and aptitudes. Preferably, the successful applicant will have a degree in biology or ecology. Previous experience and coursework in insect biology, population genetic and/or molecular ecology are an asset. The student should be willing to work in a collaborative environment with multiple

University and Government research partners.

Ideally the graduate student will begin in May 2015, although earlier or later start dates will be considered. We anticipate a competitive stipend (~20,000/year) and full funding to support lab and other research activities.

For further information please contact Brent Murray (brent.murray@unbc.ca; 1-250-960-5638; http://-web.unbc.ca/~murrayb).

Samarasekera NG, Bartell N, Lindgren BS, Cooke JEK, Davis CS, James PMA, Coltman DW, Mock KE, and Murray BW. (2012) Spatial Genetic Structure of the Mountain Pine Beetle (Dendroctonus ponderosae) Outbreak in Western Canada: Historical patterns and contemporary dispersal. Molecular Ecology, 21:2931-2948.

Janes JK, Li Y, Keeling CI, Yuen MMS, Boone CK, Cooke JEK, Bohlmann J, Huber PW, Murray BW, Coltman DW and Sperling FAH (2014) How the mountain pine beetle (Dendroctonus ponderosae) breached the Canadian Rocky Mountains. Molecular Biology and Evolution advanced press, April 22, 2014; doi: 10.1093/molbev/msu135

Brent Murray <Brent.Murray@unbc.ca>

UppsalaU PrimateEvolution

PhD in primate diversity and evolution

A PhD position is available in the newly established Primate Diversity and Evolution Lab headed by Katerina Guschanski at the Evolutionary Biology Centre of Uppsala University, Sweden.

Research focus: You will have the chance to study population and species level processes in a number of primate taxa, combining field-collected and historical (museum) samples and utilizing modern molecular techniques. Research topics include, but are not limited to: i) Conservation genetics and molecular ecology: the study of historical and present-day genetic diversity, dispersal, demography in wild primate populations ii) Hybridization and speciation: investigating the role of ancient and ongoing hybridization in speciation of primate taxa The exact project will be developed with the successful candidate and tailored towards her/his interests and skills.

Qualification: The ideal candidate will have a strong interest and documented knowledge in evolutionary biology, with a drive to understand processes shaping species diversity. Perseverance and high intrinsic motivation are required to work on non-model organisms using difficult samples. You will be highly reliable, driven and well-organized, curious and willing to look outside the box, with the ability to quickly acquire new skills. Previous experience with molecular techniques is a must, experience with bioinformatics analysis of genomic data is a plus. Proficiency in English is required.

Position: All PhD students are guaranteed 4 years of financial support. The PhD position entitles the holder to full social benefits and can be combined with up to 20% of teaching assistantship, which will extend the duration of appointment accordingly.

The environment: The Evolutionary Biology Centre (EBC, http://www.ebc.uu.se/) is one of the world's leading research institutions in evolutionary biology and part of Uppsala University - the oldest university in Scandinavia. Uppsala University, ranked top among European Universities in the subject of biology (CHE European ranking), attracts approximately 40.000 students from all over the world, creating an international and stimulating research environment. The city of Uppsala is a vibrant college town, less than an hour's train ride away from Stockholm (and even closer to Arlanda International Airport), with beautiful and easy accessible surroundings.

How to apply: Send your application material including (1) a cover letter outlining your motivation to work on this project as well as relevant research experience and interests, (2) a detailed CV describing your education and listing authored publications, if available, and (3) contact details (including address, e-mail address, and phone number) of two academic referees as a single pdf document to katerina.guschanski@ebc.uu.se. Also include (4) an accredited copy of your MSc degree or equivalent (if already available at time of application). The application must be written in English.

Review of applications will start on January 5, 2015, but candidates will be considered until the position is filled. The starting date can be as early as February 2015. Questions can be address to:

Katerina Guschanski Assistant professor Evolutionary Biology Centre Department of Ecology and Genetics/Animal Ecology Uppsala University Norbyvägen 18D SE-752 36 Uppsala, Sweden

Telephone: +46 (0)18 471 2673 Email: katerina.guschanski@ebc.uu.se http://www.ebc.uu.se/-Research/IEG/zooeko/People/katerina-guschanski/?languageId=1 Katerina Guschanski <k.guschanski@gmx.de>

USalford Manchester EvolutionaryBiology

Dear all,

We would like to draw your attention on a number of PhD projects now recruiting at the University of Salford, Manchester, UK. Several of them have an evolutionary slant. Please find details here:

http://www.salford.ac.uk/study/postgraduate/-fees-and-funding/funded-phd-studentship/school-of-environment-and-life-sciences awards will be given on a competitive basis and will include fully covered UK/EU fees and 3-year postgraduate stipends.

Deadline for applications: 02/02/2015.

Mariani Stefano <S.Mariani@salford.ac.uk>

UTennessee Knoxville EvolutionaryBiol

Title

Ecology and Evolutionary Biology-University of Tennessee at Knoxville (PhD and Masters positions)

Description

The Department of Ecology and Evolutionary Biology at the University of Tennessee-Knoxville seeks motivated applicants for PhD and MS research degree programs. Our students explore a broad range of areas: evolutionary biology, evolutionary theory, behavioral and population genetics, animal behavior, plant biology, computational, mathematical and theoretical ecology, and more.

We provide funding to both Masters and PhD students and we only admit students when we are confident that funding will be available to cover their tuition fees, salary and health insurance throughout their course of study, provided the individual is making appropriate academic progress. Depending on the student, that funding would be provided through a fellowship, research assistantship or teaching assistantship.

Graduate students in EEB typically apply to work with a particular advisor. Applicants should contact potential advisors well in advance of the January 1 application deadline to talk about research interests and opportunities. If interested but unsure about which advisors might be a good match for your interests, please contact the current chair of Graduate Admission in the department, Paul Armsworth (p.armsworth@utk.edu).

More information about applying to EEB at UTK is at http://eeb.bio.utk.edu/graduate-studies/-application-information/ . "Ward, Shelby" <sburks3@vols.utk.edu>

UToronto 2 AvianHybridZones

I am seeking outstanding students to purse graduate degrees (Master's or Ph.D.) in my lab at the University of Toronto, Canada's top-ranked research university. Graduate projects would focus on the genomics of avian hybrid zones in Amazonian birds. The positions would begin in September 2015 and would involve field work (collecting genetic samples in Amazonian Brazil), lab work (developing genetic datasets using next generation sequencing methods that sample broadly across the genome), and bioinformatics type analyses (the genomics of reproductive isolation).

Hybrid zones provide a rare window into the evolution of reproductive isolation and the formation of new species. To date, few hybrid zones have been analyzed from the tropics and no avian hybrid zones have been analyzed genetically from the species rich Amazonian forests. Over the past three years my lab has located twelve previously undescribed hybrid zones in the Amazon, have begun sampling these zones, and have developed large genomic datasets for these species. This is an exciting time to join the lab because students will have an opportunity to join an already established project, work with cutting edge genetic technologies and datasets, and learn the bioinformatics tools and methods required to analyse genomic data in an evolutionary context.

Positions available: 2

Location: Department of Ecology and Evolutionary Biology, University of Toronto (Scarborough campus)

Principle Investigator: Jason Weir

Contact: jason.weir@utoronto.ca

Lab Website: http://www.utsc.utoronto.ca/~jweir ja-

son.weir@utoronto.ca

UToronto InvasionEvolution

Graduate Positions in Invasion Ecology - applications open Peter M. Kotanen Department of Ecology and Evolutionary Biology University of Toronto, Mississauga http://www.utm.utoronto.ca/~w3pkota/ I am looking for Ph.D. and M.Sc. students for investigations into the ecology of plants and their natural enemies (herbivores and pathogens) in Ontario and elsewhere. Recent work by my lab has centred on the effects of these enemies on non-native species. We have used field experiments and surveys to test whether alien plants experience reduced rates of insect and pathogen damage, as predicted by the Enemy Release Hypothesis, and whether damage depends upon phylogeny, latitude, population isolation, and other factors. Information on our research can be found at my home page (www.utm.utoronto.ca/~w3pkota).

We are a thriving department at a leading research institution, with excellent resources and many opportunities for interaction and collaboration. All graduate students are guaranteed a stable minimum income, currently around $24,000 from a variety of sources, as well as support for research and conference travel; it also is welcome if you have your own fellowship support! Information on application procedures and our tri-campus graduate program can be found at http://www.eeb.utoronto.ca/grad.htm; applications for 2015 are now open, and we begin to review them on January 9. Interested students should first contact me via e-mail: peter.kotanen@utoronto.ca.

Some recent publications

Kambo, D. and P.M. Kotanen (2014) Latitudinal trends in herbivory and performance of an invasive species, common burdock (Arctium minus). Biological Invasions 16: 101-112.

Dunn, A.M., M.E. Torchin, M.J. Hatcher, P.M. Kotanen, D.M. Blumenthal, J.E. Byers, C.A.C. Coon, V.M. Frankel, R.D. Holt, R.A. Hufbauer, A.R. Kanarek, K.A. Schierenbeck, L.M. Wolfe, and S. E. Perkins (2012) Indirect effects of parasites on invasions. Functional Ecology 26: 1262-1274.

Hill S.B. and P.M. Kotanen (2011) Phylogenetic structure predicts capitular damage to Asteraceae better than origin or phylogenetic distance to natives. Oecologia 166: 843-851.

MacDonald A.A.M. & P.M. Kotanen (2010) The effects of disturbance and enemy exclusion on performance of an invasive species, common ragweed, in its native range. Oecologia 162: 977-986.

Peter M. Kotanen Dept. of Ecology & Evolutionary Biology University of Toronto Mississauga 3359 Mississauga Road North Mississauga, ON, L5L 1C6 CANADA tel: 905-828-5365; fax: 905-828-3792 e-mail: peter.kotanen@utoronto.ca http://www.utm.utoronto.ca/~w3pkota/ Peter Kotanen <peter.kotanen@utoronto.ca>

UTulsa Oklahoma PopGenetics SwallowBugs

Graduate research opportunity to study ectoparasite population genetics and metapopulation dynamics.

Department of Biological Sciences - University of Tulsa

A graduate student at the M.S. or Ph.D level is sought to work with Drs. Warren Booth and Charles Brown in the Department of Biological Sciences at The University of Tulsa, Oklahoma. The successful applicant will develop a thesis research project focused on the metapopulation dynamics and population structure of swallow bugs (Oeciacus vicarius: Cimicidae), a disease vectoring ectoparasite of cliff swallows (Petrochelidon pyrrhonota). The PIs have amassed a large collection of swallow bugs from cliff swallow colonies varying in size, geographic location, and patterns of occupation, and have recently identified hundreds of microsatellite markers specifically for swallow bugs using next-generation sequencing. The work will draw on a long-term (33-year) study on social behavior and reproductive ecology of cliff swallows in western Nebraska. The study aims to examine the following objectives: nest fidelity and dispersal patterns, inbreeding dynamics, metapopulation structure and population differentiation; relationships between host and parasite genetic structure and diversity; and the potential of blood-fed bugs as indirect indicators of cliff swallow demography and social structure.

Applicants for this position should have a strong background in population genetics, molecular ecology, evolutionary biology, or ecology, be willing to undertake seasonal field research at the study site in western Nebraska, and meet the admission requirements for the

Department of Biological Sciences graduate program. (http://www.utulsa.edu/academics/colleges/college-of-engineering-and-natural-sciences/departments-and-schools/Department-of-Biological-Science.aspx)

Applications should include the following:

1) A letter of interest (not exceeding two pages).

2) A curriculum vitae.

3) Names and email addresses for at least three academics/researchers willing to provide a letter of recommendation

4) Copies of undergraduate/post-graduate transcripts

5) Electronic copies of published manuscripts, if any.

For more information about this opportunity, contact Dr. Booth (warren-booth@utulsa.edu). Anticipated start date is January or August 2015.

Additional information regarding our research can be found at - www.booth-lab.org — Dr. Warren Booth Assistant Professor of Molecular Ecology Department of Biological Sciences University of Tulsa 315 Oliphant Hall Tulsa, OK 74104

Tel. (918) 631-3421 - Office (918) 631-3136 - Lab Departmental website < http://www.utulsa.edu/-academics/colleges/college-of-engineering-and-natural-sciences/departments-and-schools/Department-of-Biological-Science/Our-Faculty-and-Staff/B/-Warren%20Booth.aspx > Lab Website < http://-www.booth-lab.org/ >

“Booth, Warren” <warren-booth@utulsa.edu>

UWisconsin Madison EvolutionaryBiology

Dear Colleagues,

On behalf of my cohorts here in Madison, I would like to encourage you to recommend the UW-Madison Genetics PhD program to your students applying for graduate school. UW-Madison Genetics is one of the top Genetics training programs in the country (entering the 42nd consecutive year of our NIH training grant), with stellar research labs studying a wide variety of systems through classical genetic and genomic approaches. We would also like to announce our connections to the new Quantitative Biology Initiative (QBI, http:/-/qbi.wisc.edu.) at UW-Madison. The QBI is an interdisciplinary and cross-college initiative to provide outstanding training and research opportunities in the quantitative biological sciences. Research and training spans four thematic areas in Computational, Statistical, Theoretical, and Experimental Biology. Students entering the UW-Madison Genetics PhD program have access to many labs within the QBI, including those studying evolutionary and population genetics, statistical genomics, systems and synthetic biology, and more.

More information about the UW-Madison Genetics program, including information on how to apply, is available on our website http://www.genetics.wisc.edu .Thank you, Audrey Gasch

jpool@wisc.edu

UWuerzburg Biodiversity

Dear all,

The Department of Remote Sensing at the University of Wuerzburg, Germany, seeks to appoint a PhD student with strong interest or background knowledge of remote sensing, spatial modeling and biodiversity. The context for this position is the on going modification and variation of our environment and its impact on animal movement.

We are seeking a person capable of developing spatially explicit models to predict the effects of environmental variation and urban growth on animal movement patterns in Central Europe. Significant data for calibration will be available. The successful candidate will conduct her/his PhD in the project $B!H(BOpt4Environment$B!I(B funded by the Federal Ministry for Economic Affairs and Energy (BMWi).

more at: http://remote-sensing.eu/phd-position-on-animal-movement-and-remote-sensing regards, Martin

Dr. Martin Wegmann

Department of Remote Sensing Remote Sensing and Biodiversity Research University of Wuerzburg, Germany

German Aerospace Center (DLR) German Remote Sensing Data Center (DFD)

Phone: +49-(0)931-31-83446

url: http://www.remote-sensing.uni-wuerzburg.de url: http://www.dlr.de/eoc url: http://www.global-change-ecology.org url: http://www.remote-sensing-

biodiversity.org url: http://www.animove.org Martin Wegmann <martin.wegmann@uni-wuerzburg.de>

UZurich ParallelOrchidSpeciation

2 PhD positions - The genetics of parallel pollinator-driven ecological speciation in orchids

Two PhD positions are open for highly motivated students with a keen interest in evolutionary and ecological questions, and a solid knowledge of (1) bioinformatics/statistics/genomics or (2) molecular biology/biochemistry.

The successful candidates will be part of a team investigating the molecular basis of parallel pollinator-mediated reproductive isolation and ecological speciation between sexually deceptive orchids of the genus Ophrys. The project seeks to understand the degree of convergence, at the phenotypic and molecular levels, of two cases of species divergence mediated by the same pollinators. This multidisciplinary project will involve a combination of field experiments, chemical ecology, metabolomics, population genetics, ecological genomics, bioinformatics, evolutionary analysis, transgenesis (in Arabidopsis), molecular biology and enzyme biochemistry, to address fundamental questions about the repeatability of evolution. For background information on the study system, please see e.g. Schlüter & Schiestl (2008, Trends Plant Sci.) and Schlüter & al. (2011, PNAS).

The two main components of the project, each addressed by one PhD student, focus on (1) a field and ecological genomics approach utilising exome and RNA sequencing involving an in-depth analysis of candidate genes and metabolic pathways involved in the production of pollinator-relevant traits; (2) identification and key genes and specific mutations underlying repeated adaptations, and in-depth analysis of their biochemical functions, their regulation, evolutionary origin and ecological effect.

The ideal candidates should be highly motivated and able to articulate their motivation for this project clearly. S/he should be well organised, with a thorough understanding of evolutionary biology, population genetics and molecular biology. Moreover, candidates for position (1) are expected to have programming/analysis skills (knowledge of R is required, knowledge of C/C++, Delphi or other languages are a plus) and a proven experience in bioinformatics, ideally with an ecological genomics background. Candidates for position (2) should have ample experience in molecular laboratory techniques, such as molecular cloning and RNA work, and ideally protein work (expression/purification/Westerns/enzyme work), plant transformation and subcellular protein localisation (e.g. GFP). For both positions, proficiency in English and good communication skills are essential, as is an MSc degree (or equivalent) in biology, biochemistry, or a related discipline, and the proven ability to carry out research independently.

We offer two 3-year PhD positions at the University of Zurich, Switzerland, funded by the Swiss National Science Foundation. The students will be part of the Institute of Systematic Botany, located in the beautiful Botanic Gardens and within walking distance of Lake Zurich. The successful candidates will work in a young, active and interdisciplinary environment and will have access to state-of-the-art tools and techniques. Applications should be made via the Life Science Zurich Graduate School (http://www.lifescience-graduateschool.ch/-), selecting the Plant Science programme, before 1 December 2014.

Contact for further information: Dr Philipp Schlüter, Institute of Systematic Botany, Zollikerstr. 107, CH-8008 Zurich, Switzerland. philipp.schlueter at systbot.uzh.ch. Telephone: +41 44 63 48328.

philipp.schlueter@systbot.uzh.ch

UZurich PlantSystematics

PhD. position in Plant Systematics & Evolution, Univ Zurich

Project description: The selected student will work with Dr. Colin Hughes http://www.systbot.uzh.ch/Personen/-ProfessorenundDozenten/ColinHughes.htmlÂ on a research project entitled “Global Legume diversity patterns: macroevolutionary and ecological processes shaping biodiversity”, funded by the Swiss National Science Foundation in the Institute of Systematic Botany at the University of Zürich. http://www.systbot.uzh.ch/index_en.html We are interested in how diversity evolves and understanding the processes and factors that determine the spatial distribution of life on Earth. Using comparative approaches and one of the most evolutionary successful families of flowering plants, the legumes (Leguminosae

= Fabaceae), as a study system, we are addressing a set of inter-related questions about global plant diversity patterns. We are making use of recent developments in comparative phylogenomics and global-scale species distribution modelling to quantify phylogenetic turnover and the ecological factors underlying patterns of diversity across large-scale ecological gradients. The PhD project will focus on the legume subfamily Mimosoideae, a pantropical clade spanning all lowland tropical biomes and will involve fieldwork, laboratory work to generate DNA sequence data using NGS, herbarium specimen database work, and phylogenetic and macroevolutionary analysis. This will build on foundations already established in Zurich in terms of genomic data, development of suitable NGS approaches, taxonomic knowledge and research material for the mimosoid legumes.

Position characteristics: The Institute of Systematic Botany in Zurich offers excellent research facilities and a stimulating working environment for graduate students in plant systematics and evolution. The project will also involve collaboration with legume researchers in Brasil, the Netherlands, U.K., U.S.A. and Canada. Salary is according to the Swiss National Science Foundation guidelines. Funding, including for laboratory and field costs, is available for 3 years.

Requirements: Applicants should hold a Masters degree in systematics, biodiversity or evolutionary biology. Experience in molecular laboratory techniques, working with NGS data, phylogenetic analysis, macroevolutionary analysis, fieldwork and GIS are all potentially relevant. Excellent knowledge of English, written and oral, is essential. How to apply: Send the following documents by email AS A SINGLE PDF FILE to Dr. Colin Hughes, colin.hughes@systbot.uzh.ch:Â i) a two-page application letter describing your research interests, clearly stating why are you interested in a Ph.D. position in systematic botany and your career goals; ii) your CV, including a list of publications (if applicable); iii) a copy of your undergraduate and graduate academic record; iv) names and contact details of at least two referees selected from your academic advisors.

Deadline: Applications will be screened from January 1st 2015 onwards until the position is filled.

Starting date: early 2015.

colin.hughes@systbot.uzh.ch

WageningenU AvianPhenotypicVariation

MSc thesis opportunity Behavioural Ecology group, Wageningen University, The Netherlands

Mate preference in great tits - a matter of taste? We are looking for MSc students to work on an exciting project testing birds for mate preferences in winter (experiments), and studying reproductive investment in nesting great tits in the spring (fieldwork). Female choice for top quality males is expected to result in the evolution of exaggerated male secondary sexual characters. A strong directional preference for the 'best' males and their specific heritable traits would theoretically cause a fast decline in genetic variation among males. In natural populations under sexual selection however, diversity in ornaments and genes is still present. How, then, is genetic variation within populations maintained in the presence of sexual selection? Our project proposes that individuals may vary in their mate preference. Variation in mate preferences may weaken the strong directional selection on ornaments and thereby it may allow diversity to persist.

Mate preferences Which characters are important when females choose males? Do males choose attractive females? Which characters are important to them? Do individuals vary in their preference? Does this variation depend on the choosers' own characteristics? Starting from December 2014 or January 2015

Reproductive investment Which characters influence reproductive investment? Do individuals find a partner with characters that meet their previously tested preferences? How does the difference between partner preference and the actual partner influence reproductive investment and extra-pair paternity? Starting from March or April 2015

For more information contact Lies Zandberg (lies.zandberg@wur.nl) or Camilla Hinde (camilla.hinde@wur.nl

lies.zandberg@wur.nl

Yale MacroecologyMacroevolution

PhD Positions in Macroecology, Macroevolution and Movement Ecology Department of Ecology and Evolutionary Biology (EEB) Yale University

1-2 PhD positions are available in our research group starting fall 2015. We are interested in students with strong research experience who are excited about interdisciplinary work spanning a range of ecological scales. Applicants should have a strong interest in combining theory, modeling, and fieldwork to address questions in macroecology or macroevolution. In addition to our ongoing interest in terrestrial vertebrates we are currently recruiting students keen to work on dragonflies, butterflies or select plant groups and fish. There are particular opportunities for someone with strong field experience in birds to work on movement ecology questions.

In the Jetz Lab (http://jetzlab.yale.edu), the successful candidate will interact with two PhD students and four postdoctoral fellows and the Map of Life team (http://-/mol.org/). The student will also benefit from training activities in the Yale School of Forestry & Environmental Studies, the Program in Spatial Biodiversity Science and Conservation, http://sbsc.yale.edu/), the Yale Institute for Biospheric Studies (http://www.yale.edu/-yibs) and the Peabody Museum.

For further information about the EEB graduate program see http://eeb.yale.edu/academics/graduate-program. Significant prior research experience (e.g. as evidenced by publications) and high GRE scores are required for applications to be competitive. Applications are due Dec 15, 2014.

walter.jetz@yale.edu

Jobs

AMNH NewYork VertZoologyCurator

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

We seek candidates whose research addresses fundamental questions involving the systematics and evolutionary biology of living amphibians and/or reptiles. 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 amphibian and/or reptile diversity are especially encouraged to apply. Collection and/or field-based research and demonstration of completed published research and grantsmanship 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 develop a competitive research program for 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 of AMNH. Candidates should have postdoctoral or professional employment experience.

Interested candidates should submit electronically, via a single email message, the following materials (the first three combined into a single PDF):

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

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

All materials should be submitted electronically to: Herpetology Search Committee, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024-5192, to: jlc@amnh.org (Subject line: Herpetology 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 10, 2015.

Employer Information: The American Museum of Natural History is one of the world's preeminent scientific and cultural institutions. Since its founding in 1869, the Museum has advanced its global mission to discover, interpret and disseminate information about human cultures, the natural world and the universe through a wide-ranging program of scientific research, education and exhibition. The Museum has one of the largest vertebrate collections in the world and is nearly completely digitized. The collection of the Department of Herpetology is globally significant. The Department has access to molecular genetic facilities that can support an active graduate and postdoctoral training program.

The American Museum of Natural History is an Equal Opportunity/Affirmative Action Employer. The Museum does not discriminate due to age, sex, religion, race, color, national origin, disability, marital status, veteran status, sexual orientation, or any other factor prohibited by law. Qualified candidates of diverse ethnic and racial backgrounds are encouraged to apply for vacant positions at all levels.

If special accommodations are needed in applying for this position, please contact the Office of Human Resources at hrdesk@amnh.org or 212-768-5108.

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>

ArizonaStateU EvolutionaryMedicine

Assistant or Associate Professor " two positions (JOB# 10939) Deadline December 1 Arizona State University Center for Evolution & Medicine School of Human Evolution and Social Change

Arizona State University is making a major commitment to developing the field of Evolutionary Medicine. There are plans to recruit up to eight faculty members for the new interdisciplinary Center for Evolution & Medicine, headed by Dr. Randolph Nesse.

The Center and the School of Human Evolution and Social Change invite applications for up to two tenure eligible faculty positions in a transformative research and teaching initiative that will establish evolutionary biology as a crucial basic science for medicine and public health. Appointment may be at the assistant or associate level. Rank and tenure status will be commensurate with experience. Research areas may include topical focus on the implications for health of one or more of the following: diet/metabolism, the developmental origins of human disease, behavior, reproduction/development, environmental exposures, life history, and ecological conditions in small scale societies. These topics can be in reference to current and past epidemics and/or diseases of modern environments.

Minimum qualifications include a M.D., Ph.D., or equivalent in anthropology, human/evolutionary biology, genetics, epidemiology, demography, or related field; demonstrated readiness to teach undergraduate social science and/or global health courses; and capacity to operate effectively in a collaborative, transdisciplinary research environment. For assistant rank candidates, we require evidence of potential for high levels of research productivity and impact, as well as for teaching excellence. For associate rank candidates, research of outstanding quality and international impact, success in obtaining external funding, and evidence of teaching excellence are required.

Desired qualifications for all candidates include experience mentoring and supporting students, and a strong record of field, laboratory, and/or model based research.

The application deadline is December 1, 2014. If not filled, reviews will occur every two weeks thereafter until the search is closed. Applicants must apply online at

https://academicjobsonline.org/ajo/jobs/4835 and include a letter of application, curriculum vitae, and the names and email addresses of three references. Please make sure your last name appears in each uploaded file name. You may address your cover letter to Professor Anne Stone, Search Committee Chair. A background check is required for employment.

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. https://www.asu.edu/-aad/manuals/acd/acd401.html https://www.asu.edu/-titleIX/ Information about the School of Human Evolution and Social Change can be found at http://-shesc.asu.edu. The School has the largest anthropology faculty in the US, collaborates extensively with ASU's Institute for Human Origins (http://iho.asu.edu) and Mayo Clinic, and includes active and innovative training programs in global health, bioarchaeology, and evolutionary anthropology.

rmnesse@gmail.com

ArizonaStateU EvolutionMedicine

Assistant/Associate Professor applications due by December 1

Arizona State University is making a major commitment to developing the field of Evolutionary Medicine. There are plans to recruit up to eight faculty members for a new Center for Evolution & Medicine headed by Dr. Randolph Nesse. http://evmedcenter.org The Center and the School of Human Evolution and Social Change invite applications for two open rank faculty positions. Anticipated start date is August 16, 2015 or later. Candidates for all ranks must have: 1) a MD or a Ph.D. in anthropology, psychology, evolutionary biology, or a related field or equivalent terminal degree, 2) a

strong publication record that displays expertise in evolutionary biology and 3) experience or an explicit interest in developing the field of evolutionary medicine. Additional requirements for associate/full rank include: 1) a record of funding for a research program that applies evolutionary principles to better understand and treat diseases, 2) demonstrated evidence of strong teaching and mentoring. Topic and approach are open, however areas of special interest include diseases of modern environments, behavioral disorders, physiology, and the candidate's program of research may be focused on human biocultural evolution in deep or more recent times, including contemporary societies.

Additional desired qualifications include evidence of success in obtaining external funding, teaching experience in anthropology or related fields, experience mentoring and supporting students, and collaborative experiences with an interdisciplinary research team. Application deadline is December 1, 2014. If not filled, reviews will occur on the first of the month thereafter until the search is closed. Applicants must apply online at http://academicjobsonline.org and include a letter of application, curriculum vitae, and the names and email addresses of three references. Please make sure your last name appears in each uploaded file name. You may address your cover letter to Professor Robert Boyd, Evolutionary Anthropology Search Committee Chair. Information about the School can be found at http://shesc.asu.edu. The School collaborates extensively with ASU's Institute for Human Origins (http://iho.asu.edu). Arizona State University is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply. See https://-www.asu.edu/titleIX/. A background check is required for employment. ASU job ID #10202.

Successful candidates will be expected to transfer, or develop (if assistant professor rank), an extramurally funded research program; teach at the undergraduate and graduate levels; mentor undergraduate and graduate students and postdoctoral fellows; develop collaborative research and education projects for the Center; engage in University service; and conduct research publishable in top tier journals. A competitive start-up package will be provided and the amount of teaching required will be compatible with high research productivity.

The Center for Evolution, Medicine, and Public Health joins a vibrant, interdisciplinary community at ASU. Examples of existing centers and institutes are: Bioenergy and Photosynthesis (bioenergy.asu.edu), Biodesign (biodesign.asu.edu) and Astrobiology (astrobiology.asu.edu).

To apply, send a cover letter, curriculum vitae, three representative publications, contact information for three references, and separate statements of future research plans and teaching philosophy interests in a single pdf file to solsfacultysearch3@asu.edu. The initial closing date for receipt of applications is March 19, 2014; applications will be reviewed weekly thereafter until the search is closed. A background check is required for employment.

Arizona State University is an equal opportunity/affirmative action employer committed to excellence through diversity. Women and minorities are encouraged to apply. For additional information on the School of Life Sciences, please visit sols.asu.edu.

Randolph M. Nesse < http://randolphnesse.com/ > The ASU Center for Evolution & Medicine < http://-evmedcenter.org > Register for the ISEMPH meeting now! < http://evmedmeeting.org >

rmnesse@gmail.com

CaliforniaAcademyOfSciences AssistantCuratorArachnology

Assistant/Associate Curator of Arachnology

California Academy of Sciences seeks an inspirational scientist who exemplifies the Academy's mission to "explore, explain, and sustain life on Earth." The candidate is expected to develop an internationally recognized research program on arachnids, communicate effectively with diverse audiences and address local or global sustainability issues. We value innovation and creativity in both funding and engaging public audiences. The endowed position includes an appropriate start-up package, modest annual funds for research and a full-time postdoctoral position.

Application Instructions: Applicants should submit a cover letter, curriculum vitae, a statement of their research interests (not more than 3 pages), a statement of their sustainability and outreach goals (not more than 3 pages), and contact information for three references. Inquiries may also be directed to Dr. Brian Fisher (bfisher@calacademy.org), Chair of the search committee. Review of applications will begin January 2015. We encourage submission before that date, but applications will continue to be accepted until the position is filled.

Please apply online through http://-calacademy.snaphire.com/jobdetails?ajid=9LVs8
Jenn Azzarello Human Resources Office Assistant California Academy of Sciences 415.379.5875 (ph) jazzarello@calacademy.org www.calacademy.org 55 Music Concourse Drive Golden Gate Park San Francisco, CA 94118

Facebook < http://www.facebook.com/calacademy > | Twitter < https://twitter.com/calacademy >

Get inside our heads. Don't miss Skulls, a jaw-dropping new exhibit that reveals how vertebrate animals live, die, and–ultimately–evolve. Now through November 30.

JAzzarello@calacademy.org

ColoradoMesaU MammalEvolution

ANNOUNCEMENT OF POSITION VACANCY

Assistant Professor of Biology"Mammal Biologist

RESPONSIBILITIES: The Biological Sciences Department at Colorado Mesa University invites applications for a tenure-track faculty position in mammalian biology. The successful applicant will join a dynamic department, including field, organismal, cellular, and molecular biologists, focused on excellence in undergraduate teaching and mentorship of undergraduate researchers. Responsibilities include teaching 12 credits/semester, advising students, offering research opportunities, and participating in service to the department and university. Teaching responsibilities will include lower-division majors and non-majors courses, developing upper-division courses in mammalogy and within the candidate's specialty, and curating the mammal teaching collection.

EDUCATION & EXPERIENCE: A Ph.D. in biology or a related field is required. Preference will be given to candidates with undergraduate teaching and postdoctoral experience. Individuals with expertise as mammal biologists employing ecological, evolutionary, and/or management approaches are preferred. Colorado Mesa University is particularly interested in candidates who have experience working with students from diverse backgrounds and who have a demonstrated commitment to improving the levels of access and success for underrepresented students within higher education.

TYPE OF APPOINTMENT: Full-time, tenure-track appointment beginning August 2015.

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

APPLICATION DEADLINE: Open until filled. To ensure consideration, completed application packets must be received by January 16, 2015.

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

Applicant Authorization and Release to Conduct Reference and Background Check <http:/-/new.mesastate.edu/hr/documents/ ApplicantAuthorizationfor ReferenceandBackgroundCheck.pdf>

Background Investigation Disclosure and Authorization <http://www.mesastate.edu/hr/-documents/ BACKGROUNDINVESTIGATION DISCLOSUREANDAUTHORIZATION.pdf>

Voluntary Affirmative Action Form < http:/-/www.mesastate.edu/hr/documents/Form-Affirmativeaction.pdf >

Send to:

Biology Search Committee"Mammal Biologist

Human Resources, LHH 237

Colorado Mesa University

1100 North Avenue

Grand Junction, Colorado 81501-3122

Phone: 970 248-1820

*Colorado Mesa University is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final applicants being considered for employment. Background investigations include reference checks, a criminal history record check, and when appropriate, a financial and/or motor vehicle history. Applicant must be able to verify U.S. employment eligibility. Colorado Mesa University is an Affirmative Action/Equal Opportunity Employer, committed to a culturally diverse faculty, staff and student body. Women and minorities are encouraged to apply. *Pos #1624

Susan M. Longest, PhD Assistant Professor of Biology Colorado Mesa University 1100 North Avenue Grand

Junction, CO 81501

Phone: (970) 248-1554

susan.m.longest@gmail.com

ColumbiaU ComparativeEvolutionNeurology

INTERDISCIPLINARY FACULTY POSITIONS IN NEUROSCIENCE AND BIOLOGY, PHYSICS, OR CHEMISTRY

Columbia University's Zuckerman Mind Brain Behavior Institute, together with four Departments - Biological Sciences, Chemistry, Physics and Ecology, Evolution and Environmental Biology (E3B) - invites applications for tenure-track faculty positions to begin July 1, 2015. Appointments would be at the assistant professor level in one of the four departments. In special cases, a senior faculty appointment may be possible. The Zuckerman Mind Brain Behavior Institute is a new comprehensive institute at Columbia for the pursuit of interdisciplinary and collaborative research in brain science.

We are interested in individuals with research programs in the areas of Biology, Chemistry, or Physics that interface with neuroscience and whose work involves the development of techniques, applications, and methods for neuroscience. In addition, we encourage applications from scientists with an affinity for multidisciplinary research, and who have a demonstrated commitment to tackling the challenges of studying mind, brain, and behavior.

Individuals conducting research in the following areas are highly desirable:

- Development of imaging methods to probe neural circuit function in vivo

- Development of tools to visualize or manipulate neuronal activity in vivo

- Use of genetic or chemical genomic approaches to studying the function of neural circuits in behaving animal models

- Comparative or evolutionary approaches to studying the neural circuits underlying specific behaviors

- Precision instrumentation, optics, lasers and imaging

- Computational and statistical approaches for the analysis of large datasets

- Machine vision, automation, and precision electronics

Applicants are expected to have a strong record of achievement and to demonstrate the ability to engage in innovative and interdisciplinary research and teaching.

The successful candidates will contribute equally to the intellectual vitality and teaching of their Department and the Zuckerman Mind and Brain Behavior Institute. A Ph.D. is required at the time of the appointment. Applicants are encouraged in their cover letters to discuss the Department(s) in which they would like to be based. For more information about the Zuckerman Mind and Brain Behavior Institute and the corresponding Departments, please visit:

http://zuckermaninstitute.columbia.edu/- http://www.columbia.edu/cu/biology/ http://www.columbia.edu/cu/chemistry/ http://www.columbia.edu/cu/e3b/ http://-physics.columbia.edu/ For more information and to apply, please visit:

academicjobs.columbia.edu/applicants/Central?quickFindY935

Review of applications will start November 1, 2014.

Columbia University is an Equal Opportunity/Affirmative Action employer.

Lourdes A. Gautier Academic Department Administrator Department of Ecology, Evolution & Environmental Biology (E3B Columbia University 1200 Amsterdam Avenue New York, NY 10027 212-854-9987

Lourdes Gautier <lg2019@columbia.edu>

CornellU BirdMammalCurator 2

Curatorial/Research Associate Ornithology and Mammalogy Collections Department of Ecology and Evolutionary Biology Cornell University

The Cornell University Museum of Vertebrates (CUMV) is seeking an ornithologist or mammalogist to curate and grow the collections through an organized program of accession in-volving Cornell students in all aspects of museum-based activities. We are interested in a leader for all aspects of the program, from field collections through specimen preparation and curation, to use of the collections in modern specimen-based research. The successful candidate will curate the Ornithology and Mammalogy Collections (includ-

ing co-supervision of a full-time collections manager) and maintain an active research program in collections-based research.

The CUMV is a unit of the Department of Ecology and Evolutionary Biology and is housed in the modern Imogene Powers Johnson Center for Birds and Biodiversity, along with the Lab of Ornithology and its 200 plus faculty and staff. The CUMV holdings include over 1.25 million specimens, including over 60,000 bird and 38,000 mammal specimens and a substantial tissue collection. The CUMV includes space for teaching, specimen preparation and molecular work; a walk-in freezer; X-ray lab; dermestarium; etc. Cornell supports a diverse community of faculty, staff and students pursuing an uncommonly large number of programs and projects in vertebrate biology, ecology and evolution.

Qualifications: Applicants should have a Ph.D. in ornithology, mammalogy, or related area, have broad knowledge of birds and/or mammals, have experience working with natural history collections, and display an interest in interacting with students and the broader scientific communities at the Lab, Cornell and beyond.

Inquiries are encouraged to either of the co-chairs of the search committee: Prof. David W. Winkler (dww4@cornell.edu) or Prof. Jeremy B. Searle (jbs295@cornell.edu). Please submit (as a single pdf file) a CV, a letter describing your vision for future collections-based research and education, and the names, phone numbers, and email addresses of three individuals who can serve as references to: curator_search@cornell.edu. Review of applications will begin 27 October 2014 and continue until the position is filled.

Cornell University is an equal opportunity/affirmative action employer. Applications from women and minorities are encouraged.

[Cornell University] < http://www.cornell.edu >

John P. Friel, Ph.D. < http://www.cumv.cornell.edu/-wiki/pages/B0R4a4_7G/John_P_Friel_PhD.html >, Curator of Fishes, Amphibians & Reptiles Cornell University Museum of Vertebrates < http://www.cumv.cornell.edu > 159 Sapsucker Woods Road, Ithaca, NY 14850-1923 USA Phone: +607.254.2162 | Fax: +607.254.2415 [email] <mailto:john.friel@cornell.edu> [facebook] < http://facebook.com/john.friel > [Skype] <callto://john_friel> [twitter] < https://twitter.com/-friel >

John Patrick Friel <john.friel@cornell.edu>

FloridaStateU ComputationalBiol

Assistant Professor Position Department of Scientific Computing Florida State University

The Department of Scientific Computing seeks to fill a tenure-track Assistant Professor position with a Fall 2015 starting date. Review of applications will begin on January 22, 2015 so that to guarantee consideration of an application, it must be submitted by that date.

The Department of Scientific Computing (http://-sc.fsu.edu) was established in 2008 and offers B.S., M.S., and Ph.D. degrees in Computational Science. The Department is a highly innovative unit whose goals are to improve the way computational scientists and engineers are trained and to do cutting-edge research on the development and application of algorithms for solving science and engineering problems using computers. The faculty of the Department work in several science and applications areas. Training and research within the Department is naturally of a highly interdisciplinary nature, with many faculty and students collaborating with researchers in other units of the University along with a diverse group of researchers at other institutions in the US and abroad.

A doctoral degree in computational science, computer science, mathematics, statistics or a related field is required. Postdoctoral experience is highly desired as is experience and commitment to interdisciplinary research.

Interested applicants should send a single PDF file containing their CV, research statement, and teaching statement to hiring15@sc.fsu.edu and also have 4 letters of reference, one of which addresses teaching experience and ability, submitted to the same email address.

Florida State University if a Public Records Agency and an Equal Opportunity/Access/Affirmative Action Employer.

If you need more information about our department you may contact Peter Beerli (beerli@fsu.edu).

Dr. Peter Beerli Professor Scientific Computing Dirac Building Florida State University Tallahassee FL 32306-4120 email: beerli@fsu.edu web: http://-people.sc.fsu.edu/~pbeerli skype: pitbeerli

beerli@fsu.edu

FloridaStateU FrogFieldTech

Chorus Frog Fieldwork: A field technician position is available in the laboratory of Emily Moriarty Lemmon at Florida State University beginning early-January through mid-March 2015 to assist in the study of female mate choice behavior and population variation in chorus frogs (Pseudacris). The technicians will travel with a team throughout the southeastern U.S. to assist in collecting specimens and performing female choice experiments. Working conditions will often times be rainy and cold, and the technician will be expected to camp on occasion. Preference will be given to those applicants with extensive field experience and to those who have access to a personal vehicle during the season. Compensation will be $480 per week (corresponding to $10.00/hr; for approximately 8 hours/day; 6 days/week) for a total of 10 weeks and will also include food and lodging during fieldwork. For students interested in graduate school, this position provides an excellent opportunity to gain experience quickly and earn a great letter of recommendation.

To apply for this position, please contact Dr. Emily Lemmon at chorusfrog@bio.fsu.edu and include a CV along with contact information for three references.

Emily Moriarty Lemmon, Assistant Professor Department of Biological Science Florida State University 319 Stadium Drive

Please ship packages to: 89 Chieftain Way, Biology Unit 1 Florida State University Tallahassee, FL 32306-4295

Phone: 850-645-9170 http://www.bio.fsu.edu/-chorusfrog/index.html http://www.bio.fsu.edu/-faculty-moriarty-lemmon.php http://-www.anchoredphylogeny.com chorusfrog@bio.fsu.edu

IndianaU LabDirector BehavioralEvolution

Job announcement: CISAB Lab Director

The Center for Integrative Study of Animal Behavior (CISAB) is seeking a Research Associate to serve as the director of a common research laboratory housed in the Department of Biology that serves animal behaviorists studying the genetic and neuroendocrine basis of behavior. The successful candidate will be expected to perform a range of molecular, genetic and endocrine techniques (e.g., PCR, genotyping, sequencing, steroid and protein hormone assays, western blots, microsatellite analysis with GeneMapper software), train students in these procedures, and supervise the general operations of the laboratory (safety, supplies, personnel, regulatory compliance).

A Masters degree or equivalent required, prior experience in at least some of the needed techniques is expected.

The successful candidate must be able to work with a diverse group of people; a three-year commitment is expected. A competitive salary plus benefits provided. December 1, 2014 start date possible.

To apply, submit a letter of application & CV that lists the names and contact information for three references to https://Indiana.peopleadmin.com/postings/1225 or Attn: Dee Verostko, 1001 E. Third Street, Bloomington, IN 47405-3700. Applications will be considered until the position is filled, but for best consideration, apply by November 15, 2014.

Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status or protected veteran status.

Kimberly Rosvall <krosvall@indiana.edu>

IowaStateU Bioinformatics

Candidates working in statistical population genetics or evolutionary biology are welcome to apply.

Open Rank Position in Statistical Bioinformatics at Iowa State University

As part of a Bioinformatics and Computational Biology (BCB) hiring initiative, the Department of Statistics at Iowa State University seeks outstanding applicants for an open-rank faculty position in the area of statistical bioinformatics. We are especially interested in a candidate who can contribute to the development of statisti-

cal methodology and computational strategies for large, complex biological datasets, collaborate with biological scientists, and enhance Iowa State University's efforts in bioinformatics education and research through leadership and vision. Areas of interest include, but are not limited to, genomics, proteomics, and other omics, regulatory networks, systems biology, and biological data integration.

Duties include teaching undergraduate and graduate level courses, graduate student advising, professional and institutional service, developing and sustaining a high-impact research program that can successfully compete for external funding, and participating in collaborative research to address scientific problems involving bioinformatics and computational biology.

**Required Education and Experience

Ph.D. in statistics, bioinformatics, or a closely related field.

Associate and Full Professor: In addition, the candidate must have documented teaching experience commensurate with university standards and an outstanding research record as demonstrated by peer-reviewed publications and external research support or equivalent experience at corporate or federal research centers.

**Preferred Education and Experience

Experience that demonstrates the ability to teach statistics or bioinformatics courses at all levels

Experience developing statistical methodologies for analyzing complex, high through-put biological data.

Demonstrated ability to publish in top tier research journals

Demonstrated ability to secure research funding

Experience collaborating with biological scientists

Demonstrated ability to lead interdisciplinary educational or research initiatives

**Department/Program & College Description

The doctoral program in Statistics is ranked as one of the top programs in the country graduating about 15 PhD students annually. The program currently has about 140 graduate students, 100 undergraduate majors, and 38 faculty. Faculty and students have traditionally maintained strong collaborations across campus. The Statistics Department is located in Snedecor Hall, which received an extensive renovation in 2009. Further information about the department can be found at http://www.stat.iastate.edu **About Iowa State University and the Ames Community

Iowa State University is classified as a Carnegie Foundation Doctoral/Research University-Extensive, a member of the Association of American Universities (AAU), and ranked by U.S. News and World Report as one of the top public universities in the nation. Over 34,000 students are enrolled, and served by over 6,100 faculty and staff (see www.iastate.edu). Ames, Iowa is a progressive community of 60,000, located approximately 30 minutes north of Des Moines, and recently voted second best most livable small city in the nation (see www.amescvb.com).

Iowa State University is an equal opportunity employer committed to excellence through diversity and strongly encourages applications from all qualified applicants, including women, underrepresented minorities, and veterans. ISU is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of policies, and is an NSF ADVANCE institution.

All faculty members are expected to exhibit and convey good citizenship within the program, the department, college, and university activities and collegial interactions, and maintain the highest standards of integrity and ethical behavior.

Department Contact Name Karin Dorman Department Contact Phone 515-294-1457 Department Contact Email statbcbsearch@iastate.edu Department Address Department of Statistics Iowa State University Ames, IA 50011 Department/Unit Website http://-www.stat.iastate.edu **Additional Information

The College of Liberal Arts and Sciences (www.las.iastate.edu) at Iowa State University (ISU) has begun a major interdisciplinary hiring initiative (www.las.iastate.edu/faculty-careers) to help foster collaborative research and teaching, especially in its Signature Themes (www.las.iastate.edu/research/-signature-themes/). As part of this

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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

KU Leuven PlantMatingSystemEvolution

PhD research in Plant Mating System Evolution and Speciation For the Ecology, Evolution and Biodiversity section of the Biology Department at KU Leuven we

are looking for a PhD researcher to do research on the topic of ecological speciation in plants.

Project

Adaptive divergence due to habitat differences is thought to play a major role in formation of new species. However the extent to which individual reproductive isolating barriers related to habitat differentiation contribute to total isolation is not very clear. Here, you will address these questions through an in-depth analysis of the population structure and reproductive isolation between grassland and forest populations of the distylous Primula veris. Recent research has revealed remarkable differences in floral morphology (flower size, anther-stigma separation) and other plant traits (leaf size, floral display) between forest and grassland populations. Concomitant to changes in floral morphology forest populations consistently flowered one month earlier than grassland populations. Imperfect positioning of the sexual organs combined with differences in flowering time can be hypothesized to constitute important reproductive barriers that hamper gene flow and lead to reproductive isolation. Moreover, differences in shade and drought tolerance can be expected to contribute further to reproductive isolation. To investigate whether specific adaptations to distinct habitats are sufficient to lead to the formation of reproductively isolated species, you will combine detailed molecular genetic analyses and genomic tools with pollination and translocation experiments.

Description of the organizational unit

You will be welcomed in an international research group of 15 PhD researchers and 11 postdoctoral researchers. The lab offers a dynamic and intellectually challenging environment, in close collaboration with experts from a wide variety of domains (for more details, see: http://bio.kuleuven.be/eebcs/plant-conservation-and-population-biology/). The KU Leuven is one of Europe's leading research universities, with English as the working language for research. Leuven lies just east of Brussels, at the heart of Europe. The city is less than two hours travel from Paris, London and Amsterdam.
Offer

We offer a 1 year full-time PhD scholarship with possibility to extend to a full 4 year PhD following positive evaluation.

Profile

* A relevant master degree (Biology / Bioscience Engineering / Bioinformatics) with excellent grades.

* English language proficiency.

* A keen interest in research and thorough data analysis.

* Highly motivated to perform in-depth analytical research and write strong scientific articles.

* Proficient knowledge of bioinformatics and genetic analyses is a surplus.

Contact: Hans Jacquemyn (hans.jacquemyn@bio.kuleuven.be) Rein Brys (rein.brys@bio.kuleuven.be)

Hans Jacquemyn <Hans.Jacquemyn@bio.kuleuven.be>

LeibnizInstEvolution Berlin EvolutionEducation

Job in Education and Public engagement with Science at the Museum für Naturkunde Berlin, Leibniz Institute for Evolution and Biodiversity Science

This is a fantastic job opportunity to work at the dynamic, globally operating natural history museum in Germany's capital Berlin and to develop nationally and internationally recognized education and public engagement with science programs.

Salary TVL-13 (annual salary between c. 39,000 - 50,000, depending on qualifications). This is initially a two-year position that can be tenured.

Job description:

§Design and coordinate projects and programs around science, natural history education and science communication

§Develop standards and guidelines for educational work for the natural history / science sector

§Develop and lead national and international networks

§Develop an externally funded scientific programs on education and scientific literacy

§Publish scientific papers

§Develop educational courses for teachers, museum guides and others

§Operational work at the museum

Your qualifications:

§Science degree /PhD in Science Education, cultural history, museum studies, science

§Several years of experience in (leadership in) science education, science communication

§Good knowledge of (national and) international education policy and the museum sector

§Demonstrable experience and skills in program, project planning and management

§Knowledge and experience in Geo-/ Bio - Sciences

§Excellent communication skills and team player

§Appropriate English and German language skills to deliver tasks

Desirable:

§Citizenship of the European Union

The usual documentation should be send to recruiting@mfn-berlin.de by 05.11. 2014

The Museum für Naturkunde, Berlin Our Mission: Discovering and describing life and earth - with people, through dialog. The Museum für Naturkunde Berlin is an integrated research museum with strong national and international partnerships and networks. The research is collections based, the collections are developed through the research and the public engagement is science driven. Research areas: Evolutionary biology; evolutionary morphology, biodiversity in time and space; biodiversity dynamics; biodiversity and climate change; meteorites, impact geology & global disasters; collections development; history of science & natural history collections as cultural heritage; biodiversity informatics; public engagement with science: exhibitions; citizen science; education; science policy advice. We are currently undergoing a major renewal / building program (2007-2027). We are a member of the German Science Organisation Leibniz Gemeinschaft (89 organsiations, annual budget 1.3B) and have recently been internationally evaluated as Excellent to very good.

To find out more, visit us on: http://-www.naturkundemuseum-berlin.de/en/ Professor Johannes Vogel, Ph.D. Director General Museum für Naturkunde Berlin, Leibniz-Institute for Evolution and Biodiversity

"Vogel, Johannes" <johannes.vogel@mfn-berlin.de>

LMU Munich EvolutionaryBiology

Full Professorship of Evolutionary Biology: Munich, Germany

As one of Europe's leading research universities, Ludwig-Maximilians-Universität (LMU) in Munich is committed to the highest international standards of excellence in research and teaching. Building on its more than 500-year-long tradition, it offers a broad spectrum that covers all areas of knowledge within its 18 Faculties, ranging from the humanities, law, economics and social studies, to medicine and the natural sciences.

The LMU Faculty of Biology

http://bio.lmu.de/ invites applications for a Full Professorship (W3) of Evolutionary Biology (Chair) commencing on October 01, 2015.

The successful applicant is expected to carry out internationally recognized research that uses state-of-the-art approaches and techniques (e.g. genomics/transcriptomics) to study evolutionary processes, such as speciation, evolutionary adaptation, or ecological interactions, at the population level. The research program should allow close collaborations with established research groups in the LMU Faculty of Biology and the HighTech-Campus Grosshadern-Martinsried. The LMU Faculty of Biology provides a scientifically strong environment and excellent facilities for experiments. The professor is expected to contribute to the teaching of existing courses, as well as develop new modules in evolutionary biology for our bachelor and master programs.

Prerequisites for this position are a university and a doctoral degree, teaching skills at university level, excellent academic achievements and a productive and promising research program.

LMU Munich makes a point of providing newly appointed professors with various types of support, such as welcoming services and assistance for dual career couples.

LMU Munich is an equal opportunity employer. The University continues to be very successful in increasing the number of female faculty members and strongly encourages applications from female candidates. LMU Munich intends to enhance the diversity of its faculty members. Furthermore, disabled candidates with essentially equal qualifications will be given preference.

Further information concerning the LMU's equal opportunity policy can be obtained from Prof. B. Neuhaus (birgit.neuhaus@lrz.uni-muenchen.de), concerning teaching from Prof. H. Jung (hjung@lmu.de), concerning the structure of the Faculty from Prof. Leonhardt (dekanat19@lmu.de).

Please submit your application comprising a curriculum vitae, list of publications, a brief summary of present and future research interests, proof of teaching experience, five selected reprints and copies of relevant docu-

ments as an electronic file, together with the completed submission form (Vorlage fur Bewerber) available on the website:

http://www.bio.lmu.de/organisation/dekanat/-index.html before Dec. 12, 2014 to the email-address: dekanat19@lmu.de (addressed to the Dean of the Faculty of Biology, Prof. Dr. Heinrich Leonhardt, Ludwig-Maximilians-Universität München, Großhaderner Str. 2, 82152 Planegg-Martinsried, Germany.

A German version of the job ad can be found at: http://www.lmu.de/aktuelles/stellenangebote/-profs/w3-professur-evolutionsbiologie.html
parsch@zi.biologie.uni-muenchen.de

LMU Munich EvolutionaryBiology Correction

Please note that there was a typo in the application deadline in the previous posting. The deadline is Dec. 5, 2014. The corrected version is below.

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Full Professorship of Evolutionary Biology: Munich, Germany

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http://www.bio.lmu.de/organisation/dekanat/-index.html before Dec. 5, 2014 to the email-address: dekanat19@lmu.de (addressed to the Dean of the Faculty of Biology, Prof. Dr. Heinrich Leonhardt, Ludwig-Maximilians-Universität München, Großhaderner Str. 2, 82152 Planegg-Martinsried, Germany.

A German version of the job ad can be found at: http://www.lmu.de/aktuelles/stellenangebote/profs/-w3-professur-evolutionsbiologie.html John Parsch <parsch@zi.biologie.uni-muenchen.de>

McMasterU Bioinformatics SystemsAdministrator

Colleagues,

The McArthur lab in McMasters Department of Biochemistry & Biomedical Sciences is seeking a Systems Administrator / Information Technologist to help establish a new bioinformatics laboratory at McMaster, plus develop the next generation of the Comprehensive Antibiotic Resistance Database (CARD; arpcard.mcmaster.ca). The candidate will configure BLADE and other hardware for general bioinformatics analysis, development of a GIT version control system, construction of an in house Galaxy server (usegalaxy.org), and development of a new interface, stand-alone tools, APIs, and algorithms for the CARD (based on Chado; www.gmod.org/wiki/chado). Outside of server and software development, the candidate will perform a variety of bioinformatics analyses as well as be responsible for effective provisioning, installation/configuration, operation, and maintenance of systems hardware and software and related infrastructure. Genomics and bioinformatics training will be provided. For more details on the McArthur lab research program, see mcarthurbioinformatics.ca.

The candidate is expected to have knowledge and experience of LINUX operating system installation and management, network management, RAID and other storage technologies, database skills (SQL, postgreSQL), software for hosting advanced websites (Apache, PHP, Javascript, JQuery), and the computer languages common to bioinformatics (Python, Perl). Knowledge of bioinformatics would be advantageous to the candidate. Experience with Flask, SQLAlchemy, and JSON would be beneficial. Skills in text mining and/or controlled vocabularies would be welcome, but not mandatory.

For more information, contact Dr. Andrew McArthur at mcarthua@mcmaster.ca

Andrew G. McArthur, Ph.D. Associate Professor & Cisco Research Chair in Bioinformatics Department of Biochemistry & Biomedical Sciences McMaster University Hamilton, Ontario, Canada

w. mcarthurbioinformatics.ca | e. mcarthua@mcmaster.ca

“Andrew G. McArthur” <mcarthua@mcmaster.ca>

MissouriBotGarden LabTech ConservationGenetics

Position: Lab Technician in the Conservation Genetics Lab of the Missouri Botanical Garden.

* Hourly * Full Time, Regular * Full Benefits

The Center for Conservation and Sustainable Development (CCSD) at the Missouri Botanical Garden explores and implements new, science-based approaches to the conservation and sustainable use of plant diversity. CCSD’s strategies for conservation are based on a sound, scientific understanding of the occurrence and distribution of plants. CCSD applies the knowledge of plant diversity accumulated by Missouri Botanical Garden researchers over many years, making that knowledge usable for conservation planning and decision-making. Operating under the auspices of the Garden and as part of its division of Science and Conservation, CCSD builds upon the Garden’s institutional expertise, scientific programs, influence and resources.

Summary: Lab Technician at the Conservation Genetics Lab ’ Under the direction of the Assistant Scientist, works on projects that employ genetic analyses (DNA metabarcoding, genotyping-by-sequencing, and microsatellites) to help provide information that will contribute to the management of species of conservation concern.

Essential Duties and Responsibilities: * Carries out DNA extractions, gel electrophoresis, PCR, sample quantification, preparation and submission of samples for genotyping, sanger sequencing, or next-generation sequencing. * Conducts post-processing/bioinformatics such as editing DNA sequences or scoring genotype data, compiling and managing data matrices, etc. * Ensures experiments are performed according to specifications in the conservation genetics lab. * Provides technical guidance, including training of students, as necessary. * Assists with dissemination of results of the conservation genetic projects by preparing tables, figures and summaries of research methods. * Contributes to the maintenance of the lab. * Demonstrates highest level of professional and ethical conduct. * Adherence to all health and safety guidelines * Adheres to guidelines and protocols for working with plant species listed on the Endangered Species Act. * Behaves and communicates in a manner that promotes and fosters a culture of teamwork and cooperation, within our division

and throughout the Garden, with co-workers, supervisors/managers, volunteers, visitors and employees.

Qualifications:

* Strong background including 2 or more years' experience in one or more of the following fields: biology, ecology, genetics or related discipline. * Prior experience using standard laboratory techniques to extract and sequence or genotype DNA. * Familiarity with preparation of samples for Illumina DNA sequencing. * Strong organizational skills and ability to multi-task. * Excellent communication and interpersonal skills. * Ability to work independently and as a team. * The requirements and duties listed above are representative and do not constitute an exhaustive list of the knowledge, skill, and/or abilities required.

Education and/or Experience:

* H.S. diploma or equivalent required with coursework in one or more of the following fields: genetics, evolution, ecology, conservation biology, botany, or a related discipline (Bachelor's degree preferred). * A strong interest in conservation biology and/or applied conservation genetics a plus. * Demonstrated ability, including a minimum of (1) year experience using standard laboratory techniques to extract and sequence or genotype DNA. Experience generating and analyzing next-generation DNA sequence data or with experience in handling environmental (eDNA) samples preferred. * An equivalent combination of education, skills, and experience may be considered.

Computer Skills: Proficient with Microsoft Office suite (i.e., Word, Excel, PowerPoint, etc.). Prior experience with bioinformatics and genetic analysis software.

Certificates, Licenses, Registrations: * Must be able to maintain a valid driver's license.

Physical Demands: * Ability to lift 35 lbs. and over. * Manual dexterity to use a computer keyboard for the purpose of accurately communicating, writing, and managing research data. * Ability to walk, stand, kneel, or climb as required and move about for extended periods of time in indoor and outdoor environment. * Physical fitness necessary for field work sometimes in inclement weather.

Work Environment: * Indoor office and laboratory environment.

Please apply online by 02-Dec-2014 (CST) at https://-/missouribotanicalgarden.applicantpro.com/jobs/-165019-24416.html Christine E. Edwards Assistant Scientist, Conservation Genetics Center for Conservation and Sustainable Development Missouri Botanical Garden Phone: 314-577-9473 x6244 Fax: 314-577-9596 Christine.Edwards@mobot.org

NewYorkU AssistResSci MarineGenomics

Assistant Research Scientist of marine facility

Location: New York, NY

Institute: New York University

The candidate will be responsible for the day-to-day operations of the marine facility of ascidian, as well as long-term maintenance under the general supervision of the facility users. Mission include daily operation and upkeep of the facility including phytoplankton culture, monitoring water conditions and ascidian health, stock maintenance and breeding, and staff training.

This opening is an ideal opportunity for recent graduates interested in a career in experimental research, husbandry and/or genomic research.

Qualifications:

- BSc of Aquaculture, Aquatic Resources or Marine Biology

- 2 years of experience of aquatic technician or senior aquaculture technician experience, in breeding facility of invertebrates (or other species used as laboratory models).

- Experience with microalgae culture and recirculating Systems

- The ability to function with minimal supervision and strong analytical skills to resolve problems requiring the use of scientific or technical principles are required. In addition, knowledge of general engineering principals of the aquatic life support systems, basic plumbing skills and an understanding of genetic principles, population biology and biosecurity are desirable.

- Effectively manage all accidents/incidents occurring in the Aquatic Facility

- Collect and evaluate data on facility/ maintenance operations

Description:

You will be in charge for all aspects of the marine facility of ascidian model for research production, from artificial seawater production, phytoplankton culture operations to the animal breeding.

Responsibilities include:

- Leading the day to day operations including maintenance, husbandry, quality control

- Monthly reports about experiment, ascidian health records and water quality

- Feeding forecasting, inventory and ordering

- Water Quality Monitoring

- Can require weekend monitoring

More information: http://openwetware.org/wiki/-Christiaen Contact Name: Régis Lasbleiz and Lionel Christiaen

Email: rl118@nyu.edu

lc121@nyu.edu

Please submit a résumé and cover letter to email

Best Régis

Regis LASBLEIZ Christiaen Lab New York University 100 Washington Square East New York, NY 10003 email: rl118@nyu.edu

Regis Lasbleiz <rl118@nyu.edu>

QueensU EvolutionaryTheory

The Department of Mathematics and Statistics, Faculty of Arts and Science at Queen's University is seeking outstanding candidates for at least one and, subject to budgetary approval, up to three Tenure-track faculty positions at the rank of Assistant Professor, with a starting date of July 1, 2015. Candidates from all areas of mathematics and statistics are invited to apply.

Candidates must have a PhD or an equivalent degree at the start date of the appointment. The successful candidate(s) will provide evidence of high quality scholarly output that demonstrates potential for independent research leading to peer assessed publications, as well as strong potential for outstanding teaching contributions at both the undergraduate and graduate levels, and an ongoing commitment to academic and pedagogical excellence in support of the department's programs. The successful candidate(s) will be expected to work in areas of study that complement areas already represented in the department (see http://www.mast.queensu.ca/), and to demonstrate evidence of an ability to work in an interdisciplinary, collaborative environment. They will also be expected to make substantive contributions through service to the Department, to the Faculty of Arts & Science, to the University, and/or the broader community. Salary is commensurate with qualifications and experience.

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

To comply with Federal laws, the University is obliged to gather statistical information about how many applicants for each job vacancy are Canadian citizens / permanent residents of Canada. Applicants need not identify their country of origin or citizenship, however, all applications must include one of the following statements: "I am a Canadian citizen / permanent resident of Canada"; OR, "I am not a Canadian citizen / permanent resident of Canada". Applications that do not include this information will be deemed incomplete.

A complete application consists of: a cover letter (including one of the two statements regarding Canadian citizenship / permanent resident status specified in the previous paragraph), a current Curriculum Vitae (including a list of publications), a statement of research interests, a statement of teaching interests and experience (including teaching outlines and evaluations if available), and at least four letters of reference (one of which addresses teaching abilities and/or potential).

Application materials, with the possible exception of recommendation letters, should be submitted through http://www.mathjobs.org. Recommendation letters may be uploaded directly on http://www.mathjobs.org, or sent by e-mail to position@mast.queensu.ca, or mailed to: the Department of Mathematics and Statistics, Jeffery Hall, University Ave., Kingston, ON Canada, K7L 3N6. In order to ensure full consideration, complete applications should be received by November 17, 2014.

The University will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs. If you require accommodation during the interview process, please contact: the Department of Mathematics and Statistics, Marge Lambert, at lambertm@mast.queensu.ca, phone number 613- 533-2440.

Additional information about Queen's University, which may be of interest to prospective faculty

members, can be found at http://www.queensu.ca/-facultyrecruitment . Academic staff at Queen's University are governed by a Collective Agreement between the Queen's University Faculty Association (QUFA) and the University which is posted at http:/-/www.queensu.ca/provost/faculty/facultyrelations/-qufa/collectiveagreement.html . troy.day@icloud.com

RutgersU ComputationalGenetics

Faculty Position in Computational Genetics

The Department of Genetics in the School of Arts and Sciences at Rutgers, The State University of New Jersey seeks an outstanding scientist to complement the existing faculty in computational genetics, moving our program into exciting new areas and expanding our existing strengths. Tenure-track or tenured appointment will be made at the Assistant, Associate, or Full Professor level. Areas of interest include, but are not limited to, population or evolutionary genetics, bioinformatics, statistical genetics, computational genomics, and analysis of complex genetic diseases. Experienced faculty with appropriate experience will be considered for a leadership role within our Computational Genetics Group. Department of Genetics faculty may also join the Human Genetics Institute of New Jersey. Core resources and generous startup funds will be provided. Research space, including wet lab if needed, will be provided in the newly constructed Life Sciences Building.

The Department of Genetics is home to over 30 faculty with diverse interests and numerous well-funded research programs, hosts one of the oldest undergraduate majors in Genetics in the country, and is part of a vibrant life sciences and computational community. Our computational group collaborates with other Department of Genetics faculty and Rutgers scientists within the Division of Life Sciences, the Departments of Computer Science and Statistics, the Waksman Institute, the Center for Advanced Biotechnology and Medicine, the Robert Wood Johnson Medical School, the BioMaPS Institute for Quantitative Biology, the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), the Center for Human Evolutionary Studies, and the Cancer Institute of New Jersey. The New Brunswick/Piscataway campus is located in suburban central New Jersey, close to New York City, Philadelphia, beaches, and countryside. For more information on the Department and Rutgers see: http://genetics.rutgers.edu/faculty/-faculty-recruitment . Candidates must have a Ph.D. and/or M.D., demonstrated record of signiïresearch, the potential to make substantial contributions as an independent investigator, and have a commitment to teaching undergraduate and graduate students. Applicants should submit a CV, a detailed statement of research interests, a teaching statement, and full contact information for three individuals willing to provide letters of reference. Applications should be submitted electronically at http://apply.interfolio.com/-22156 and inquiries made to Ms. Mary Carmona, carmona@dls.rutgers.edu. Review of applications will begin November 10, 2014 and continue until the position is ï.

Andrew Kern Assistant Professor of Genetics Rutgers University website: http://kernlab.rutgers.edu Kern@dls.rutgers.edu

SalfordU Manchester MicrobiomeGenomics

The School of Environment & Life Sciences wishes to appoint a Career Development Research Fellow in Microbiome Genomics. This 5-year post is aimed at outstanding scientists who are in the early stages of their research career but who can already demonstrate a significant and ingenious contribution to the field of microbiome genomics, including an impressive publication record. Applicants must possess a clear and ambitious plan for independent and imaginative world-class scholarly research that will attract substantial extramural funds. The successful candidate must also be willing to collaborate with others within the School and beyond, with the aim of harnessing NGS approaches to explore, quantify and understand biodiversity; numerous academics in the School are already embracing NGS-based approaches to study the diversity and functionality of animal (human and non-human), arthropod and environmental ecosystems, and the successful candidate will be expected to play a pivotal role in escalating these studies. A successful Fellow will be a strong candidate for a permanent academic position within the School.

Informal enquiries can be directed to Prof. Richard Birtles (r.j.birtles@salford.ac.uk) or Prof. Judith Smith (j.e.smith@salford.ac.uk).

Closing date for applications: 16th December 2014 Date for interviews: week commencing 12th January

2015

For further information on our School and the application process, please go to: https://-atsv7.wcn.co.uk/search_engine/jobs.cgi?SID=-3DamNvZGU9MTQ0MjIxMiZ2dF90ZW1w bGF0ZT05MTkmb3duZXI9NTAzNjMyOC Zvd25lcnR5cGU9ZmFpciZicmFuZF9p ZD0wJnBvc3RpbmdfY29kZT0yMjQmcm Vxc2lnPTE0MTU4MDYwOTYtOGMwZWVk ZWJiNjhiN2RmOGQ1ODg4Nzc3MmZhNT Izc WViZWM0ODk3ZgJobs.ac.uk link: http://-www.jobs.ac.uk/job/AJZ190/career-development-research-fellow-microbiome-genomics/
S.Mariani@salford.ac.uk

Smithsonian UCambridge ButterflyDiversity

Internship to study sexual conflict and diversification in Neotropical butterflies.

We are seeking a research intern to work at the Smithsonian Tropical Research Institute (STRI) in Panama from February/March 2015 for a period of approximately 6 months. The project is a collaboration between STRI and the University of Cambridge, UK. The internship will assist with experiments exploring the potential role of sexual conflict in driving warning pattern divergence in Heliconius butterflies (for more information please see http://heliconius.zoo.cam.ac.uk/ and http://www.heliconius.org).

The intern will join a vibrant community of scientists studying the origins and maintenance of tropical diversity (see http://www.stri.si.edu). The project is based in Gamboa (central Panama) and the intern will be responsible for experiments looking at female-specific costs associated with warning colour patterns. In addition, the intern will assist with ongoing projects looking at behaviours that reduce gene-flow across the species barrier. This will involve breeding butterflies, assisting with crossing experiments and conducting behavioural assays. Applicants must be able to work independently and be committed to spending considerable time in Panama. A knowledge of Spanish and the ability to drive would be useful but not essential.

A stipend of US$800/month will be provided to cover accommodation and living costs in Panama .

Please send applications, or further questions, to Richard Merrill (r.merrill@zoo.cam.ac.uk) with a CV and the names and contact details of two referees. Please use the subject header: "STRI RESEARCH ASSISTANT" before 7th December 2014.

Dr. Richard Merrill Junior Research Fellow, King's College Department of Zoology | University of Cambridge

Tel: (+44)(0)1223 336644 Mob: (+44)(0)7590 984754 Email: r.merrill@zoo.cam.ac.uk Web: http://-/heliconius.zoo.cam.ac.uk/2009/richard-merrill/
rmm60@hermes.cam.ac.uk

TexasAMU ChairBiology

Title: Chair, Department of Life Sciences at Texas A&M University - Corpus Christi

The College of Science and Engineering at Texas A&M University-Corpus Christi (TAMUCC) invites applications for the Chair of the Department of Life Sciences (LSCI; https://lsci.tamucc.edu/) from individuals with an outstanding record in research and teaching in the sciences. The department chair will provide direction, advocacy, oversight, and management to one of the most diverse and productive academic units on campus. Applicants must have a PhD in Biology, Biomedical Sciences or a related field and an academic record of achievement in scholarship appropriate for appointment with tenure at the rank of Professor. The incumbent will be expected to maintain externally funded research and mentor graduate and undergraduate students and junior faculty in the department. TAMUCC (http://-www.tamucc.edu) is uniquely positioned to become an emerging research institution with a focus on science, engineering and resource economics and policy, particularly as they apply to the Gulf of Mexico.

TAMUCC requires applicants for all university positions to apply online at https://-islanderjobs.tamucc.edu. Applicants should upload a letter of interest, CV, and a position statement describing leadership style, philosophy of teaching, research, and particularly, administration. Please provide names and contact information of three references. Review of applications will begin on 7 December 2014 and continue through 7 January 2015. The desired start date for this position is 1 July 2015. TAMUCC is an Equal Opportunity/Affirmative Action Employer committed to diversity. Search Committee Chair, Dr. Richard Coffin, can also be contacted for inquiries

about the position at richard.coffin@tamucc.edu or at (361) 825-2456.

“Rodriguez, Patricia” <Patricia.Rodriguez@tamucc.edu>Walter Salzburger <walter.salzburger@unibas.ch>

UBasel EvoDevo

The Department of Environmental Sciences at the Faculty of Science, University of Basel, invites as of Fall term 2015, applications for a

ASSISTANT PROFESSORSHIP IN ZOOLOGY (Evolutionary development of animals)

We are seeking for a scientist with an outstanding record in the field of evolutionary developmental biology (EvoDevo/EcoEvoDevo). The successful candidate will help to further develop the strategic axis âEvolution and Environmental Change/Zoology“, of the Department of Environmental Sciences (http://-duw.unibas.ch). The assistant professorship is limited for a period of 5 years.

The candidate is expected to:

- establish an outstanding, internationally recognized research programme in current topics of evolutionary developmental zoology (EvoDevo or EcoEvoDevo), - to teach and further develop undergraduate (in German or English) and graduate level (in English) courses and engage in the Master programme Animal Biology (in English), - to expand the existing syllabus regarding the interface of zoology with plant science and environmental sciences, as well as evolutionary biology, evolutionary genomics, and developmental biology, - actively collaborate with colleagues in the Department of Environmental Sciences and in joint research projects within and outside the University of Basel.

The University of Basel is an equal opportunity and family friendly employer committed to excellence through diversity. To increase the number of women in leading academic positions the university strongly encourages applications from women.

Applications (including CV, list of publications, letter of motivation, and a statement of research and teaching interests) should be sent by e-mail as pdf-file to Prof. Dr. Jörg Schibler, Dean, Faculty of Science, University of Basel, Klingelbergstrasse 50, 4056 Basel, Switzerland, to dekanat-philnat@unibas.ch.

Please address requests for further information to Prof. Dr. W. Salzburger (walter.salzburger@unibas.ch). The application deadline is January 15, 2015.

Walter Salzburger <walter.salzburger@unibas.ch>

UBergen DeptHead

The Department of Natural History of the University Museum of Bergen (University of Bergen, Norway) is seeking a new Head of Department, with management and scientific responsibilities.

Please see full announcement at:

http://www.jobbnorge.no/ledige-stillinger/stilling/-107641/avdelingsleiar-avdeling-for-naturhistorie
Deadline: 15 December 2014

Further details about the position can be obtained from Prof. Henrik von Achen (Director), e-mail henrik.achen@um.uib.no, telephone (+47) 55583120, mob. (+47) 92445843.

Manuel Malaquias, Associate Professor Department of Natural History University Museum of Bergen University of Bergen PB7800 5020 Bergen Norway

http://www.uib.no/persons/Manuel.Malaquias http:/-/manuelmalaquias.wix.com/malaquias “Manuel Antonio E. Malaquias” <Manuel.Malaquias@um.uib.no>

UBordeaux EvolutionaryEcol

**The University of Bordeaux hires a junior scientist in the field of Evolutionary Ecology.*

We seek candidates whose research encompasses the fields of quantitative ecology, evolutionary biology through investigations in subfields such as population, and evolutionary genetics. The overarching goal is to integrate the various processes shaping the composition of terrestrial or aquatic communities in order to predict their future evolution. This can be achieved by coupling ecological, genetic but also social drivers into a generic framework, through modeling approaches.

Applicants must have a Ph.D. or equivalent in ecology or evolutionary biology and postdoctoral experience. A strong background in modeling and theoretical

approaches is also recommended.

The successful candidate will be part of the "Integrative Ecology" team within the cluster of Excellence COTE and build on existing contributions from its different members. COTE ≪ Continental to Coastal Ecosystems: Evolution, Adaptability and Governance" is a Cluster of Excellence (LabEx) recently created at the University of Bordeaux within the national program of "Initiatives d'Excellence" as a joint project with CNRS, INRA, IRSTEA (former CEMAGREF) and IFREMER. The "Integrative Ecology" team will be composed of two scientists and two post doctorates, which will be affiliated with the member labs of COTE. In addition, it will have access to modeling facilities and personnel including dedicated engineers (data management and programming). The successful candidate is expected to develop strong collaborations and interactions between the different member labs of COTE and contribute significantly to the development of Evolutionary Ecology within the Cluster of Excellence.

The position is funded for two years by Labex COTE, with the perspective to apply for a permanent position during this period. Applicants should send a cover letter describing their interest in the position, a curriculum vitae, and name and contact information of three references to: manager-labexcote@u-bordeaux.fr

For additional information on the research project contact: antoine.kremer@pierroton.inra.fr. For additional information regarding application procedure contact : manager-labexcote@u-bordeaux.fr

- Opening date for applications: 28/10/2014 - Submission deadline for applications: 31/12/2014 - Short listing: 15/01/2015 - Final selection: 28/02/2015

Université de Bordeaux < http://www.u-bordeaux.fr >

Julien Dumercq <julien.dumercq@u-bordeaux.fr> Chargé de mission LabEx COTE Summer school coordinator

T. 0540002255 P. 0665376668 cotesummerschool.u-bordeaux.fr/

Julien Dumercq <julien.dumercq@u-bordeaux.fr>

UCalifornia Riverside Bioinformatics

BIOINFORMATICS FACULTY POSITION UNIVERSITY OF CALIFORNIA, RIVERSIDE

The College of Natural and Agricultural Sciences at the University of California, Riverside invites applications for a new faculty position at the assistant professor level to develop a state-of-the-art research program in the area of Bioinformatics. The successful candidate will become a member of an academic department within The College of Natural and Agricultural Sciences in his/her area of expertise with opportunities for a secondary appointment in a variety of departments and colleges and will be expected to join the innovative and multidisciplinary Institute for Integrative Genome Biology (IIGB) that connects theoretical and experimental researchers from different departments in Life, Physical and Mathematical Sciences, Medicine, Engineering and various campus based Centers. The Institute has a vibrant faculty and excellent state-of-the-art facilities with advanced instrumentation and technical support in genomics, proteomics, microscopy and imaging, and bioinformatics. Areas of preferred interest include developing and deploying methods for genomic data analysis such as variant identification, transcriptomics, genome assembly, comparative genomics. An emphasis on next generation sequencing data and large dataset analysis and processing is desired. However, candidates developing approaches for analysis of metabolomic, proteomic, image analysis for biological systems are also in the scope of the position. Candidates employing experimental data collection as well as computational methods are welcomed. Study systems that address research in plant, animal, and microbial organisms are all encouraged to apply. Appointees in this series are expected to conduct mission oriented,translational research that has an ultimate goal of solving societal problems relevant to the mission of the Agricultural Experiment Station http://cnas.ucr.edu/about/anr/ . The successful candidate will be expected to establish and maintain a vigorous, innovative and collaborative research program that is well funded, teach effectively at the undergraduate and graduate levels, and participate in departmental and interdepartmental graduate programs.

Applications received by December 3, 2014 will be reviewed for full consideration .

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

Applications can be made at https://aprecruit.ucr.edu/apply/JPF00269 Jason E Stajich, PhD Associate Professor University of California, Riverside jason.stajich@ucr.edu http://lab.stajich.org

http://fungalgenomes.org http://fungidb.org @stajichlab @hyphaltip @fungalgenomes @fungidb

Jason Stajich <jason.stajich@ucr.edu>

UCalifornia Riverside PlantQuantGenetics

Asst. or Assoc. Professor, Plant Quantitative Genetics University of California, Riverside Department of Botany and Plant Sciences

We are seeking an assistant/associate professor in quantitative genetics with a focus on genetic improvement of agricultural crop populations, including exploitation of wild relatives. Research may include development of statistical methods integrating genomic and phenotypic information that address both additive and non-additive genetic variation, methodologies to discover and exploit dominance and epistatic effects as genomic predictors, methods of enhancing the accuracy of genomic predictors across populations, and expanding methodologies for the analysis of complex traits using high-density markers in combination with phenotypic data. This position will include an appointment in the Agricultural Experiment Station, which carries a responsibility to conduct research and outreach relevant to the mission of the California Agricultural Experiment Station (http://cnas.ucr.edu/about/anr/).

The title and rank is open to either an Assistant or an Associate Professor. Appointment level and salary will be competitive, commensurate with accomplishments.

The successful candidate will have a faculty appointment in the Department of Botany and Plant Sciences (BPSC) at the University of California, Riverside, California.

The position will deepen the department's established strength in quantitative genetics and plant breeding and provide expertise in statistical genetics and genomics. The BPSC Department is a vibrant, interdisciplinary research community, with faculty working across areas of basic to applied plant sciences.

A Ph.D. degree with emphasis in quantitative genetics and strong training in statistics is required. Postdoctoral and/or independent research experience is greatly preferred, especially in genome-wide association analysis, with ability to integrate high-density genotype data sets to identify genetic variation that influences complex traits and understanding of theoretical and computational methodologies used in the analysis of quantitative and molecular data for genetic prediction. Programming skills with multiple computer languages are desired.

The candidate is expected to develop vigorous research and teaching programs, which are demonstrated with publications in refereed journals, extramural funding, and supervision of graduate students and post-doctoral associates. The candidate should have demonstrated experience in conducting research, strong written and oral communication skills, and a desire to work in a team environment to further strengthen collaborative links with multiple departments in the College of Natural and Agricultural Sciences at UCR. Research may focus on any crop. The appointee will be welcome to engage in research utilizing established UCR germplasm collections in various crops including citrus, avocado, wheat, and cowpea. Teaching responsibilities will include graduate and undergraduate level courses that fit the expertise and interests of the successful candidate and departmental needs.

Applicants for the Assistant level should submit a curriculum vitae, a statement of research, a statement of teaching interests, and have four letters of recommendation submitted through https://aprecruit.ucr.edu/-apply/JPF00282 . Applicants for the Associate level, should submit a curriculum vitae, a statement of research, a statement of teaching interests, and provide names and e-mail addresses of four references through https://aprecruit.ucr.edu/apply/JPF00283. Inquiries should be directed to the search committee chair, Shizhong Xu (shizhong.xu@ucr.edu).

Review of applications will begin on January 19, 2015 and will continue until the position is filled. Websites: http://www.plantbiology.ucr.edu/ , http://www.cepceb.ucr.edu and http://www.ucr.edu The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, disability, protected veteran status, or any other characteristic protected by law. In accordance with Federal law, we are making available our Campus Security Report < http://police.ucr.edu/clery/clery.html > to all prospective employees.

Lisa Dunmore <lisa.dunmore@ucr.edu>

UCBerkeley WildlifeConservation

ASSISTANT PROFESSOR IN WILDLIFE MANAGEMENT AND POLICY

University of California, Berkeley

The Department of Environmental Science, Policy, and Management (ESPM) in the College of Natural Resources at the University of California, Berkeley invites applications for a tenure-track position at the assistant professor level in Wildlife Management and Policy with an expected start date of July 1, 2015.

The successful recruit is expected to develop an internationally recognized research program on the effective management of wildlife. We embrace a broad definition of wildlife that includes wild-living aquatic and terrestrial animals. Possible areas of emphasis for this position would include: strategies to quantify and mitigate the impacts of human land-use or global change on wildlife populations, communities and habitats; management of harvested game and fish populations; formulation and assessment of wildlife management policies and practices; wildlife management in food or timber-production systems; endangered species management and policy; wildlife and ecosystem services; human-wildlife interactions and conflict. Research in these or other areas may represent local, regional, and global scales and should make contributions to both basic and applied aspects of wildlife science.

Applicants must have or be working toward a Ph.D. degree in wildlife or fisheries management, animal ecology, conservation biology, environmental or conservation policy, human-wildlife interactions, or a related field. At a minimum, applicants must have completed all degree requirements for the Ph.D. or equivalent degree with the exception of dissertation at the time of application. Ph.D. or equivalent degree is required by the start date. Additional qualifications include demonstrated excellence in research, extensive field or lab experience, evidence of outstanding scholarship within a relevant discipline, a dedication to excellence in teaching at the undergraduate and graduate level, and a commitment to working in an inclusive and interdisciplinary environment. Practical experience and strong skillsets in some of the following areas is desirable: animal community or population biology, applied wildlife ecology, game or fish management, management of economically or politically important species, habitat management, wildlife or biodiversity policy, decision-analysis, and human dimensions of wildlife management.

The successful applicant will be responsible for teaching an undergraduate and graduate course of their design in wildlife management and/or policy. To learn more about our department please visit: http://ourenvironment.berkeley.edu/ . Applications should be submitted online at https://aprecruit.berkeley.edu/apply/JPF00608. Candidates should submit the following materials for a complete application:

A cover letter

A current curriculum vitae

A statement of research interests and experience

A statement of teaching philosophy including contributions to diversity (i.e., experience and goals for bringing wildlife science to underrepresented groups)

Three publications or other writing samples

Three letters of recommendation

Each document should be submitted as a separate pdf file. Filenames should include the applicants last and first names. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality (http://apo.berkeley.edu/evalltr.html) prior to submitting their letters.

The closing date for applications is December 19, 2014. Please direct questions to

espm_recruit@berkeley.edu.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct. The department seeks candidates whose research, teaching, or service has prepared them to contribute to our commitment to diversity and inclusion in higher education. The department is also committed to addressing the family needs of faculty, including dual career couples and single parents. For more information please go to the CALcierge web site at http://calcierge.berkeley.edu . Erica Bree Rosenblum, Ph.D. Dept Environmental Science Policy and Management I Assistant Professor Museum of Vertebrate Zoology I Affiliated Faculty

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UKentucky ArthropodEvolution

Integrative Arthropod Biologist University of Kentucky Department of Entomology http://www2.ca.uky.edu/-entomology/entomology.php Position: Assistant Professor of Entomology, Integrative Arthropod Biology, twelve- month, tenure track appointment, research (80%), teaching (20%)

Description: The Department of Entomology at the University of Kentucky is seeking a broadly trained entomologist or biologist who will develop an internationally recognized, externally funded research program that integrates evolutionary, ecological, physiological, molecular and/or genomic approaches to study arthropod biology. The Department is particularly interested in an integrative biologist in one of the following areas: pollinator biology and their role in ecosystem functioning, arthropod vectors of pathogens affecting human health, or invasion biology. The individual is expected to develop a program that complements and enhances existing research programs at the University of Kentucky. Additionally, the individual is expected to expand the integrated graduate research program within the Department. This position includes a 20% teaching responsibility. The individual will be expected to participate in undergraduate and graduate education, including developing a course in their area of expertise and mentoring graduate students. Qualified candidates will participate in the graduate training of students, whose interests vary from population management and organismal insect biology to molecular biology and genomics.

Qualifications: The successful applicant must have a PhD in Entomology or related discipline with demonstrated experience and publications in integrative arthropod research. Post-doctoral research, potential as both an independent researcher and as a member of a multidisciplinary team, and teaching experience are highly desirable. Applicants should be familiar with integrated research techniques, including ecological, molecular, genomic, and statistical methods.

Salary and Benefits: Salary commensurate with background and experience; overview of benefits: http://-www.uky.edu/professors/benefit.htm Application Procedure: Applicants should submit a CV, list of publications with up to (5) selected reprints, names and addresses of four individuals who may be contacted for letters of reference, copies of undergraduate and graduate transcripts, and an application letter describing background and expertise specifically related to this research/teaching position at the University of Kentucky.

Applications must be submitted electronically to the Integrated Employment System at the University of Kentucky (copy and paste into browser) https://-ukjobs.uky.edu/postings/45339 Application Deadline: January 15, 2015 or until a suitable candidate is identified

Date Position is Available: July 1, 2015 or as mutually agreed upon

The University of Kentucky College of Agriculture, Food and Environment is an equal opportunity organization and welcomes applications from women and minorities.

Dr. Charles W. Fox Professor and Director of Graduate Studies Department of Entomology University of Kentucky Lexington, KY 40546-0091 phone: 859-904-9404 e-mail: cfox@uky.edu web: www.uky.edu/˜cfox Charles Fox <cfox@uky.edu>

UMassachusetts Boston EvoDevo

This is a molecular developmental biologist position, but researchers taking an evolutionary approach are invited to apply.

*ASSISTANT PROFESSOR IN MOLECULAR DEVELOPMENTAL BIOLOGY UNIVERSITY OF MASSACHUSETTS BOSTON *

The Department of Biology at the University of Massachusetts Boston seeks applicants for a full-time tenure track Assistant Professor in Molecular Developmental Biology to begin in September 1, 2015. The successful applicant is expected to establish an externally funded research program, direct the research of students at the doctoral, masters and undergraduate levels, and interact with a dynamic group of cell signaling molecular biologists, geneticists and colleagues in the new Center for Personalized Cancer Therapy and the Developmental Science Research Center.

Applicants must have a PhD and professional experience in molecular and developmental biology or related fields and preference will be given to individuals who have a record of external funding. Applications will be particularly welcome from candidates who utilize creative experimental approaches combining molecular, cellular and developmental biology, genetics and bioin-

formatics, including research in model systems. Excellence in teaching at the undergraduate and graduate levels is expected.

Application materials must be submitted online: http://umb.interviewexchange.com/-candapply.jsp?JOBID=54924 Please include a statement of teaching and research interests and goals, *curriculum vitae*, and 3-5 representative reprints. Applicants should also include contact information for three references.

For further information, visit the Biology Department website at http://www.umb.edu/academics/-csm/biology, or contact Linda Huang, Chair of Search Committee, at linda.huang@umb.edu or Rick Kesseli, Chair of Biology at rick.kesseli@umb.edu. Review of applications will begin on December 29, 2014 and will continue until the position is filled.

UMass Boston provides equal employment opportunities (EEO) to all employees and applicants for employment.

Doug Woodhams

Doug Woodhams <dwoodhams@gmail.com>

UMemphis ComputationalBiology

University of Memphis Department of Biological Sciences Tenure Track Assistant Professor

The University of Memphis, Department of Biological Sciences and the Bioinformatics Program invite applications for a tenure track position at the Assistant Professor level beginning August 2015, pending funding availability. The successful candidate is expected to develop a research program that builds upon and complements the existing strengths in genomics and bioinformatics at the University of Memphis and its partner institutions (including University of Tennessee Health Science Center and St. Jude Childrens Research Hospital) in the Memphis Research Consortium (http://-memphisresearch.org/).

Candidates are sought with a Ph.D. in computational biology and a strong research track record. The successful applicant is expected to develop an externally funded research program, mentor Ph.D and M.S. students, and contribute to teaching activities in the Department of Biological Sciences and the Bioinformatics Program. Teaching responsibilities would include some combination of undergraduate and graduate level courses. The ability to teach computer programming, data structures, and algorithms for biologists is a plus. Research areas of interest include, but are not limited to genomics/metagenomics, microbiology/environmental microbiology, and genetics. Candidates developing innovative bioinformatic approaches for addressing current issues in genome biology are encouraged to apply.

The University of Memphis is a leading metropolitan research institution with over 30 faculty members specializing in diverse subdisciplines of the biological sciences. The Department serves approximately 500 majors and over 40 M.S. and Ph.D. students. The W. Harry Feinstone Center for Genomic Research (www.memphis.edu/feinstone/-), the interdepartmental Program in Bioinformatics (www.memphis.edu/binf/), the Ecological Research Center (www.memphis.edu/erc/), the Integrated Microscopy Center (www.memphis.edu/imc/), and the Meeman Biological Field Station (www.memphis.edu/-meeman/), are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Applications must be submitted online at https://-workforum.memphis.edu/ and include a cover letter, CV, statements of research and teaching interests, and contact information for at least three professional references. Application deadline is November 30, 2014. Review of applications will begin December 1 and may continue until the position is filled. Inquiries should be directed to Dr. Ramin Homayouni, Chair, Bioinformatics Faculty Position, Department of Biological Sciences, The University of Memphis, Memphis, TN 38152, USA (or email rhomayon@memphis.edu)

The University of Memphis is a Tennessee Board of Regents Institution and an Equal Opportunity/Affirmative Action Employer. We urge all qualified applicants to apply for this position. Appointment will be based on qualifications as they relate to position requirements without regard to race, color, national origin, religion, age, sex, disability or veteran status. Successful candidates must meet guidelines of the immigration and Reform Control Act of 1986.

"Duane McKenna (dmckenna)" <dmckenna@memphis.edu>

UMemphis EvolutionaryBiologyEducation

Tenure-track Assistant/Associate Professor in Biology Education, beginning in August 2015 (pending funding availability).

The Department of Biological Sciences at the University of Memphis (www.memphis.edu/biology) invites applications for a tenure-track position in Biology Education at the Assistant or Associate Professor level. Candidates must have a Ph.D. in a Biological Science discipline with evidence of excellence in post-secondary Biology Teaching (preferably in a large classroom environment) and scholarship. The successful candidate must have a demonstrated interest in developing innovative instructional approaches to teaching undergraduate biology courses, and knowledge of assessment strategies. Experience in the development and delivery of online courses is a plus.

Responsibilities of the position include teaching and curriculum development for introductory biology and departmental core courses as well as departmental service courses. Candidates applying at the Assistant Professor level will be expected to garner extramural funding in STEM education. Candidates at the Associate Professor level should have current funding or a history of funding in STEM education. In addition, the successful candidate will be expected to develop and implement course changes to improve student success and collaborate with STEM colleagues to improve science teaching. Startup funds are available and salary will be commensurate with experience.

The University of Memphis is a leading metropolitan research institution with over 30 faculty members specializing in diverse subdisciplines of the biological sciences. The Department serves approximately 500 majors and over 40 M.S. and Ph.D. students. The W. Harry Feinstone Center for Genomic Research (www.memphis.edu/feinstone/-), the interdepartmental Program in Bioinformatics (www.memphis.edu/binf/), the Ecological Research Center (www.memphis.edu/erc/), the Integrated Microscopy Center (www.memphis.edu/imc/), and the Meeman Biological Field Station (www.memphis.edu/-meeman/), are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Candidates should submit a letter of application, statements of research interests and teaching philosophy, and a cv online at http://workforum.memphis.edu/- Applicants should also provide contact information for three references willing to write letters of recommendation, if requested. Review of applications will begin December 1, 2014 and may continue until position is filled. Inquiries should be directed to Dr. Judith Cole, Chair, STEM Faculty Position, Department of Biological Sciences, The University of Memphis, Memphis, TN 38152, USA (or email jcole2@memphis.edu). Women and minorities are encouraged to apply. The University of Memphis is an equal opportunity/affirmative action employer that accommodates individuals with disabilities.

"Duane McKenna (dmckenna)" <dmckenna@memphis.edu>

UMiami EvoDevo

***Faculty Position in Evolutionary Developmental Biology*

The University of Miami, FL

The Department of Biology at the University of Miami, Coral Gables, Florida invites applications for a tenure-track appointment at the Assistant/Associate Professor level in Evolutionary Developmental Biology. We are searching for an outstanding scientist addressing fundamental questions in evo-devo; however, applicants who complement the existing strengths of our department and who can also contribute to a university-wide initiative in Biomaterials are particularly encouraged to apply. Potential areas of research interests include, but are not limited to, regenerative studies with a focus on extracellular matrices, the evolution and development of biomineralized structures, plant cell walls, spider silk or other biological novelties that can potentially be exploited for biologically-inspired materials research. We seek candidates with a Ph.D. and postdoctoral experience who have demonstrated creativity and productivity in research and have a strong interest in undergraduate and graduate education. The successful candidate will have the opportunity to interact with a growing-community of integrative scientists in the Departments of Chemistry, Physics, Math, Computer Science, Biochemistry, and Psychology, as well as the Miller School of Medicine, Rosenstiel School for Marine and Atmospheric Science, Fairchild Tropical Botanic Garden and

Abbess Center for Environmental Science & Policy.

Inquiries may be directed to the Search Chair at evodevo@bio.miami.edu

Details on the Department of Biology and our strengths and foci can be found at:

http://www.as.miami.edu/biology/ Applications should include a full curriculum vitae listing all publications and contact information of three references. Copies of three relevant publications and statements of research objectives and teaching interests should also be included. A cover letter outlining how the applicant will complement the current research areas of the Department of Biology, and link with a campus-wide initiative on interdisciplinary approaches to biomaterials should be included.

The position will remain open until filled, but to receive full consideration, applicationmaterials must be uploaded at http://content.as.miami.edu/biology/about-the-department/apply/by November 15, 2014.

The University of Miami is an Equal Opportunity Employer — Females/Minorities/Protected Veterans/Individuals with Disabilities are encouraged to apply. Applicants and employees are protected from discrimination based on certain categories protected by Federal law.

J. Albert C. Uy Aresty Chair in Tropical Ecology Department of Biology University of Miami 1301 Memorial Drive 202/204 Cox Science Center Coral Gables, FL 33146, U.S.A.

Office: 305.284.8558 Lab: 305.284.3039

http://www.bio.miami.edu/uy/ uy@bio.miami.edu

UMiami InvertebrateEvolution

Marine Invertebrate Biologist

The Department of Marine Biology and Ecology (MBE) formerly known as the Division of Marine Biology and Fisheries (MBF) < http://www.rsmas.miami.edu/-academics/graduate-programs/degrees/marine-biology-fisheries/ > at the University of Miami's Rosenstiel School of Marine and Atmospheric Science, RSMAS < http://rsmas.miami.edu/ > , invites applications for a tenure-track position in Marine Invertebrate Biology as part of a broad strategic plan involving 16 faculty hires over the coming few years. This will be a 9-month guaranteed salary position and is intended to be at the rank of Assistant Professor but exceptional applicants at other ranks will be considered. The anticipated start date is August 2015.

We are searching for an outstanding candidate working on any marine invertebrate group and questions. Potential research areas include, but are not restricted to: comparative or developmental physiology, organism-environment interactions, toxicology, climate change impacts, ecological and/or evolutionary genomics, or ecology. Preference will be given to applicants applying a broad range of techniques and approaches with strong potential for within and among department collaborations, as well as interactions with our Coral Gables < http://miami.edu/ > and Medical campuses < http://-/med.miami.edu/ > .

Research interests of the faculty in MBE span, in no particular order, fisheries/population level biology; coastal and coral reef biology, ecology and conservation; organismal biology; marine health and biomedicine, and biological oceanography. The successful applicant will be housed in the recently inaugurated 85,000 sf Marine Technology and Life Sciences Seawater

Complex < http://www.rsmas.miami.edu/seawater > that hosts state-of-the-science biological and chemical labs for seawater research and hands-on teaching. In addition, the hire would have access to marine invertebrate culture facilities associated with our NIH-supported National Resource for < https://-/cc1.rsmas.miami.edu/slugs/ > Aplysia, as well as the extensive collections of our Marine Invertebrate Museum < http://www.rsmas.miami.edu/resources/-invertebrate-museum/ >. The hire will also have access to on-campus research vessels, including the F.G. Walton Smith < http://www.rsmas.miami.edu/resources/-marine-department/fg-walton-smith/ > (a 96-foot research catamaran), multiple smaller boats, Broad Key < http://www.rsmas.miami.edu/resources/broad-key/ > (a 63-acre island recently acquired as a field station for marine research and education, as well as a pool currently under construction for the training of scientific divers.

The successful candidate will contribute to teaching and mentoring students at the undergraduate and graduate level, and is expected to teach Invertebrate Zoology in our top-ranked Marine Sciences undergraduate < http://www.rsmas.miami.edu/-academics/undergraduate/ > (B.S.) program, and related courses in our graduate programs < http://-www.rsmas.miami.edu/academics/ > (Ph. D., M. S. and Professional Masters).

The RSMAS campus is located on Virginia Key, a

unique community of marine research and educational institutions 15 minutes from downtown Miami, Florida. Approximately $250M per year is invested in marine science and education on Virginia Key, including RSMAS, the NOAA Atlantic Oceanographic and Meteorological Laboratory, the NOAA Southeast Fisheries Science Center, the Miami Seaquarium, and the Maritime and Science Technology Academy (MAST).

Applicants must have a Ph. D. in a relevant field, appropriate postdoctoral training, and the ability to establish and maintain a vigorous, extramurally-funded research program. A complete application includes a cover letter, curriculum vitae, separate statements of research and teaching interests, and the names and contact information of at least three references. The position will remain opened until filled, but to receive full consideration, applications should be received by January 15, 2014. We anticipate conducting interviews for the positions in February 2015. Inquiries should be directed to MBEsearch@rsmas.miami.edu

The University of Miami is an Equal Opportunity Employer, and we encourage

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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

UMinnesota PollinatorEvolution

We encourage those with expertise in the evolution of plant-pollinator interactions, bee evolutionary biology, pollinator behavior, and the evolutionary ecology of native bee populations to apply for this position.

Assistant Professor, Pollinator Ecology

Position: Full-time, nine-month tenure-track faculty position with responsibilities for Research and Teaching, including advising graduate students, with a focus on pollinator-plant interactions, especially involving native bees. The successful applicant's main responsibility will be to establish a prominent, externally-funded research program. In addition, the successful applicant will teach undergraduate and graduate courses, and participate in departmental, college, and university service activities. The position is jointly supported by the Department of Entomology, College of Food, Agricultural and Natural Resource Sciences (CFANS), and the Department of Ecology, Evolution and Behavior, College of Biological Sciences (CBS), with tenure home negotiable. The position is located on the St. Paul Campus of the University of Minnesota.

Responsibilities - Research: In response to national concern about declining bee pollinator populations, the successful candidate will develop an internationally recognized research program supported by external funding in pollinator ecology with an emphasis on the habitat, nesting, and foraging requirements, and surveys of native bee populations, in areas including Minnesota and the Upper Midwestern United States. Possible research topics include but are not limited to: enhancement of native bee populations and habitat in natural, agricultural and urban landscapes, integrated pollinator management, pollinator community ecology, impact of parasites and pathogens on native bee populations, pollination efficiency, floral specificity, and the ecology, evolution, and behavior of bee pollinators.

Responsibilities - Teaching: The appointee is required to teach a course in pollinator ecology and a graduate-level course in their area of specialization. The use of innovative experiential learning and pedagogy is encouraged. Supervision of graduate students including those from culturally diverse backgrounds, student advising, and performance of University service are expected

Inherent in faculty responsibilities is service to the department, college, and University, which may include serving on and/or chairing faculty committees, task forces, or development and implementation of university policies or programs.

Qualifications - Required: - Ph.D. or equivalent degree in Entomology, Ecology, or related field by date of appointment. - Excellence in written and oral communication. - Research experience relevant to pollinator ecology, biology, and/or behavior. - Experience mentoring graduate or undergraduate students. - Research publication(s) in peer-reviewed journals.

Qualifications - Desired:

- Cross-disciplinary strengths in areas such as insect taxonomy, landscape ecology, behavioral ecology, conservation biology

- Experience working in interdisciplinary teams including individuals from diverse backgrounds

- Capacity and willingness to collaborate with state and federal agencies on issues related to pollinator protection

-

Evidence of success in obtaining extramural funding -

Post-doctoral experience in pollinator biology and ecology -

Demonstrated commitment to diversity and inclusion

Salary and benefits: The tenure-track position will be filled at the rank of Assistant Professor with a full-time, nine-month (B-term) appointment in the Department of Entomology and/or the Department of Ecology, Evolution and Behavior. Salary will be competitive and commensurate with professional experience and qualifications. Benefits include a competitive faculty retirement program, and group life, medical and dental insurance plans, disability benefits, sick leave, and sabbatical opportunities. Two months of summer salary for the first three (3) years will be covered. A competitive start-up package will be provided.

Date Available: August 31, 2015

Application: Apply online to requisition number 194884 at https://employment.umn.edu/applicants/-jsp/shared/Welcome_css.jsp, and attach CV, college-level transcripts, a statement of research and teaching interests, and future goals, along with the names and addresses of three references. Screening of applicant files will begin December 15, 2014. Any offer of employment is contingent upon the successful completion of a background check.

Direct questions about the application process to: Felicia Christy

Department of Entomology 218 Hodson Hall 1980 Folwell Avenue St. Paul, MN 55108 christy@umn.edu 612-624-3278

Department of Entomology, University of Minnesota: www.entomology.umn.edu College of Food, Agricultural and Natural Resource Sciences:

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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

UMontana ConservationGenomics

ASSISTANT OR ASSOCIATE PROFESSOR, FISH CONSERVATION GENOMICS

University of Montana, Missoula

The University of Montana College of Forestry and Conservation (CFC) and Wildlife Biology Program seek applications for a nine-month, tenure-track assistant or associate professor position in fish conservation genomics beginning Fall 2015. We are interested in candidates who use genomic approaches to address ecological questions in fisheries, aquatic ecology, and population biology associated with the conservation and management of aquatic systems. Wildlife Biology is a broad interdisciplinary program between the CFC, the Department of Ecosystem and Conservation Sciences (DECS), the Division of Biological Sciences, and the Montana Cooperative Wildlife Research Unit (www.cfc.umt.edu/wbio). One of the top-ranked Wildlife Biology Programs in the nation, we comprise highly interactive and collaborative faculty with outstanding records of scholarship and training in basic and applied wildlife biology. The successful candidate will complement existing programmatic strengths in wildlife ecology, conservation, and genetics, including on-campus integration of state and federal geneticists working on aquatic and terrestrial systems and a new state-of-the-art genomics core facility.

Specific responsibilities of this position include:

- Develop a vigorous, externally-funded research program;

- Teach an upper-division undergraduate wildlife conservation genetics course and other undergraduate or graduate courses that contribute to the Aquatic option of the Wildlife Biology Program, linking the expertise of the candidate and needs of the program;

- Advise undergraduate students in the Aquatic option of the Wildlife Biology Program and direct graduate student research in Wildlife Biology at the M.S. and Ph.D. level; and

- Participate in Wildlife Biology, CFC, DECS, and University committees and develop collaborations with state, federal, and private conservation organizations.

Required Experience:

- A Ph.D. in a relevant biological field of study (e.g., aquatic and/or fisheries biology or ecology, genomics) at the time of appointment.

- A strong record of research and scholarship in the field of aquatic and fisheries ecology and genomics, including publications in peer-reviewed journals and successful development of competitive externally-funded grants;

- Experience and strong commitment to excellence in teaching; and

- A proven ability to communicate effectively with students, professionals, and the general public.

Candidates with post-doctoral experience as well as experience working with natural resource agencies are especially encouraged to apply. The University of Montana is one of the nation's outstanding public universities, committed to liberal arts education, research, and strong professional programs. UM is located in Missoula, a northern Rocky Mountain city located between Yellowstone and Glacier National Parks. Missoula boasts abundant recreational opportunities with a blend of small-town charm and urban sophistication.

TO APPLY:

Screening of applications will begin December 1, 2014 and will continue until position is filled.

Visit http://bit.ly/1065fcg to submit online application for full consideration. Complete applications include:

- A current CV.

- Statements of research and teaching interests.

- Three representative examples of publications (in one of the following formats: doc, xls, txt, rtf, pdf, gif, jpg, htm, html).

- Names and contact information for three professional references.

Inquiries pertaining to the announcement can be directed to Mark Hebblewhite, Search Committee Chair, Ph: 1-406-243-6675 or E-mail: mark .hebblewhite@umontana.edu

The College of Forestry and Conservation has additional faculty openings expected to begin fall semester 2015. All positions may be found on the UM Jobs website at https://umjobs.silkroad.com/ . ADA/EOE/AA/Veteran's Preference Employer.

jeffrey.m.good@gmail.com

UMontana Director WildLifeConservation

DIRECTOR, WILDLIFE BIOLOGY PROGRAM UNIVERSITY OF MONTANA

Announcing the search for an innovative and visionary leader to direct Montanas world-class Wildlife Biology Program. The successful applicant will live and work in the Rocky Mountain setting that attracts our vibrant and competitive student body. Immediate benefits to the Directorship include healthy student enrollment, newly staffed Undergraduate Advisor position, and additions to programmatic base funding as 2013 recipient of the Universitys Programs of National Distinction.

Required knowledge, skills and abilities: We seek a leader who derives job satisfaction from helping others to succeed. As such, we seek a Director with demonstrated success in Wildlife Biology or a related field to help guide the success of faculty and students, to build and maintain strong relationships with partners within and outside the University, and to help shape the future of our program. Experience raising external funding is required, and a track record raising private donations is preferred. The new Director will be expected to collaborate and communicate effectively with faculty, students, university administrators and private donors. The Director will be evaluated based on administrative performance; however, the successful candidate will have the opportunity to maintain a research program. Experience interacting with State and other natural resource agencies, national and international conservation organizations, and professional societies is preferred.

The Wildlife Biology Program is an interdisciplinary program that integrates faculty across the Division of Biological Sciences, the College of Forestry & Conservation (CFC), and the Montana Cooperative Wildlife Research Unit. Our Programs core strength and depth lies in this broad faculty membership. The Program is further enriched by a strong science community including USFS Rocky Mountain Research Station, US Geological Survey, scientists from Montana Fish, Wildlife and Parks, and conservation groups such as the Wildlife Conservation Society and Panthera. The Director of the Wildlife Program is a tenure-track position housed in the Department of Ecosystem and Conservation Sciences (DECS) in the CFC.

Required education: Requirements include a PhD in the field and professional accomplishments commensurate with academic rank of Associate Professor or higher.

Position responsibilities and duties: - Foster local, national and international collaborations in support of teaching and research mission - Develop and maintain relationships with resource management agencies to maintain programmatic integration of basic and applied science - Guide development of undergraduate and graduate curriculum to ensure we are training the next generation of leaders in the field of Wildlife Biology - Interact with wildlife students through graduate and senior seminars - Work to raise external funds to meet programmatic goals and enhance student opportunities - Supervise 2-3 administrative staff - Participate in Wildlife Biology, DECS, CFC, and University com-

mittees

To apply go to: http://bit.ly/1056cfcwb and upload a letter of interest, statement of Wildlife Biology Program vision, statement of research vision in wildlife biology, three representative publications, curriculum vitae and names of three references. Direct questions to the chairs of the search committee: Creagh Breuner (406-243-5585; creagh.breuner@umontana.edu) or Paul Lukacs (406 243-5675; paul.lukacs@umontana.edu). Screening of applicants begins 15 January 2015, and will continue until a suitable candidate is appointed. Employment may begin 1 July 2015.

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

"Breuner, Creagh" <creagh.breuner@mso.umt.edu>

UMontana IntegrativeVertebrateBiology

The Division of Biological Sciences and Graduate Program in Organismal Biology and Ecology (OBE) at The University of Montana invite applications for a faculty position in Integrative Vertebrate Biology beginning fall 2015. The search is open at the rank of both Assistant and Associate Professor.

We seek outstanding applicants doing integrative research on vertebrate ecology and evolution with emphasis in natural populations. OBE is an internationally recognized Ecology and Evolution program comprised of highly interactive faculty with outstanding records of scholarship and teaching. We are particularly interested in colleagues whose research will complement and enhance existing programmatic strengths in evolutionary genetics, organismal function and behavior, and population and community ecology.

The successful candidate will be expected to establish a vigorous, externally funded research program, contribute to undergraduate and graduate teaching, participate in the interdisciplinary Wildlife Biology Program, and contribute to the Montana Institute on Ecosystems.

A doctoral degree and demonstrated research excellence are required. Preference will be given to candidates with postdoctoral experience and a record of excellence in teaching and mentoring student research.

The University of Montana is an outstanding public university committed to liberal arts education, research, and strong professional programs. UM is located in Missoula, a charming city in the northern Rocky Mountains that offers an outstanding quality of life. The University of Montana embraces diversity as a core value. We are interested in hiring a candidate who will contribute to the diversity of our faculty. The University of Montana is an Equal Employment Opportunity/Affirmative Action/ADA/Veterans Preference employer, and recipient of a recent NSF ADVANCE award. Applications must be submitted through the University of Montana website (http://-bit.ly/UM1074DBS) and include a current CV, a statement of research and teaching interests, three representative publications, and contact information for three references. Screening of applications will begin Dec. 1, 2014 and continue until position is filled. Inquiries pertaining to the announcement can be directed Art Woods, Search Committee Chair, Ph: 406-243-5234 or E-mail: art.woods@mso.umt.edu. This position announcement can be made available in alternative formats upon request.

ADA/EOE/AA/Veteran's Preference Employer. Finalists must submit to a criminal background check.

art.woods@mso.umt.edu

UNewMexico SeniorLabTech MicrobialEvolution

The Taylor Lab in the Department of Biology at the University of New Mexico is seeking a Senior Lab Tech in Microbial Ecology. The lab investigates fungal biodiversity and the evolutionary ecology of plant-microbe interactions, particularly mycorrhizae and biological nitrogen fixation, using field and molecular methods. This position will involve molecular analyses related to two recent NSF grants, one investigating climate-change related disruption of grass-endophyte interactions along elevational gradients in the Rocky Mountains, the second investigating the potential for associations with mycorrhizal fungi to underlie niche-partitioning in hyperdiverse epiphytic orchid communities of Costa Rican rainforest (see award IDs 1354972 and 1355155). For more information about the lab, please see taylorlabunm.weebly.com and bore-

alfungi.uaf.edu.

The senior technician will be involved in various aspects of laboratory management, including student mentoring. The main duties will be to push forward cutting-edge plant microbiome molecular analyses. A core duty will be the preparation of amplicon libraries for NGS sequencing. There may also be opportunities to participate in fieldwork in Costa Rica and Alaska. Leadership and success in bringing projects to fruition will be rewarded with numerous opportunities for authorship on scientific publications.

A bachelors degree in biology, biochemistry, microbiology or related field is required, an MS is preferred. Experience beyond the classroom with standard microbiological and molecular methods including DNA extraction, PCR and sequencing is essential. Skills in more advanced methods, especially NGS methods such as RADseq, RNAseq, or anchored-hybrid-enrichment-sequencing are desirable. Strong organizational skills and basic data management experience are also essential, while scripting/programming skills (e.g. linux system administration, Perl, PHP, python) would be a major plus.

For additional information and to apply for the position, please follow this link: unmjobs.unm.edu/applicants/Central?quickFind401 Applications should include a cover letter, resume, unofficial transcripts and contact information for at least three references. Start date is flexible and position is open until filled; for best consideration, applications should be received before December 15th.

The University of New Mexico is the flagship university in the state with 36,000 students and 40 PhD programs. Interactions with Los Alamos and Sandia National Labs contribute to a vigorous research climate. The main UNM campus is located in Albuquerque, a city of ~800,000 situated on the Rio Grande River at 5000 feet in elevation. Days are sunny and warm while nights are cool. At the transition between the Sonoran Desert and the Great Plains Grasslands and surrounded by mountains, Albuquerque is ideally situated for both cultural and outdoor explorations. The 10,000 foot Sandia Crest is only a 40 minute drive, while the epicurean, cultural and artistic delights of Santa Fe are only an hour away. Numerous other attractions may be found in all directions, such as Chaco Canyon, Bandolier National Park, White Sands National Monument, and many mountain ranges and ski resorts.

If you have questions about the position, please email Lee Taylor at fflt@unm.edu.

Donald Lee Taylor <fflt@unm.edu>

UOklahoma 3 EcolAndEvolResponsesToGlobalChange

Cluster Hire in Geographic Ecology: three positions at the rank of Assistant, Associate, or Full Professor http://GE.ou.edu The Department of Biology at the University of Oklahoma invites applications for three tenured/tenure-track faculty positions at any rank, beginning in fall 2015. We are searching for creative, collaborative thinkers who use integrative approaches to address fundamental ecological questions at regional to global scales. Our ultimate goal is to enhance our expertise in geographical and aquatic ecology toward predicting ecological and evolutionary responses to global change. The search is open to theoretical, lab, and field biologists working on any taxa. In this cluster hire, we seek:

* A Geographical Ecologist who studies phenomena at multiple spatial scales toward understanding large-scale patterns and processes. Innovators in biogeography, macroecology, bioinformatics, and global ecology are especially encouraged to apply.

* An Aquatic Ecologist who studies freshwater ecosystems toward predicting the role of changing water supplies on ecosystem services. Innovators in biogeochemistry, ecological networks, ecological genomics, river-reservoir systems and land-water interactions are especially encouraged to apply.

* A Physiological Ecologist who studies the origin and maintenance of ecological traits and their ultimate role in the dynamics of population and ecosystem responses to a changing environment. Innovators studying traits involved in metabolic, stoichiometric, thermal and water-related variation and adaptation are especially encouraged to apply.

We are especially interested in candidates who use or combine some of the following three approaches in their work. The first is development and/or testing of models and theory that connect phenomena at scales from local to global. The second is an integrative use of data-from gene frequencies to biogeochemistry, species distributions to climate past and future, functional traits to landscapes-to advance theory and identify novel patterns and processes. The third is a desire to apply this research to ameliorating outstanding ecological problems, including climate change, biodiversity loss, dwin-

dling water supplies, and the degradation of ecosystem services.

The University of Oklahoma is committed to building an international center of excellence exploring the geographical ecology of our evolving biosphere. Successful candidates will join colleagues across campus, including cluster hires in the EPSCoR initiative Adapting socio-ecological systems to increased climate variability. Our shared goal is to build theoretical and empirical bridges across the sciences, to predict the interplay between biotic and climatic changes, and to better steward our natural resources and services. Join us.

How to Apply Successful candidates will have a Ph.D. degree and a record of outstanding achievement as evidenced by publications. Preferred candidates will have a promising (assistant) or externally funded (associate/full) research program and the ability to lead interdisciplinary, multi-investigator projects across a range of geographic scales. Each individual will be expected to provide excellent training for graduate students and postdocs, and contribute to undergraduate and graduate teaching (one course per semester) in the department.

Applicants should submit a cover letter, complete curriculum vitae, research and teaching statements, and selected reprints/preprints as PDF files to Chair, Geographical Ecology Search Committee, at biologyjobs@ou.edu. Applicants should also arrange to have three signed letters of reference sent to biologyjobs@ou.edu or Department of Biology, 730 Van Vleet Oval, University of Oklahoma, Norman, OK 73019, USA. Applicants at the rank of Associate Professor or Professor may submit names and contact information for three references in lieu of letters. Visit us at http://biology.ou.edu. Screening of candidates will begin 3 December 2014 and will continue until the positions are filled.

The University of Oklahoma is an Affirmative Action/Equal Opportunity employer and encourages diversity in the workplace. Protected veterans and individuals with disabilities are encouraged to apply.

Rosemary Knapp Professor and Director of Graduate Studies Department of Biology 730 Van Vleet Oval University of Oklahoma Norman, OK 73019

rknapp@ou.edu

UOregon Biostatistics

Faculty Position in Biostatistics University of Oregon

The Departments of Biology (http://-biology.uoregon.edu) and Mathematics (http://-math.uoregon.edu) at the University of Oregon announce a search for a senior faculty member in Fall 2015. This position is to be at the level of Associate or Full Professor with indefinite tenure. This hire is part of an integrated effort to strengthen research and scholarship at the nexus of statistics/mathematics and biology at the University of Oregon. The successful candidate will have the opportunity to lead searches for two more positions in biostatistics in the immediate future. We are interested in recruiting candidates developing statistical methodology related to the life sciences. Example research areas include, but are not limited to, statistical analysis of large data sets, algorithms for analyzing sequence data, systems biology, population genomics and molecular evolution. Successful candidates will bolster our emerging strengths in biomathematics, maintain an outstanding research program that focuses on solving core problems in their research area, and have a commitment to excellence in teaching. Ph.D. required. Position responsibilities include undergraduate teaching.

Interested persons should apply online to the BIOSTATISTICS SEARCH, University of Oregon at https://www.mathjobs.org/jobs/jobs/6443. Applicants should submit a cover letter, a curriculum vitae including a publication list, a statement of research accomplishments and future research plans, a description of teaching experience, and three letters of recommendation. The research description and letters should together address both the statistical tools/models used in the applicants research and the scientific accomplishments. To ensure consideration, application materials should be uploaded by December 1, 2014, but the search will remain open until the position is filled.

The University of Oregon is an equal opportunity, affirmative action institution committed to cultural diversity and compliance with the ADA. The University encourages all qualified individuals to apply, and does not discriminate on the basis of any protected status, including veteran and disability status. We are supportive of the needs of dual career couples. Candidates who promote and enhance diversity are strongly desired.

Hal Sadofsky Associate Dean, Natural Sciences University of Oregon

Hal Sadofsky <sadofsky@uoregon.edu>

UOtago NZ QuantitativeGenetics

Lecturer or Senior Lecturer in Quantitative Genetics-1401520 DEPARTMENT OF MATHEMATICS AND STATISTICS To build on the University of Otagos internationally recognised strengths across Mathematics, Statistics and Genetics, and to develop quantitative genetics capability in support of New Zealands primary industries, we are offering opportunities for permanent academic appointments that would suit motivated people who wish to live in the vibrant southern city of Dunedin < http://www.otago.ac.nz/-humanresources/careers/relocation/dunedin.php >, gateway to the beautiful Otago Region < http://-www.otago.ac.nz/about/area/otago.html > of New Zealand < http://www.otago.ac.nz/humanresources/-careers/relocation/ >.

The position is supported by Beef + Lamb New Zealand Genetics (B+LNZG). The successful applicant will be expected to engage in research and teaching that will promote the development of the next generation of researchers and industry experts using statistical genetics to promote New Zealands primary industries.

The position is ideal for an active researcher who wants to further his or her career in an academic environment, with a focus on quantitative genetics and who is interested in applications in plant and animal science. The University of Otago < http://www.otago.ac.nz/humanresources/-induction/aboutotago/about-otago.php > is one of New Zealand's most research-intensive University, and members of the Department collaborate frequently with researchers in other University departments, including researchers in Genetics Otago. The AgResearch Invermay campus is also nearby. Research interests of staff in the Department of Mathematics and Statistics < http://www.maths.otago.ac.nz/home/department/-research/statistics/statistics.php#barker > include environmental and ecological statistics, Bayesian inference, time-series analysis, phylogenetics, biostatistics and bioinformatics. We welcome applications from candidates wishing to extend their research in any area of statistics, applied mathematics or animal genetic evaluation.

The successful applicant will teach papers in Mathematics, Statistics or Genetics at undergraduate and postgraduate levels, and supervise postgraduate research students. The research/teaching nexus is emphasised at Otago, and we structure teaching loads to facilitate personal scholarship of our academics, as well as to expose our students to research-informed teaching. Genetics < http://www.otago.ac.nz/genetics > at Otago involves a broad collaboration that strongly supports research informed teaching in statistical genetics, and provides a broad range of potential collaborators.

A feature of this position is that it is supported by a grant from Beef and Lamb NZ Genetics that aims to develop capability in the area of quantitative genetics that can be applied in the primary industries. The successful candidate will have the opportunity to create and lead a new centre of expertise that is fully supported by the University. Candidates will preferably have a PhD in animal/plant breeding and genetics, quantitative genetics, statistical/computational genetics and genomics, or related fields. The successful appointee will have shown a commitment to ongoing research in quantitative genetics with applications in the primary industires, and an aptitude for teaching. Therefore a background in genetic or genomic statistical methodologies and computational skills is a strong requirement.

We welcome international candidates, and can provide financial assistance for relocation < http://www.otago.ac.nz/humanresources/careers/-relocation/relocation.php > and visa applications < http://www.immigration.govt.nz/ >. There is a wealth of practical information available for migrants considering a move to New Zealand < http://www.newzealandnow.govt.nz/-life-in-new-zealand ˜ 5.html > and Dunedin < http://www.dunedin.govt.nz/services/newcomer-information/ >. We encourage academics to maintain international research connections, and support this with generous research and study leave

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USouthFlorida MarineEvolutionaryBiol

Although this posting is not explicitly for an evolutionary biologist, we are eager to consider applicants that use marine systems to explore evolutionary questions.

Assistant Professor in Marine Biology at the University of South Florida

The Department of Integrative Biology at the University of South Florida (USF), Tampa (http://-biology.usf.edu/ib) seeks to fill a 9 month tenure-earning, Assistant Professor position in Marine Biology. Candidates are expected to establish a strong, externally-funded research program and contribute to the Marine Biology curriculum at both the undergraduate and graduate level. A Ph.D. in a relevant field and appropriate Post-doctoral training are required. USF is located in close proximity to diverse marine environments and collaborations are possible with the Florida Institute of Oceanography, the USF College of Marine Science and numerous state and federal agencies in St. Petersburg, FL.

Salary is negotiable. To apply, please visit http://-employment.usf.edu . Submit a cover letter, a CV, a one page statement outlining current and future research plans, a one page statement of teaching philosophy and proposed undergraduate and graduate level courses, up to three pdfs of selected publications, and names and contact information of at least three references. The position is open until filled; review of applications will commence on Dec. 1, 2014. Conclusion of this search is subject to final budget approval.

USF is a high-impact, global research level 1 university dedicated to student success. For information regarding the USF System, please visit our website at http://system.usf.edu. According to Florida Law, applications and meetings regarding them are open to the public. USF is an Equal Opportunity/Equal Access Institution. For disability accommodations contact Mary Parrish at 813-974-6210 a minimum of five working days in advance.

Luanna Prevost Assistant Professor Department of Integrative Biology University of South Florida 4202 E. Fowler Ave, SCA 110 Tampa, FL 33620 phone: (813) 974-7836 email: prevost@usf.edu

clr@usf.edu

Other

ABI 3130sequencer PC

Hi,

We have been having serious problems with the PC supplied with our ABI 3130 sequencer. It is now looking very likely that the PC will have to be replaced.

I have therefore been wondering if it is possible to successfully run a 3130 sequencer using a different PC to that with which it is supplied. I would be interested

to know how well the Genemapper software runs on different PCs.

Thank you,

Robert Donnelly robert.donnelly@plymouth.ac.uk

Robert Donnelly <robert.donnelly@plymouth.ac.uk>

AmericanGeneticAssoc Awards

The American Genetic Association (AGA) announces a new funding opportunity in Evolutionary, Ecological, or Conservation Genomics (EECG) for graduate and post-doctoral researchers who are at a critical point in their research, where additional funds would allow them to conclude their research project and prepare it for publication.

These EECG Research Awards are open to any graduate student or postdoctoral fellow who is a member of the American Genetic Association at the time of application - visit http://www.theaga.org/ for membership details. This program is not intended to fund an entire research project or to initiate new research projects. Awards will generally range from $5,000 to $10,000, awarded to the PI or institution (no overhead is provided).

Awardees are expected to submit at least one paper derived from the support to the AGA Journal of Heredity. Accepted papers will be eligible for an additional $2000 through the Stephen J O'Brien Award, if the first author is a student and the paper is regarded as particularly high quality by the AGA publications committee. In addition, papers arising from the EECG awards will receive priority consideration to be highlighted on the cover of the Journal, will be made freely available immediately on publication, and the first author will receive an additional year of AGA membership, including a subscription to Journal of Heredity.

Application deadline is 1 February 2015, and awards will be announced by 15 April. Instructions for preparing applications can be found at http://-www.theaga.org/ Timeline: Release of RFP: Dec 1, 2014 Deadline for submission: Feb 1, 2015 Awards announced: April 15, 2015 Funds distributed: by May 31, 2015

Contact: agajoh@oregonstate.edu

AGAJOH@oregonstate.edu

Bird masturbation

Dear colleagues,

My co-authors and I are trying to survey which species of birds masturbate for a phylogenetic analysis. There is a pretty good literature on masturbation in mammals, but hardly anything on birds. As there are several theories about why masturbation has evolved, we would be extremely grateful if anyone who is very familiar with behaviour in a particular bird species would be willing to complete the following survey and send it back to me at: t.price@liverpool.ac.uk

Many thanks, and sorry for the unusual request.

Tom Price, University of Liverpool

Questionnaire about masturbation in birds What we want to know: Please tell us about any bird species you have seen masturbate, or any species where you are reasonably confident you would have observed masturbation if it occurred regularly in that species. If you are expert in multiple species, it would be great if you would tell us about as many of them as you can, using multiple sheets if you want, or focus on the species you are most confident about. Feel free to answer N/A or "don't know" to any of the questions below.

The behaviour we are looking for: We define masturbation as a bird having sex with an inanimate object or their own body (e.g. beak). Birds typically masturbate by rubbing their cloaca against an inanimate object, often a rock, branch, or something in their cage. This may lead to ejaculation in males.

Species of bird:

Have you observed masturbation by a bird of this species (Y/N)?

If not, how confident are you that you would have seen it if it occurred (very/fairly/not very/not confident)?

If you did see masturbation in this species: What was the sex of the birds that masturbated (M/F/both)?

Approximately how many individuals of this species have you seen masturbate?

Were they in captivity (captive/wild)?

Were they solitary (alone/with same sex/with opposite sex/with both sexes)?

Were they hand reared (hand/parent)?

Were they adult (juvenile/adult)?

Do you consider the bird(s) to have been in good condition (good/bad)?

Are there any other details you think we should know?

Please forward your questionnaire or any questions to: Dr Tom Price: t.price@liverpool.ac.uk

Tom Price Institute of Integrative Biology Biosciences Building, Crown Street University of Liverpool Liverpool L69 7ZB

+44 151 795 4523

http://drthomasprice.wordpress.com/ http://-blogs.exeter.ac.uk/wedellgroup/ "Price, Thomas" <T.Price@liverpool.ac.uk>

Dactylorhiza incarnata maculata samples

Dear EvolDir,

For a project on the population genetics of Dactylorhizamajalis, we are looking for samples of D. incarnata and D. maculata to use as references. Does anybody have samples of DNA or leaf material that he or she would be willing to share?

Best regards,

Ludo.

Dr. Ludo A.H. Muller Freie Universität Berlin Institut für Biologie - Botanik Altensteinstraße 6 14195 Berlin Germany Tel. +49 (0)30 838 56539 Fax +49 (0)30 838 4 56539 E-mail: ludo.muller@fu-berlin.de Homepage: http://userpage.fu-berlin.de/ ˜ ludom/ ludo_muller@yahoo.com

DiseaseEvolution ResearchExchanges

Dear colleagues,

We invite interested scientists to apply for a <3week research exchange sponsored by our NSF-funded Research Coordination Network (http://-ideas.princeton.edu) focused on the evolutionary biology of infectious diseases. We are interested in supporting exchanges that promote collaborative research on the evolutionary trajectories of parasites and pathogens. A research exchange is designed to allow researchers the opportunity to spend time working intensively away from their home institution, within a group with complementary expertise, to investigate the evolutionary biology of infectious diseases.

Two examples of possible research exchanges: 1) A research exchange could involve a theoretician visiting an empiricist's lab to learn more about how data are collected, integrate that knowledge into models they have already developed, run in silico experiments to test competing hypotheses, and jointly design the next experiment to be undertaken by the empiricist. 2) A research exchange could involve two empiricists bringing new datasets from different systems to a theoretician's lab to provide a reality check for models, jointly test the fit between model and data and answer new questions about biology across systems.

We request a concise application to include: your proposed research, with whom you propose collaboration and why, where the work will take place and an estimated budget (travel/subsistence).

Eligibility: Anyone is eligible, however exchanges will be awarded preferentially to meritorious PhD students and postdocs. International participants are welcome.

First application deadline: December 15, 2014 (quarterly thereafter)

Where to submit an application: Please visit our website in order to submit an application electronically or for further information: http://ideas.princeton.edu/-research-exchanges/ Thanks and all best wishes, Andrea

– Andrea L. Graham Assistant Professor Department of Ecology and Evolutionary Biology Princeton University Princeton, NJ 08544 USA

Tel: (+1) 609-258-6703 E-mail: algraham@princeton.edu

Graham Group URL: http://algraham.princeton.edu/ ISI Researcher ID: http://www.researcherid.com/rid/-A-8808-2010 algraham@princeton.edu

ECRpaper tweets

Dear Evoldir,

We are excited to announce a new initiative called #ECRpaper launching this Thursday (tomorrow)! We hope all of you will participate in this initiative described below and in this blog post on INNGE's blog http://www.innge.net/?q=3Dnode/379 . Tweetable summary: "#ECRpaper - every Thursday - tweet early career papers with a topical hashtag - read them herehttp://www.innge.net/ecrpaper" Background: The amount of work published each month is staggering. Many of us understandably resort to scanning tables of contents for big names. This is unfortunate for early career researchers because our work is being overlooked. It is also unfortunate for the progress of science because it means the ideas of fresh thinkers are being overlooked. Work done by early career researchers foretells the directions our fields are moving and often showcases cutting edge techniques. Therefore, we think it is particularly important that we–those early in our careers–read work by our peers.

#ECRpaper: We think it is time to improve the exposure of early career papers by using the power of Twitter for the good of early career scientists and science in general. Here's our suggested solution:

Every Thursday afternoon, tweet about a paper with an early career researcher as the primary author. Include #ECRpaper and a topical hashtag as well as the twitter handle of the author if available.

An easy place to read all these tweets in one place will be on INNGE's #ECRpaper aggregator (http://-/innge.net/ecrpaper), which organizes tweets by field of study.

Here's what we hope to achieve with #ECRpaper: -Foster debate and discussion about research by early career scientists -Build connections among early career researchers and expand their colleague networks -Help early career researchers see directions other early career researchers are moving -Help everyone see the directions their fields are moving -Bring publicity to work by early career scientists

You do not have to be an early career researcher to join this movement. Scientists from all career stages are encouraged to participate. We all benefit when early career scientists are supported to do the best work they can.

Now is the time to think about the paper you want to tweet on Thursday.

We hope to see you there,

Will Wetzel, (@wcwetzel), Mariah Meek (@mhmeek), Peter Søgaard Jørgensen (@PSJorgensen)

William Wetzel Population Biology Graduate Group University of California, Davis http://-williamcwetzel.com twitter: @wcwetzel

william.wetzel@gmail.com

ESEB GodfreyHewittAward CallApplications

Godfrey Hewitt Mobility Award 2015 V Call for Applications

Godfrey Hewitt (1940-2013) was President of the European Society for Evolutionary Biology (ESEB) from 1999-2001. He was exceptionally influential in evolutionary biology both through his research and through his mentoring of young scientists. He was also a great believer in seeing organisms in their environment firsthand and in exchanges of ideas between labs. Therefore, ESEB has decided to offer, annually, mobility grants for young scientists in his name.

Closing date: Friday 16 January 2015, 12.00 GMT.

Eligibility:

The award is open to PhD students or postdoctoral scientists who are, at the closing date for applications, both within 6 years of the start date of their PhD and ESEB members. The maximum single award will be 2000 Euros. It must be used to support fieldwork or a period of research at a lab that you have not previously visited. There is no restriction on the country of residence or nationality of the applicant but preference will be given to applicants who are unlikely to be able to fund the proposed work by other routes. Preference will also be given to self-contained or seed-corn projects, rather than fundamental elements of already-funded PhD or postdoctoral projects, and to projects with a definable output that is achievable within the scope of the GHM award. A report will be required by 30 April 2016, by which time the funds must have been used.

Application procedure:

Your application should be sent as a single PDF file to Ute Friedrich at the ESEB office, office@eseb.org. It should include your name, current status and institution, your PhD start date, your ESEB membership number, a description of the work to be carried out (maximum 500 words), an outline budget with brief justification (maximum 100 words) and a signed state-

ment from your PhD supervisor or postdoctoral adviser (maximum 100 words) explaining why the work cannot be funded from your institution.

Applications will be considered by a committee chaired by Roger Butlin. The aim will be to announce decisions before the end of March 2015.

Sincerely, Ute Friedrich ESEB Office Manager

– Email:office@eseb.org Homepage:www.eseb.org
ESEB <office@eseb.org>

ESEB TravelStipend Applications

ESEB TRAVEL STIPENDS 2015

The European Society of Evolutionary Biology (ESEB) is pleased to announce the call for applications for travel stipends 2015. These stipends are for students and young scientists to attend the XVth ESEB congress in Lausanne, Switzerland in August 2015 (http://-www3.unil.ch/wpmu/eseb2015/), or to the SSE meeting in Guarujá, São Paulo, Brazil, in June 26-30, 2015 (http://www.evolutionsociety.org/). The stipend will contribute to covering travel, living expenses and congress registration fees. The stipend will be paid out as a reimbursement after the congress, based on specification of the expenses.

Eligibility: - Applicants must be ESEB members (for becoming a member of ESEB, see http://-www.eseb.org/). - Applications can be submitted by scientists at various stages of their professional career (e.g., Masters and PhD students, postdocs, and lecturers). - Scientists working in a country with high GDP are not eligible (for the list of excluded countries see below). - People who received an ESEB travel stipend in the last five years are not eligible. - Applicants must submit to present either an oral communication or a poster to be eligible for the stipend. This will be verified before the reimbursement, but no proof that a poster or talk is accepted is necessary at the application stage.

PLEASE NOTE THAT THESE STIPENDS ARE GIVEN IN CONJUNCTION WITH ANALOGOUS STIPENDS OFFERED BY THE SSE (separate call), SO THERE IS NO NEED TO APPLY TO BOTH

How to apply: send your application by email to the ESEB Travel Bursary Committee, c/o Dr. Martijn Egas <egas@uva.nl>. The application should be no more than 2 pages long and include:

- Name of the applicant; - Budget, including sources of additional support; - An explanation of how attendance to the meeting will further the attendant's professional goals; - and a CV.

Please submit the application as a single PDF-file. A support letter from the applicant advisor/mentor/senior colleague is also required. Support letters should be sent to the same email address (egas@uva.nl) by the applicant's mentor.

Deadline: 28 February 2015 24:00 GMT.

Members professionally based in the following countries are not eligible for the travel stipend: Australia, Austria, Belgium, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland , United Kingdom, United States of America.

Dr. Ute Friedrich ESEB office Manager Email:office@eseb.org

European Society for Evolutionary Biology www.eseb.org office@eseb.org

mtDNA mismatch distribution

Hello,

I am working with two distinct mtDNA clades, each of which is predominated by a major haplotype. Clade 'A' has numerous 1-step mutations away from the main A type with a couple of 2-3 step mutations. Clade 'B' has fewer 1-step mutations from the main B type with a single 2 step haplotype. I have tried running BEAST with little success (lack of convergence, I think due to the simplistic nature of the network). I have also tried estimating time of population expansion for the two clades individually from mismatch distributions and get a more recent event for A (the more variable of the two) than for B. I am certain this is not a data formatting error, but the expectation would be the more variable should have the older time of expansion. Any thoughts?

Mark

Mark Coulson <Mark.Coulson@glasgow.ac.uk>

MuLV resistance Mice

To whom it may concern;

I am trying to locate any tissue or DNA from mice carrying the resistance allele Fv-4r or Akvr-1, which confers resistance to murine leukemia virus (MuLV). We are screening a wild population of mice for the frequency of this allele via PCR and need a positive control. Any help would be greatly appreciated.

Brent W. Young MSc. Conservation Genetics Research Specialist Dean Lab Molecular and Computational Biology University of Southern California lab: 1-213-740-7316 email: brentwyo@usc.edu

Brent Young <evogenetics@hotmail.com>

NESCent EvolutionaryMedicine CallForProposals

CATALYSIS MEETINGS Proposals for Catalysis Meetings in Evolutionary Medicine are now being accepted at The National Evolutionary Synthesis Center (NESCent). We are looking to support innovative approaches to outstanding problems, specifically in areas realted to evolutionary medicine. Appropriate areas of inquiry include any field of evolutionary science that is relevant to medicine, or to human or animal health. Examples include, but are not limited to, evolution of infectious or zoonotic disease, evolutionary issues in global health, evolution of aging, evolution of fertility, autoimmune disease and allergy, evolutionary perspectives on cancer, and evolution of disease-relevant micro-organisms. Proposals that have a clear interdisciplinary focus, and involve evolutionary concepts in any health- or disease-related area, are strongly encouraged, as are proposals that demonstrate international participation and a mix of senior and emerging researchers, including graduate students. Deadline for proposals is Nov 1, 2014. All meetings must be completed by Sep 30, 2015. For more information, please see our website at http://nescent.org/science/EvolutionaryMedicineCatalysis.php GRADUATE FELLOWSHIPS for NC GRADUATE STUDENTS Proposals for 1-semester Graduate Fellowships in fields related to Evolutionary Medicine are now being accepted at The National Evolutionary Synthesis Center (NESCent). We are looking to support innovative approaches to outstanding problems in any field of evolutionary science that is relevant to medicine, or to human or animal health. Examples include, but are not limited to, evolution of infectious or zoonotic disease, evolutionary issues in global health, evolution of aging, evolution of fertility, autoimmune disease and allergy, evolutionary perspectives on cancer, and evolution of disease-relevant micro-organisms. Eligible students are those at any North Carolina academic institution with an accredited graduate program in a relevant field; students may remain resident at their home institution during the fellowship, or travel to another institution. Evidence of engagement, during the fellowship, with other activities relevant to evolutionary or comparative medicine in NC will be viewed positively. The deadlines is Nov 1 (for the spring semester 2015 fellowship), Feb 1 (for the summer semester 2015 fellowship) and Apr 1 (for the fall semester 2015fellowship). For more information, please see our website http://nescent.org/science/TriangleGraduateFellowships.php "Craig McClain, Ph.D." <craig.mcclain@duke.edu>

Phyloseminar MattRasmussen Dec16

Next talk:

Matt Rasmussen, Counsyl Mathematical and visualization tools for working with ancestral recombination graphs Tuesday, December 16, 2014, 10:00 AM PST

The fields of phylogenetics and population genetics share several important models including gene trees, species trees, ancestral recombination graphs (ARGs), and pedigrees. These models are all closely related and can be viewed as subgraphs of one another. Amongst them, the ARG is particularly central and if inferred efficiently can enable many applications such as inference of selection and demography. Here, I will review various helpful mathematical tools for working with ARGs, including what we call the threading algorithm, the branch graph, and the leaf trace visualization.

For more details see http://phyloseminar.org/ . Frederick "Erick" Matsen, Assistant Member Fred Hutchinson Cancer Research Center http://matsen.fhcrc.org/ Erick Matsen <matsen@fhcrc.org>

Shorebird DNA samples

Request for tissue or blood samples from shorebirds (Charadriiformes)

I am seeking tissue or blood samples from shorebird species (sandpipers, plovers and allies), and would appreciate if anyone having such samples will contact me.

My PhD project focuses on genetic diversity and differentiation in shorebirds, and using microsatellite markers, I am planning to compare various estimates of diversity and gene flow between different shorebird populations throughout the world. I already have an excellent set of samples from 15 species collated by my supervisors, however, I wish to top up these samples with others.

To quantify genetic diversity and gene flow, I require samples from a minimum of 20 breeding individuals (males and female) from three+ breeding populations which are approx. 100 km apart. With these samples we will test whether geographic latitude, population size and distribution may influence the extent of genetic diversity and gene flow.

Since collecting these samples often requires substantial effort, we are offering co-authorship to anyone willing to contribute 20+ individual samples. Please note that we only need breeding individuals, so all samples should be gathered on the breeding ground. For statistical analyses, we will need the date and geographic coordinate of the sample, and sex and/or age (adult/juvenile) of the individual. However, if necessary, we can use molecular techniques to sex the individual.

Please contact Josie D'Urban Jackson (jduj20@bath.ac.uk) if you have samples (feather, blood, tissue) from any shorebird species, and are willing to share them and please send samples to Prof. Mike Bruford, OnE Division, C5.15, The Sir Martin Evans Building, Museum Avenue, Cardiff, CF10 3AX, UK.

We would be happy to create a formal agreement specifying the use of the samples and will only deal with samples that were taken under permit. For blood samples, we require a letter which includes a vet's certificate from the region where the samples are found and confirmation if they have had 30 minutes treatment at 56âC or not.

Best wishes,

Josie D'Urban Jackson, PhD student, University of Bath & Cardiff University (UK)

Ph.D student Department of Biology & Biochemistry University of Bath Claverton Down Bath BA2 7AY United Kingdom

Cardiff University School of Biosciences, The Sir Martin Evans Building Museum Avenue Cardiff CF103AX United Kingdom

Josie Jackson <jduj20@bath.ac.uk>

Software Bio++ Libraries

Dear Evoldir members,

We have just released a new version of the Bio++ Libraries, available at http://bioweb.me/BioPP . Bio++ is a set of C++ libraries for Bioinformatics, including sequence analysis, phylogenetics, molecular evolution and population genetics. Recent additions include tools for analyzing next generation sequencing data. Bio++ is Object Oriented and is designed to be both easy to use and computer efficient. Bio++ intends to help programmers to write computer expensive programs, by providing them a set of re-usable tools.

The Bio++ project was started in 2005 and comes now in its version 2.2.0. Source code and packages for various Linux distributions are available.

The Bio++ Development Team.

julien.dutheil@univ-montp2.fr

Software MafFilter

Dear Evoldir member,

We have released a new software called "MafFilter" available at http://biopp.univ-montp2.fr/forge/-maffilter .

MafFilter can parse genome alignments as MAF (Multiple Alignment Format) files. The program is command-line driven and proposes several data processing and analyzing tools named "filters" which can be combined into fully customizable pipelines.

Methods include: - Sequence-based and alignment-based quality filtering - Synteny filtering - Sequence selection - Extraction of annotated features - Window-based statistics - Phylogeny reconstruction - Population genetics method (nucleotide diversity, SNP calling...). - etc.

MafFilter is describe in the following article:

Dutheil JY, Gaillard S, Stukenbrock EH. MafFilter: a highly flexible and extensible multiple genome alignment files processor. BMC Genomics. 2014 Jan 22;15:53. doi: 10.1186/1471-2164-15-53.

MafFilter is based on the Bio++ libraries and is available as pre-compiled packages for various linux distributions. Source code can be compiled on other systems with GCC or CLANG.

Best regards,

Julien Dutheil.

julien.dutheil@univ-montp2.fr

Software Phybase 1 4

"The new version phybase_1.4.tar.gz for R (>3.0) is available at https://faculty.franklin.uga.edu/lliu/-content/software "

Phybase is an R package for phylogenetic analysis, especially for species tree estimation. The old version phybase is not compatible with the latest version of R >3.0. I have updated phybase and the new version phybase 1.4 for R>3.0 is available at https://-faculty.franklin.uga.edu/lliu/content/software.

Liang

Liang Liu <lliu@uga.edu>

Sphingomonas contamination in BSA

Dear EvolDir Members:

Please, did you have any experience of /Sphingomonas/ (bacterium) contamination in not-acetylated bovine serum albumin (BSA)? We met this problem during ancient DNA work with otters and we guess it very likely depends from BSA (Sigma Aldrich brand). Any comments?

Thank you,

Filippo Barbanera University of Pisa, Italy

Filippo Barbanera Researcher Department of Biology Zoology and Anthropology Unit Via A. Volta, 4 I-56126 Pisa Italy

tel. + 39 050 2211386 fax + 39 050 2211393 web page: http://www.biologia.unipi.it/-index.php?id=4164_research&L=1 Filippo Barbanera <filippo.barbanera@unipi.it>

Systematics Research Fund

Systematics Research Fund - 2014/15 call for applications

The Systematics Research Fund is a joint fund of the Linnean Society of London and the Systematics Association. It provides grants for small-scale research projects in the field of systematics. The 2014/2015 application round is now open. The deadline for applications is Friday 16th January 2015.

The SRF typically supports fieldwork expenditure, the purchase of scientific equipment or expertise (e.g. buying time on analytical equipment), specimen preparation (including the cost of temporary technical assistance), and publication costs. However, the fund is unable to cover article processing charges. Projects of a more general or educational nature may also be considered, provided that they include a strong systematic component.

The fund does not provide support for attendance at scientific meetings, student maintenance or tuition fees, nor for bench fees.

Projects already substantially funded by other bodies may be disadvantaged.

Successful projects are selected by a panel of systematists who represent a wide range of conceptual interests and taxonomic groups. The value of any single award will not exceed Â£1500.

Please note that the applicant named on the application form must be a current member of the Linnean Society of London or the Systematics Association to be eligible for funding.

For more information, please see: http://-www.systass.org/awards/srf.shtml Dr Mark Carine Plants Division, Department of Life Sciences The Natural History Museum Cromwell Road London SW7 5BD United Kingdom

Tel: 020 7942 5541

Mark Carine <M.Carine@nhm.ac.uk>

WageningenU VolFieldAssist AvianPhenotypicVariation

Volunteer field assistant position to study the maintenance of phenotypic variation in great tits in the Netherlands We are looking for a research assistant for the upcoming breeding season to join our project investigating sexual selection and reproductive investment in great tits. The research will be conducted in the Netherlands near Arnhem and will last throughout the breeding season, from April until the end of June.

Our project investigates the potential of individual differences in mate choice and reproductive investment to maintain phenotypic variation in great tits. During the breeding season we will study parental investment of the great tits breeding in the study area in relation to plumage characters and partner quality. The project is based at the Wageningen University and is in collaboration with the Netherlands Institute of Ecology (NIOO-KNAW).

The volunteer will help the PhD student working on the project in the field. The work will involve monitoring the breeding birds in the study area, cross fostering of chicks, making video and audio recordings of the nest and banding the offspring.

We ask:

- Candidates should preferably have a BSc or higher in biology, behavioural ecology or a similar qualification

- Ability to work in a team, good social and organizational skills

- Willingness to work long days and if needed during weekends

- Experience in handling and banding birds preferred

- Driving license

- Proficient level of English language

We offer: This is a voluntary position but we may be able to offer travel and accommodation costs to the right candidate. For further information, please contact Lies Zandberg (lies.zandberg@wur.nl) or Dr. Camilla Hinde (camilla.hinde@wur.nl) or check the website of the research group (www. bhe.wur.nl). Application deadline 30 January 2015. Applications consisting of a CV and a motivation letter should be sent to Lies Zandberg (lies.zandberg@wur.nl)

lies.zandberg@wur.nl

WillametteU Nevada VolFieldAssist PollinationBiol

The Smith lab at Willamette University is soliciting applications for volunteers to participate in field research studying the pollination biology and coevolution of Joshua trees (*Yucca brevifolia*) and yucca moths (genus *Tegeticula*) from late March to mid April of 2015.

Volunteers will assist in the completion of pollination experiments in a plant hybrid zone located in central Nevada. Participation will require living at a remote field site continuously for approximately four weeks. Cost of transportation to the field site will be covered as will food while in the field.

Successful applicants will be of above-average physical fitness (i.e.,capable of walking 10 miles per day while carrying heavy and awkward loads, able to climb a 6' ladder, and able to lift 40 lbs) and be enthusiastic about living and working closely with others in challenging conditions. The field site has no running water, little opportunity for personal space and time, and no phone/internet services. Daily temperatures may drop below freezing or exceed 90 F. Wind and sandstorms are very common.

Volunteers must have an educational background in biology or a related field (there is no degree requirement, but a familiarity with ecology and natural history is necessary) and must provide their own camping equipment. Essential gear includes a 4-season tent, a sleeping pad, a sleeping bag rated to 20 degrees F, and backpack with at least a 40 liter capacity.

Prospective volunteers should submit a CV or resume, the name and contact information for one or more professional references, and a letter describing their interest in the project by email to csmith@willamette.edu .

Please include the words 'Volunteer Field Assistant' in the subject line of your message.

Screening of applicants will begin on December 24th, 2014, and continue until all positions are filled.

http://www.willamette.edu/ ~ csmith/-ChrisSmith.htm http://www.nsf.gov/discoveries/-disc_summ.jsp?cntn_id=3D115956&org=3DNSF

Christopher Irwin Smith Associate Professor and Chair Department of Biology Willamette University Salem, OR 97301 ph: 503-370-6181 fax: 503-375-5425

Google Calendar

Lab Website: http://www.willamette.edu/ ~ csmith/-ChrisSmith.htm csmith@willamette.edu

PostDocs

AarhusU 12 EvolBiol

We want to draw attention to a call for 12 postdoc fellowships at the Aarhus Institute of Advanced Studies, Aarhus University, Denmark. The emphasis is on international applicants. Applicants define their own

projects and all academic topics are eligible. Fellows are employed at the Aarhus Institute of Advanced Studies, but most of them are also associated with a research group in another department.

You can find information about AIAS, the specific call and link to the online application form here: http://aias.au.dk/aias-fellowships/aias-cofund-fellowships/ The deadline for the call is 11 February 2015.

If you are interested in applying for a fellowship focusing on evolutionary biology and would like to be associated with the research group "Genetics, Ecology and Evolution" at the Department of Bioscience, then feel free to contact one of us:

Prof. Trine Bilde (evolutionary ecology) e-mail: trine.bilde@bios.au.dk Dr. Jesper Givskov Sørensen (stress and adaptation) e-mail: jesper.soerensen@bios.au.dk Prof. Volker Loeschcke (stress and adaptation) e-mail: volker@bios.au.dk Prof. Michael M. Hansen (population genomics) webpage: e-mail: mmh@bios.au.dk

Michael Møller Hansen <mmh@bios.au.dk>

ColumbiaU EvolutionTickBorneDiseases

POSTDOCTORAL POSITION: ECO-EPIDEMIOLOGY OF TICK-BORNE DISEASES Department of Ecology, Evolution and Environmental Biology (E3B)

A post-doctoral position is available in Maria Diuk-Wassers EcoEpidemiology lab at the Department of Ecology, Evolution and Environmental Biology (E3B), Columbia University. The applicant will join a collaborative project to study the influence of pathogen interactions on the emergence of tick-borne diseases in the United States, funded by the joint NSF/NIH Program on Ecology and Evolution of Infectious Diseases (EEID). This project offers a unique opportunity to integrate laboratory and field studies with various modeling approaches to study the ecological and evolutionary drivers of the emergence and geographic expansion of tick-borne pathogens such as Babesia microti, an emerging pathogen sharing tick vector and host with Borrelia burgdorferi, the Lyme disease agent.

Candidates should have a Ph.D. in ecology, epidemiology, entomology, microbiology or related fields. Background in molecular methods is required, in addition to skills in one or more of the following areas: spatial modeling, population or community ecology, population genetics or dynamic modeling of microbes, vectors, or vertebrate reservoir hosts.

The successful candidate must be capable of working independently in an interdisciplinary environment and have strong quantitative and writing skills evidenced by publication. Opportunities exist for collaboration with the Mailman School of Public Health, the Earth Institute, the American Museum of Natural History, the Wildlife Conservation Society and the EcoHealth Alliance. To ensure consideration, please submit application by December 18, 2014, but the position will remain open until filled. The expected start date is between January and May 2014. The position is available for 1 year with the possibility of renewal depending on performance. Salary is commensurate with experience. Applications should include CV, statement of research interests, the names of three references and be sent to:

mad2256@columbia.edu

Maria Diuk-Wasser Columbia University Dept. of Ecology, Evolution and Environmental Biology 10th Fl. Schermerhorn Ext., Room 1013 1200 Amsterdam Avenue New York, NY 10027

Columbia University is an Equal Opportunity/Affirmative Action employer.

"Diuk-Wasser, Maria" <maria.diuk@yale.edu>

DukeU Bioinformatics

Our lab is looking for a postdoc to spearhead the genomics portion of a five-year UNC-Duke collaborative project that aims to understand the physiological basis of magnetoreception in sea turtles and spiny lobsters. The candidate must have proven (ideally published) experience with assembling genomes and transcriptomes and then analyzing them for the presence and expression levels of particular genes, in this case those associated with the transportation and sequestration of iron and iron oxides. Additional experience with orientation and navigation, marine ecology, and biophysics is also desirable. Funding is available starting as early as January 1st, 2015, with the project lasting until September 30th, 2019. Pay will be based on experience and NIH guidelines. If interested, please send a CV and letter of intent to sjohnsen@duke.edu and arrange to have two

reference letters sent to the same address.

Sönke Johnsen Professor of Biology Duke University

"Sonke Johnsen, Ph.D." <sjohnsen@duke.edu>

France Portugal LandscapeGenetics

ANR-FCT supported Postdoctoral position

We have a 2 years postdoc position in landscape genetics and dispersal ecology funded by the French National Research Agency (ANR) and the Portuguese National Agency (FCT) to work on a recently granted project "ExpandTree: Spatio-temporal colonization patterns in expanding tree populations: an integrated genetic and genomic approach". The work is based in INRA-Avignon (France) for up to 1 year and in CIBIO/InBio (Portugal) up to another year starting early 2015. Shorts stays at the hosting-collaboration Integrative Ecology Group (IEG, Estación Biológica de Doñana, CSIC, Spain) are also contemplated supervised by Prof. Pedro Jordano.

Project overview and description of the position

Understanding the spatio-temporal dynamics of expanding populations is central to predict the responses of fragmented forest populations to drivers of global change. The main tasks of the postdoctoral researcher consist in implementing recent statistical methods and, ideally, developing new evolutionary models, that use georeferenced genotypic and phenotypic data to understand demographic dynamics and gene flow patterns in the colonisation front of expanding populations of trees inhabiting heterogeneous environments. Two Mediterranean tree species currently undergoing demographic expansions will be studied: (i) Juniperus phoenicea subsp. turbinata in Reserva Biológica de Doñana (Huelva, Spain) in collaboration with Pedro Jordano's team (CSIC, Spain) and (ii) Cedrus atlantica on Mont-Ventoux (Avignon, France, in collaboration with Sylvie Oddo-Muratorio-François Lefèvre's team). Microsatellites are the primary genotypic markers but the development and analysis of SNPs potentially under selection are also planned in the ExpandTree project. Specific goals within the framework of the project entailing genetic, spatial, demographic, and ecological data can be accommodated to the skills and interests of the successful candidate.

Skills required: an excellent quantitative and computational background in spatial population genetics modelling applied to ecological issues. Interest in movement ecology, eco-evolutionary dynamics and statistical methodology of molecular data for ecology. Experience in analysing SNPs and phenotypic data based on association models would be appreciated.

Proficiency in written and spoken English is mandatory.

Host teams:

. Plant Biology group (PLANTBIO), CIBIO-InBio, University of Porto, Portugal (www.cibio.pt)

. Biostatistics and Spatial Processes (BioSP), INRA Avignon, France (http://ciam.inra.fr/biosp)

. Ecology of Mediterranean forests (URFM), INRA Avignon

http://www6.paca.inra.fr/-ecologie_des_forets_mediterraneennes . Collaboration team: Estación Biológica de Doñana (CSIC, Spain)

http://ebd10.ebd.csic.es .

Recent publications relevant to the ExpandTree project:

. Roques, L., Garnier, J., Hamel, F. & Klein, E.K. (2012) Allee effect promotes diversity in traveling waves of colonization. Proceedings of the National Academy of Sciences. 109: 8828-8833.

. García, C., Moracho, E., Diaz-Delgado, R. & Jordano, P. (2014) Long- term expansion of juniper populations in managed landscapes: patterns in space and time. Journal of Ecology 102, 1562-1571.

For informal inquiries of the position, please contact the PI's of the project

Cristina Garcia (CIBIO), cristinagarcia@cibio.up.pt Etienne Klein (BioSP-URFM), etienne.klein@avignon.inra.fr

How to apply

To apply, please e-mail Etienne Klein (etienne.klein@avignon.inra.fr) or Cristina García (cristinagarcia@cibio.up.pt) with a motivation letter explaining why you are interested in the position, a PDF of your CV where you should include the name and contact details for two referees. Deadline for application is 15 January 2015.

CRISTINA GARCIA <garciacristin@icloud.com>

GeorgiaTech EvolutionaryGenomics

The School of Biology at the Georgia Institute of Technology has a growing research group in evolutionary genomics; openings in three collaborating laboratories are posted below:

— The Yi lab has open positions for graduate students and postdoctoral researchers. Potential projects in the Yi lab include 1) epigenomic evolution of human brains; we aim to identify DNA methylation, post-translational modification, and histone modifications specific to human brains, and their impacts on neuropsychiatric disorders. 2) Chromosome evolution in the context of behavior; we examine sequence evolution, epigenetics and transcriptomes of a vertebrate model system to elucidate the co-evolution between these components, and how they affect complex phenotypes. 3) Phylo-epigenomics, to systematically analyze evolution of epigenetic modification systems across deep phylogenies, and specifically answer how natural selection shapes various epigenetic landscapes across taxa. Motivated students who are ready to embrace the use of next-generation sequencing methods and computational analyses to tackle new and exciting questions should contact Soojin Yi (soojinyi@gatech.edu).

— The Lachance Lab has one open postdoctoral position in human population genomics. Funding is available for two years. The Lachance Lab uses a mix of whole genome sequencing and computational biology to understand how evolutionary history impacts the risk of hereditary disease across diverse human populations. Potential projects include: 1) studying fast evolving regions of the human genome in African and non-African populations, 2) developing evolutionary models of hereditary disease risk, and 3) determining how genetic architecture and evolutionary history contribute to health disparities. The ideal candidate will have a background in population genetics, genetic epidemiology, or computational biology. Please send any enquiries to (joseph.lachance@biology.gatech.edu).

— MULTIPLE POSITIONS for postdocs and graduate students in developmental biology and evolutionary genomics are available in the laboratory of Prof. Todd Streelman. Successful candidates will be expected to carry out independent research contributing to an understanding of how craniofacial, neural and sensory systems evolve diversity. Experience in developmental biology, neuroscience, dental biology, computational and/or experimental genomics is desired. Interested individuals should contact Todd Streelman by e-mail: (todd.streelman@biology.gatech.edu).

J.T. Streelman Professor School of Biology Petit Institute for Bioengineering and Bioscience Georgia Institute of Technology 310 Ferst Drive Atlanta, GA 30332-0230 404-385-4435 (office) 404-385-4436 (lab) 404-385-4440 (fax) E-mail: todd.streelman@biology.gatech.edu http://-www.biology.gatech.edu/faculty/todd-streelman/ Jeffrey Streelman <todd.streelman@biology.gatech.edu>

GoetheU Frankfurt BiodiversityModelling

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

Postdoctoral position as geobio databases and modelling expert (Ref. #E43) (Fulltime)

The candidate is expected to contribute to knowledge transfer and an effective distribution of labour between geo- and bio-scientists at BiK-F. She or he should provide expertise on data describing potential drivers of biodiversity dynamics (e.g. climate scenarios and remote sensing products concerning, e.g., land cover), as well as climate and ecological modelling, for the latter in particular concerning species distribution modelling. The candidate is expected to devote some of her or his time to service for a wide range of scientists, which in many cases is expected to develop into a collaboration with shared authorship. If time allows, own research is also very much appreciated.

Your tasks: Provide expertise on climate scenarios and remote sensing products Collaborate with a variety of researchers across the institute Help with processing input data for ecological models Run species distribution models Lead the further development of the portal of the Data and Modelling Centre (https://-dataportal.senckenberg.de/Metadataportal/) as an important tool for communication within the institute Maintain an existing Metacat database for data storage and archiving

Your profile: PhD degree in geography, biology, ecology, meteorology, Earth system science, physics, mathemat-

ics, or related fields Advanced skills in analysis of large datasets and/or ecological modeling Good written and oral communication skills are required Interest to work in interdisciplinary teams

Salary and benefits are in accordance with a public service position in Germany (TV-H E13, 100%). The contract shall start January, 1st 2015 and will initially be limited to a 3-year term. The Senckenberg Research Institute supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The type of handicap should not prevent work needed to conduct the research. The duty station will be Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung.

Please send your application before November, 17th 2014 preferably by e-mail (attachment in a single pdf document), mentioning the reference of this position (Ref. #E43) and including a letter outlining your suitability for the post, a detailed CV, contact details of two potential references and, if available, publications to the address below.

Dr. Johannes Heilmann c/o Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main recruiting@senckenberg.de

For scientific enquiries please contact Prof. Dr. Thomas Hickler, Tel. 069 / 7542-1861. In addition please indicate in your application how our job advertisement came to your attention. Please visit: http://www.senckenberg.de/-files/content/stellenausschreibungen/-e_43_stellenausschreibung_sb.pdf Mit freundlichen Grüßen /Best Regards

Stefanie Ulrich Team Recruiting

SENCKENBERG Gesellschaft für Naturforschung Service & Administration - Personal und Soziales/Personnel and Social Affairs Senckenberganlage 25 60325 Frankfurt/Main

Telefon/Phone: 0049 (0)69 / 7542 -

Leiterin Personal/Head of Personnel - 1319 Elsen, Carina

Team Personalbeschaffung/Team Recruiting - 1313 Ulrich, Stefanie - 1205 di-Biase, Maria - 1478 Kurt, Sibel - 1310 Treuberg, Sascha

Fax: 0049 (0)69 / 7542-1467 Mail: recruiting@senckenberg.de Homepage: www.senckenberg.de SENCKENBERG Gesellschaft für Naturforschung Rechtsfähiger Verein gemäß §22 BGB Senckenberganlage 25 60325 Frankfurt am Main Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Dr. Johannes Heilmann, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, PD Dr. Ingrid Kröncke Präsidentin: Dr. h. c. Beate Heraeus Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt) P Before printing, think about the environment

recruiting@senckenberg.de

Harvard ComputationalBiol

HARVARD SCHOOL OF PUBLIC HEALTH

POSTDOCTORAL FELLOWSHIP

LIPSITCH AND HANAGE LABS / CCDD

BIOINFORMATICS/COMPUTATIONAL BIOLOGY

STARTING AS SOON AS POSSIBLE

Dynamic postdoctoral research fellow sought to work on *Streptococcus pneumoniae* population genomics with Professors Marc Lipsitch and Bill Hanage in the Center for Communicable Disease Dynamics, Department of Epidemiology, Harvard School of Public Health. The fellow would work on two separate, NIH R01-funded projects:

1. Analyzing the genomes of ~800 pneumococci from carriage studies in Native American populations in the US Southwest with research questions related to detecting natural selection for diversification and/or loss of antigens (PI Lipsitch collaboration with Johns Hopkins Bloomberg School of Public Health and Wellcome Trust Sanger Institute) and analysis of the relation between measured preexisting antipneumococcal antibody in participant sera and genome composition of the pneumococci they subsequently carry.

2. Analyzing the genomes of ~ 1500 pneumococci from the CDC's Active Bacterial Core Surveillance for invasive disease, aiming to identify the factors in the genome or environment that lead to the success of antimicrobial-resistant strains (PI Hanage, collaboration with CDC).

We seek a recent PhD in biology, computational biology, population genetics, microbiology or bioinformatics (or related field) with experience in as many as possible of the following: Assembly, alignment and annotation of whole genome sequences from NGS short reads, phylogenetic methods, population genetics, and statistical methods. Successful applicants need not have all

of these but must be prepared to learn them. Interest in and experience of experimental microbiology or molecular biology is an additional plus.

Attractive features of this position include two large and unexplored datasets with unusually good epidemiologic data; the opportunity to test hypotheses generated from sequence analysis by experiment as both PIs have wet labs (either alone or in collaboration with others in the group); a highly collaborative, productive and friendly group within CCDD including expertise in many relevant fields, mostly concentrated around the intersection of infectious disease epidemiology, pathogen genomics, and mathematical modeling; and opportunities to learn some of these complementary skills during the course of the project.

Appointment is for 2 years, subject to satisfactory performance in the first, with possibility of renewal.

Please contact both PIs by email: mlipsitc@hsph.harvard.edu, whanage@hsph.harvard.edu, with CV, letter of interest, and names of at least 2 references.

Marc Lipsitch, DPhil Professor of Epidemiology Director, Center for Communicable Disease Dynamics Harvard School of Public Health email: mlipsitc@hsph.harvard.edu Skype and Twitter: mlipsitch http://www.hsph.harvard.edu/faculty/marc-lipsitch/ http://ccdd.hsph.harvard.edu (617) 432-4559

Marc Lipsitch <mlipsitc@hsph.harvard.edu>

HarvardU EvolutionOfRegeneration

Postdoctoral positions are available in the lab of Mansi Srivastava at the Department of Organismic and Evolutionary Biology, Harvard University (http://-/oeb.harvard.edu/faculty/Srivastava/srivastava-oeb.html).

Positions are available for postdoctoral candidates with experience in varied fields, including developmental biology, stem cell biology, molecular and cell biology, computational biology, and evolution. A diversity of potential research projects, ranging from in vivo studies of stem cell biology in regeneration to functional studies of embryonic development in acoels, are available. Please send an email describing your research background and interests as well as a curriculum vitae to Mansi (mansi@oeb.harvard.edu).

Research Summary:

Most animals are able to repair wounds and many can regenerate extensively, re-growing organs or even entire body plans from small fragments. Very little is known about how wounding results in repair and/or regeneration, or whether these mechanisms are similar across diverse animal species. The lab will take an integrative approach for studying wound response and stem cell biology during regeneration in an evolutionary framework by using a broad range of techniques including transcriptional profiling and lineage tracing.

A major focus of the lab will be the three-banded panther worm, Hofstenia miamia, an acoel species that is a new model system for studies of regeneration and development. Acoels are likely to be the earliest lineage of animals with bilateral symmetry (bilaterians), and are therefore in a phylogenetically informative position for understanding the evolution of regenerative mechanisms. Hofstenia has many advantages as a model regenerative species, for example: RNAi that can be administered by soaking; tools for studying gene function; and the ability to isolate stem cells. Hofstenia also produces accessible embryos that enable comparisons of regeneration and development, and provide a unique opportunity to use gene-delivery and genome-editing tools to study regeneration.

Various projects are available for studying genetic and cellular mechanisms underlying the wound response and regulation of stem cells in Hofstenia as well as for comparing regeneration between different regenerative animal species including cnidarians and planarians. In addition to uncovering new mechanisms, these studies will aim to learn which aspects of animal regeneration are conserved, and which evolved independently along different animal lineages.

mansi@oeb.harvard.edu

Helsinki PDF PhD EvolutionaryMorphometrics

1.Job/ project description: Potsdoc or graduate position for a PhD in evolutionary morphometrics

The main objectives of the PhD project is to:

a) Develop mathematical tools for non-landmark morphometrics of whole embryos and adult bodies.

b) Use those tools to test quantitatively classical com-

parative hypotheses in evolution and development (evo-devo). These hypotheses include the hour-glass model and the patterns of variation in different stages of development according to the type of development.

c) Collect data, mostly 3D scans, of embryonic material.

The project would involve working with different species and would involve collecting data with a CT-scanner and analyzing already existing data. The biotechnology institute includes a range of experimental biologitst working on several systems. The supervisor of the theoretical aspects will be Dr. Salazar-Ciudad but the PhD would include close collaboration with Jukka Jernvall group. This includes collaboration with developmental biologists, bioinformaticians, paleontologists and other evolutionary and systems biologists. The work may also include, optionally, collaboration, and spending some time, in Barcelona.

2. Requirements:

The applicant must be a biologists, preferably with a strong background in either evolutionary biology, developmental biology or theoretical biology. Some knowledge of ecology, zoology, cell and molecular biology are also desirable.

Bioinformaticians, systems biologists or computer biologists that do not have a degree in biology (e.g. Computer scientists, physicists or engineers) would not be considered (not replied). Mathematicians with a strong background in biology may be considered.

Programming skills or a willingness to acquire them is required.

The most important requirement is a strong interest and motivation on science, morphological evolution and development. A capacity for creative and critical thinking is also desirable.

3. Description of the position:

The fellowship will be for a period of up to 4 years (100% research work: no teaching involved).

The purpose of the fellowship is research training leading to the successful completion of a PhD degree.

Salary according to Finnish PhD student salaries (or postdoc) depending on the applicant.

4. The application must include:

-Application letter including a statement of interests -CV (summarizing degrees obtained, subjects included in degree and grades, average grade)

-Application should be send to Isaac Salazar-Ciudad by email:

isaac.salazar@helsinki.fi

Foreign applicants are advised to attach an explanation of their University's grading system. Please remember that all documents should be in English.

5. Examples of recent publications by Isaac Salazar-Ciudad group.

-Salazar-Ciudad I. Morphological evolution and embryonic developmental diversity in metazoa. Development. 2010 Feb;137(4):531-9.

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

-Salazar-Ciudad I1, Marín-Riera M. Adaptive dynamics under development-based genotype-phenotype maps. Nature. 2013 May 16;497(7449):361-4.

6. Interested candidates should check our group webpage:

http://www.biocenter.helsinki.fi/salazar/index.html
The deadline is 15 of August (although candidates may be selected before).

Isaac Salazar-Ciudad: isaac.salazar@helsinki.fi

isalazar@mappi.helsinki.fi

IBC Montpellier EvolutionnaryGenomics

Postdoc:

WHERE : Institute of Computational Biology (IBC), Montpellier (France), http://www.ibc-montpellier.fr
WHAT : Methodological developments in evolutionary genomics

Three-year post-doctoral position at the Institute of Computational Biology (IBC), Montpellier (France) : Methodological developments in evolutionary genomics.

One young investigator position opens immediately at the Institute for Computational Biology (IBC, http://-/www.ibc-montpellier.fr) of Montpellier (France) to work on the development of innovative inference methods and software in population genomics or phylogenetics to analyze large-scale genomic data in the fields of health, agronomy and environment (Work Package 2 ≪ evolutionary genomics ≫ of the IBC). The candidate will develop its own research on some of the fol-

lowing topics : selective processes, demographic history, spatial genetic processes, very large phylogenies reconstruction, gene/species tree reconciliation, using maximum likelihood, bayesian and simulation-based inference. We are seeking a candidate with a strong background in mathematical and computational evolutionary biology, with interest in applications and software development. The successfull candidate will work on his own project, build in collaboration with any researchers* involved in the WP2 project and working at the IBC labs (AGAP, CBGP, ISEM, I3M, LIRMM, MIVEGEC).

IBC hires young investigators, typically with a PhD plus some post-doc experience, a high level of publishing, strong communication abilities, and a taste for multidisciplinary research. Working full-time at IBC, these young researchers will play a key role in Institute life. Most of their time will be devoted to scientific projects. In addition, they are expected to actively participate in the coordination of workpackages, in the hosting of foreign researchers and in the organization of seminars and events (summer schools, conferences...). In exchange, these young researchers will benefit from an exceptional environment thanks to the presence of numerous leading international researchers, not to mention significant autonomy for their work. Montpellier hosts one of the most vibrant communities of biodiversity research in Europe with several research centers of excellence in the field. This positions is open for up to 3 years with a salary above the French post-doc standard.

Living at Montpellier: http://www.agropolis.org/-english/guide/index.html Contacts WP2 ≪ Evolutionary Genetics ≫ : Jean-Michel Marin : http://-www.math.univ-montp2.fr/ ˜ marin/ François Rousset : http://www.isem.univ-montp2.fr/recherche/teams/-evolutionary-genetics/staff/roussetfrancois/?lang=en Vincent Ranwez : https://sites.google.com/site/-ranwez/ Olivier Gascuel : http://www.lirmm.fr/-˜ gascuel/ Submit my application : http:-/www.ibc-montpellier.fr/open-positions/young-investigators#wp2-evolution * WP2 researchers : Vincent Berry, François Chevenet, Jean-François Dufayard, Olivier Gascuel, Mathieu Gautier, Raphaël Leblois, Jean-Michel Marin, Miguel Navascués, Fabio Pardi, Martine Peeters, Pierre Pudlo, Vincent Ranwez, François Rousset, Céline Scornavacca, Renaud Vitalis.

raphael.leblois@supagro.inra.fr

IndianaU AngiospermGenomeEvolution

POSTDOC ON HORIZONTAL GENE TRANSFER AND GENOME EVOLUTION

An NSF-funded postdoctoral position is available to work on a collaborative project between the labs of Dr. Jeff Palmer (Department of Biology, Indiana University, Bloomington) and Dr. Claude dePamphilis (Department of Biology, Penn State University, University Park). This project is a follow-up to papers on the mitochondrial and nuclear genomes of the basal angiosperm /Amborella/ that were led by our labs and published in the Dec. 20, 2013 issue of /Science/.The project focuses on evolutionary gene transfer, including transfer of mitochondrial and plastid sequences to the nucleus of /Amborella/, and the extensive horizontal transfer of foreign mitochondrial sequences to the mitochondrion of /Amborella/.

This is a strictly bioinformatic/comparative genomic project involving extensive analysis of genome-scale sequence data.A Ph.D. in computational biology, evolutionary genetics, or a related field is required, and proficiency in computer programming is expected. Competitive candidates will have a strong record of prior publication in genome-scale data analysis, including bioinformatic pipeline construction, phylogenomics, and/or genome evolution.This position is funded for two years, with continued appointment dependent upon availability of funding. Salary will be commensurate with experience, and full benefits are included.

To apply, please submit, as a single unified PDF, a cover letter detailing research interests and experience, a C.V., and contact information for three professional references to http://indiana.peopleadmin.com/postings/-1258or Dee Verostko, 1001 E. 3ˆrd St., Bloomington, IN 47405.Review of applications will start immediately and will continue until the position is filled. Inquiries about the position may be directed to Jeff Palmer (jpalmer@indiana.edu) or Claude dePamphilis (cwd3@psu.edu).

Indiana University is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity,

national origin, disability status, or protected veteran status.

Jeff Palmer <jpalmer@indiana.edu>

INRA France GrassAdaptation

A Postdoctoral position in Landscape genomics and quantitative genetics for climate-change adapted grasslands available in France at INRA URP3F research unit

POSITION DESCRIPTION. The INRA URP3F research unit is seeking for a post-doctoral researcher to contribute to a European research network project (GrassLandscape) aiming to discover genetic variability involved in the climatic adaptation of a grassland species (perennial ryegrass) at the scale of Europe.

The main objective of this post-doctoral research will be to analyse SNP and phenotypic data released by the project in combination with environmental data (notably climatic data) extracted from fine-resolution databases in order to detect signal of selection (i.e. climate driven selection). Based on association models between genomic polymorphisms and environmental variations, the candidate will (i) map the spatial distribution of genomic markers linked to adaptive diversity in present climatic conditions and (ii) foresee possible shifts in the spatial range fitting these markers in the context of several climate change scenarios. Based on these results, he will define allelic profiles expected to provide climatic adaptation at regional scale over Europe under the foreseen future climatic conditions.

The post-doctoral fellow is expected to have a background in population and landscape genomics and to have expertise in population genetics, statistics and ecology. An experience in mining large databases and in using Geographical Information Software would be appreciated.

CONDITIONS. This post-doctoral position is offered in the frame of the AgreenSkills postdoctoral fellowship program. It is opened to young researchers having less than 7 years of postdoctoral research experience and having spent not more than 12 months in France within the last 3 years. The appointment is for a three years duration provisionally starting from September 1st 2015. Deadline for application is March 1st 2015 but it is advised to apply as soon as possible.

Candidates eligible to the AgreenSkills programme benefit from attractive working conditions (gross monthly salary about â¬3500$for young researchers$).

The post-doctoral fellow will be hosted at the INRA URP3F research unit in Lusignan (France) where he will get direct support from the coordinator of the project GrassLandscape (Jean-Paul Sampoux). The fellow will also work in close collaboration with Pr. Stéphanie Manel (stays at her EPHE-BEV-CEFE lab in Montpellier, France).

INRA URP3F has extensive experience in research aiming to improve services provided by grasslands. It combines skills in quantitative and population genetics, plant breeding and genetic resource conservation, plant eco-physiology and agronomy and it will thus offer a stimulating interdisciplinary environment to the fellow.

EPHE-BEV-CEFE aims to better understand biological and ecological evolutionary processes in the evolutionary dynamics of populations facing heterogeneous environments in space and time (e.g. global change). It has internationally recognized skills in landscape genetics.

HOW TO APPLY . Candidates can apply by sending a copy of their CV and a motivation letter to JP. Sampoux and S. Manel (jean-paul.sampoux@lusignan.inra.fr; Stephanie.manel@cefe.cnrs.fr)

Stéphanie Manel

Stephanie MANEL <Stephanie.MANEL@cefe.cnrs.fr>

LeibnizInst Berlin DiseaseModelling

WHAT: Postdoctoral position in Ecological-Epidemiological Modelling WHERE: at IZW in Berlin, Germany, for 2 years, with regular visits to CEFE/CNRS in Montpellier, France. APPLICATION DEADLINE: 04.01.2015 For WHOM: Ecological-epidemiological modeller; computational biologist SUBJECT: evolutionary ecology, ecology of infectious diseases, epidemiology TO DO: Developing process-based dynamical models to understand complex disease dynamics in the light of heterogeneity of host behaviour and contact rates due to social processes. Research will focus on a highly social carnivore, the spotted hyena, and long-term data on demography, social processes and viral genotypes determined by the IZW's long-term spotted hyena project in the Serengeti National Park, Tanzania.

Dr. Stephanie Kramer-Schadt Senior Scientist Department Evolutionary Ecology Leibniz Institute for Zoo and Wildlife Research (IZW) in the Forschungsverbund Berlin e.V. Alfred-Kowalke-Straße 17 10315 Berlin GERMANY P.O.Box 70 04 30, 10324 Berlin Fon. + 49 - 30 - 51 68 -714 Fax + 49 - 30 - 51 26 - 104 http://www.izw-berlin.de< http://www.izw-berlin.de/ > :: Evolutionary wildlife research for conservation ::

"Kramer-Schadt, Stephanie" <kramer@izw-berlin.de>

Lyon ViralBioinformaticsEvolution

Post-doctoral position in viral bioinformatics : Lyon, France

We are welcoming applications from enthusiastic and independent post-doctoral candidates to participate in our ECOFECT LabEx grant-funded project. We will develop a new bioinformatic approach to identify the sites of the Dengue virus genome that interact with the mosquito cell machinery.

Background To control the Dengue virus epidemics, the most promising strategies target the mosquito host to stop viral transmission to humans. However, it is very hard to optimise these strategies and predict whether they could be successful because little is known about how the virus interacts with its mosquito host.

Project We will implement a new approach that combines viral evolution experiments in mosquito cells with deep sequencing runs (collaboration with Marlne Dreuxs team). The postdoctoral project aims at developing bioinformatic and statistical methods to infer a map of interactions between the mosquito cell machinery and the viral genome. Doing so requires addressing two important problems in viral bioinformatics, i/ the assembly of viral haplotypes from short reads and ii/ fitness prediction for assembled haplotypes.

Environment The host laboratory (LBBE) is a stimulating and pleasant place to work, where one can meet biologists, physicians, computer scientists, mathematicians and statisticians working on problems that range from ecology to medicine, through genomics and evolution. In addition, the post-doctoral researcher will enjoy close interactions with virologists in the team of Marlne Dreux (CIRI, ENSLyon).

Lyon is the second largest city in France, is famous for its food, is a UNESCO World Heritage site and enjoys a very convenient central location in Europe.

Candidates The applicants are expected to have a strong background in bioinformatics or phylogenetics or population genetics or computer science or statistics. The ideal candidate should be highly motivated, curious and enthusiastic to work in a collaborative team. Proven ability to identify research objectives and meet agreed deadlines, self-motivation and flexibility are essential. Excellent written and oral skills in English are required'.

Applicants: Please send one PDF file to Bastien Boussau, boussau@gmail.com, with the following:

- cover letter - concise summary of previous research activities - curriculum vitae including publication list and contact details for 2-3 referees

Ad: https://drive.google.com/file/d/-0Bx94s6WDY7szZTVSaWl0SWtvWWM/view Bastien Boussau UMR CNRS 5558 Biometry and Evolutionary Biology Laboratory Lyon, France http:/-/tinyurl.com/nq4drfe Collaboration with Marlne Dreux CIRI - Inserm U1111 - CNRS UMR5308 ENS Lyon, France http://tinyurl.com/pxhph24 Bastien Boussau <boussau@gmail.com>

MaxPlanck GenomicsMigration

Postdoctoral Position Genomics of Migration

My group combines several biological disciplines including behavioural observation, evolutionary genomics, molecular ecology, and bioinformatics, and utilises emergent technologies to identify the genetic basis of migratory traits.

Here we focus on identifying the genes and signaling pathways behind the components shaping the migratory phenotype in the blackcap, a well characterised migratory songbird species. We will complement the sequencing approach with gene expression profiling and characterisation of chromatin modification to investigate the extent of phenotypic variation manifested by expression differences, either through slight genetic differences or epigenetic processes.

The key focus of this project is to understand: Which genes harbour coding variation with relevant consequences for migratory traits, and which signalling cascades are involved in shaping the migratory phenotype?

Within this project that is funded through a Max Planck Research Group Grant, I am offering a 2 year

postdoctoral position with the possibility for extension. The postdoc will assume a central position within this project that is funded through an independent Max Planck Research Group Grant. Project start is January 2015 and the ideal starting date for the postdoc is April 2015.

The ideal candidate has a biological training, background in bioinformatics with skills in programming (scripts and analysis pipelines), next generation sequence analysis, genome assembly and annotation. The successful candidate will be involved in fundamental research questions on migratory genomics, and I highly appreciate a creative postdoc who is motivated to contribute to and extends our research agenda to understand the genetic architecture of migratory traits.

The core dataset that will be generated includes Illumina sequencing of the blackcap genome from populations with varying migratory phenotypes, some of which will be used for de novo genome assembly. The expected output of the postdoc is to contribute to the genome assembly and to compare the genomic makeup and underlying signaling pathways of different populations with various migratory phenotypes.

We offer an English speaking and ambitious working environment at the Max Planck Institute for Evolutionary Biology in Plön, Germany. Cutting edge infrastructure is available at all levels, including high-performance computer clusters and next-generation sequencing core facility. The Institutes main fields of work include evolutionary ecology (Prof. Dr. M. Milinski), evolutionary genetics (Prof. Dr. D. Tautz) and evolutionary theory (Prof. Dr. A. Traulsen) and hosts a number of research groups providing ample opportunities for collaborations and interactions. The MPI in Plön further collaborates with the nearby Christian Albrechts University of Kiel in a joint International Max Planck Research School that attracts PhD students from abroad which contributes to a multicultural working atmosphere.

The Max Planck Society is committed to also employing handicapped individuals and especially encourages them to apply. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Applications should include 1) a cover letter outlining your motivation to work on this project as well as relevant experience, 2) a detailed curriculum vitae and copies of certificates, and 3) the contact details of three academic referees. Please send the above as a single .pdf file to liedvogel@evolbio.mpg.de.

Review of applications will start on January 1st 2015, but candidates will be considered until the position is filled. For more information, feel free to contact me!

Miriam Liedvogel liedvogel@evolbio.mpg.de

Max Planck Research Group Behavioural Genomics Max-Planck-Institute for Evolutionary Biology August-Thienemann-Straße 2 24306 Plön, Germany

www.evolbio.mpg.de/3004473/-group_behaviouralgenomics Miriam Liedvogel <liedvogel@evolbio.mpg.de>

Maynooth Ireland OriginOfEukaryotes

Dear all,

I will have a bioinformatics/molecular evolution postdoc position starting on the 1st of January. The project is to investigate the origins of the eukaryotic cell from a phylogenetic and metabolic perspective. I am looking for somebody that can program in any of the usual languages (PERL, Python, C, etc.), who is familiar with phylogenetic tree construction and who is used to handling large datasets. The successful candidate will need to have already published in the peer-reviewed literature and will have their PhD awarded by the start of the project.

The total annual remuneration package is worth EURO 49,358 (US$61,294), though PRSI and Pension is deducted before gross salary is calculated. Pay rises by 3% annually.

The position potentially lasts for 2.75 years, though there is an annual assessment of progress, which will determine progression.

Send a CV and covering letter to mcinerney.james@gmail.com with the subject line “post-doc position on Eukaryotic Origins”

Please pass this notice on to anybody you think might be interested.

Regards,

James.

Some background publications:

McInerney, J.O., O’Connell, M.J., and Pisani, D. (2014) The hybrid nature of the Eukaryota and a consilient view of life on Earth. Nature Reviews Microbiology 12(6):449-455. doi:10.1038/nrmicro3271.

Bogumil, D., Alvarez-Ponce, D., Landan, G., McInerney, J.O. and Dagan, T. (2014) Integration of two ancestral chaperone systems into one: the evolution of eukaryotic molecular chaperones in light of eukaryogenesis. Molecular Biology and Evolution 31(2) 410-418.

Alvarez-Ponce, D., Lopez, P., Bapteste, E. and McInerney, J.O. (2013). Gene similarity networks provide new tools for understanding eukaryote origins and evolution. Proceedings of the National Academy of Sciences USA doi:10.1073/pnas.1211371110.

Cotton, J.A., and McInerney, J.O. (2010) Eukaryotic genes of archaebacterial origin are more important than the more numerous eubacterial genes, irrespective of function. Proceedings of the National Academy of Sciences, USA 107:40 17252-17255.

James McInerney PhD DSc, Bioinformatics & Molecular Evolution Unit, Department of Biology, National University of Ireland Maynooth, Co. Kildare, Ireland. website — http://bioinf.nuim.ie/james-mcinerney/ mcinerney.james@gmail.com

Montpellier EvolutionaryGenomics

Three-year post-doctoral position at the Institute of Computational Biology (IBC), Montpellier (France) : Methodological developments in evolutionary genomics.

One young investigator position opens immediately at the Institute for Computational Biology (IBC, http://www.ibc-montpellier.fr) of Montpellier (France) to work on the development of innovative inference methods and software in population genomics or phylogenetics to analyze large-scale genomic data in the fields of health, agronomy and environment (Work Package 2 ≪ evolutionary genomics ≫ of the IBC). The candidate will develop its own research on some of the following topics : selective processes, demographic history, spatial genetic processes, very large phylogenies reconstruction, gene/species tree reconciliation, using maximum likelihood, bayesian and simulation-based inference. We are seeking a candidate with a strong background in mathematical and computational evolutionary biology, with interest in applications and software development. The successfull candidate will work on his own project, build in collaboration with any researchers* involved in the WP2 project and working at the IBC labs (AGAP, CBGP, ISEM, I3M, LIRMM, MIVEGEC).

IBC hires young investigators, typically with a PhD plus some post-doc experience, a high level of publishing, strong communication abilities, and a taste for multidisciplinary research. Working full-time at IBC, these young researchers will play a key role in Institute life. Most of their time will be devoted to scientific projects. In addition, they are expected to actively participate in the coordination of workpackages, in the hosting of foreign researchers and in the organization of seminars and events (summer schools, conferences...). In exchange, these young researchers will benefit from an exceptional environment thanks to the presence of numerous leading international researchers, not to mention significant autonomy for their work. Montpellier hosts one of the most vibrant communities of biodiversity research in Europe with several research centers of excellence in the field. This positions is open for up to 3 years with a salary above the French post-doc standard.

Living at Montpellier: http://www.agropolis.org/-english/guide/index.html Contacts WP2 ≪ Evolutionary Genetics ≫ :

Jean-Michel Marin : http://www.math.univ-montp2.fr/~marin/

François Rousset : http://www.isem.univ-montp2.fr/-recherche/teams/evolutionary-genetics/staff/-roussetfrancois/?lang=en Vincent Ranwez : https:/-/sites.google.com/site/ranwez/ Olivier Gascuel : http://www.lirmm.fr/~gascuel/

Submit my application : http://-www.ibc-montpellier.fr/open-positions/young-investigators#wp2-evolution * WP2 researchers : Vincent Berry, Franc?ois Chevenet, Jean-Franc?ois Dufayard, Olivier Gascuel, Mathieu Gautier, Raphaël Leblois, Jean-Michel Marin, Miguel Navascue?s, Fabio Pardi, Martine Peeters, Pierre Pudlo, Vincent Ranwez, François Rousset, Ce?line Scornavacca, Renaud Vitalis.

Raphael Leblois <raphael.leblois@supagro.inra.fr>

NatlUSingapore 3 ComparativeGenomics

Postdoctoral Positions in Comparative Genomics of Non-Model organisms (comparative genomics, transcriptomics, population genomics)

Department of Biological Sciences (DBS), National

University of Singapore

The Department of Biological Sciences (DBS), National University of Singapore, is starting a research initiative whose focus is the promotion of genomic, transcriptomic, and population genomic tools in non-model species that are studied throughout the department (http://www.dbs.nus.edu.sg/). Three 3-year postdoctoral positions will be available from December 2014 onwards. Sought areas of expertise are the design and analysis of NGS data used for comparative genomics, transcriptomics, and population genomics of non-model organisms.

Organisms living in the forests and oceans of South East Asia have evolved chemical, morphological, and physiological adaptations that we have barely begun to comprehend, many of these with currently unforeseen applications to human health, disease management, agriculture, or technological developments. Improved access to Next Generation Sequencing data and bioinformatics will be instrumental for studying the genetic basis of these adaptations as well as assessing and managing the genetic biodiversity of populations and species in the region. One of the most efficient ways to explore, understand, catalogue, and conserve such unexplored biodiversity is via genomic information. The key aim of the initiative is to start new projects on particularly striking phenotypes and to enable existing research on non-model organisms in the DBS. As such the postdoctoral fellows are expected to collaborate with DBS students, postdocs, and faculty on the uses and analysis of NGS data.

Postdoctoral candidates are invited to visit the lab pages of DBS faculty (see examples below) to identify potential host labs that they wish to be associated with for the development of specific research projects. In addition, candidates are expected to contribute to training in NGS design and analysis (ca. 20% of time). Training includes providing help with experimental design and analysis of NGS data, and contributing to a yearly training workshop. Please send a CV, a 2-page Research Statement indicating preferred host labs and area of bioinformatics research, and the names and addresses of three referees to the search committee:

Rudolf Meier (PI)

meier@nus.edu.sg

Antónia Monteiro

antonia.monteiro@nus.edu.eg

Greg Tucker-Kellog

dbsgtk@nus.edu.sg

Manjunatha Kini

dbskinim@nus.edu.sg

Faculty at DBS (http://www.dbs.nus.edu.sg/staff) working on non-model systems:

- John Ascher (bees)

- Theo Evans (termites)

- Manjunatha Kini (snakes and other poisonous organisms)

- Daiqin Li (jumping spiders)

- Rudolf Meier (non-model flies)

- Antónia Monteiro (butterflies)

- Peter Ng (crustaceans)

- Frank Rheindt (birds)

- Greg Tucker-Kellogg (systems biology)

- Darren Yeo (freshwater fish)

- Peter Todd (marine organisms)

Antónia Monteiro Associate Professor Department of Biological Sciences National University of Singapore 14 Science Drive 4 Singapore 117543

and,

Associate Professor Yale-NUS-College 6 College Avenue East Singapore 138614

web-page: http://www.lepdata.org/monteiro Antónia Monteiro <antonia.monteiro@nus.edu.sg>

NTNU Taipei SpeciationGenomics 2

Postdoc Position in Genomics of Adaptation and Speciation (Taipei, Taiwan)

A three-year postdoc is available immediately for an innovative and motivated person to work on the genomics of adaptation and speciation in endemic Psolodesmus damselflies of Taiwan and Yaeyama islands. This is a re-announcement of a previous advertisement.

Project:

The position is funded by a MOST (Ministry of Science & Technology, Taiwan) grant focused on testing hypotheses about how genomes evolve during the process of population adaptation and species formation. One of main objectives is to identify the role of natural and sexual selection in generating the patterns of phenotypic and genomic divergence between habitat-

associated populations and species of damselflies. The project is to combine field translocation experiments and whole genome sequencing to measure selection at the population and genomic level.

Requirement:

1. The postdoctoral fellow will be responsible for leading hypothesis- driven field experiment, laboratory preparation, and analyses of genomic- scale DNA sequence data sets.

2. The successful applicant must have demonstrated expertise in population genetics, phylogenetics, genomics, and/or computational statistics.

3. Preference will be given to candidates with:

(1) Experience of high performance computing, (2) The ability to develop and apply statistical or computational methods to solve problems, (3) Expertise in research on speciation, theoretical models of evolution, or trait divergence.

Application:

To apply, please contact Chung-Ping Lin by email (treehopper@ntnu.edu.tw), and attach a single PDF file containing: 1) a cover letter, 2) a CV, 3) a brief 2-page statement of research interests, and how your skills can contribute to project objectives, and 4) contact information for three references.

Salary & Deadline:

The position will be available immediately, and the start date is flexible . Funding is available for at least 1 year and up to 3 years, pending performance.

A monthly post-doc salary of about $55,000 NTD ($1,900 USD) will be offered, including retirement plan, health benefits, and a year-ending bonus of 1.5- month salary. The average living cost in Taiwan is about 1/2 of that in the USA.

The position will remain open until a suitable candidate is found.

More information:

The lab: http://web.ntnu.edu.tw/ ~ treehopper/ Department of Life Science: http://-www.biol.ntnu.edu.tw/ National Taiwan Normal University: http://www2.ntnu.edu.tw/en/index.php

Chung-Ping Lin Department of Life Science National Taiwan Normal University http://web.ntnu.edu.tw/-~treehopper treehopper <treehopper@ntnu.edu.tw>

Paris 2 EvolutionInsectPheromes

TWO POST-DOC POSITIONS INSECT PHEROMONES AND COGNITION, PARIS, FRANCE Each position is a full time, 2-year contract. Expected starting date: from March 2015

ANR-funded project PHEROMOD: Pheromones as general modulators of insect behavior

In addition to their well-documented function as communication signals, some pheromones have been recently shown to play a role as 'modulators' of cognitive phenomena, facilitating or inhibiting associative learning and memory both in vertebrates and invertebrates. The project aims at investigating the modulator effect of pheromones on experience-dependent behaviour of three insect species, the honeybee Apis mellifera, the ant Lasius niger and the moth Agrotis ipsilon, in order to determine the mechanisms that are either conserved across species or species-specific and associable with particular life-styles. We will study the mechanisms and adaptive value of pheromone modulation of learning by using a behavioural approach and by focusing on octopaminergic and dopaminergic circuits, which in many insects signal appetitive and aversive situations, respectively (pharmacological approach). As odour coding changes after appetitive learning in olfactory centres of the insect brain, we will analyse if pheromone exposure modifies per se the odour code in the first olfactory relay (antennal lobe) of the three species. A combination of pheromone/neutral odour exposure and in vivo calcium imaging recordings of antennal lobe activity will be used to this end. This research project will achieve a comprehensive knowledge on how pheromones influence learning performances in three paradigmatic insect taxa.

The successful applicants will have a PhD in behavioural biology, evolutionary biology or chemical ecology with a solid track record. Experience with insects, learning paradigms and/or neurophysiology (in vivo calcium imaging) is welcome. Candidates should be fluent in English.

Position 1): focus on ants and honey bees. The postdoc will be based at the Laboratory of Experimental and Comparative Ethology, University of Paris 13 (http://leec.univ-paris13.fr/new), working with Prof. Patrizia d'Ettorre but will spend extended periods of time at the CNRS Research Center on Animal Cog-

nition, University of Toulouse (http://cognition.ups-tlse.fr/uneEn.html), working with Prof. Martin Giurfa.

Position 2): focus on the black cutworm moth. The post-doc will be based at the Department of Sensory Ecology (INRA Versailles) of the Institut d'Ecologie et des Sciences de l'Environnement de Paris (http://www-physiologie-insecte.versailles.inra.fr), working with Dr. Nina Deisig. Candidates should send, in one single PDF file: a) letter of interest, b) Curriculum Vitae with publication list; c) contact information (e-mail, phone) for two referees who can provide letters of recommendation.

DEADLINE for receiving applications: 15 January 2015 Contact for position 1): Patrizia d'Ettorre, dettorre@leec.univ-paris13.fr Contact for position 2): Nina Deisig, nina.deisig@versailles.inra.fr

dettorre@leec.univ-paris13.fr

Paris EvolutionaryEcology

Post-doc position in Evolutionary Ecology/Community Ecology/Theoretical Ecology

"Adaptation and Resilience of Spatial Ecological Networks to human-induced changes"

Anthropogenic environmental changes increasingly threaten biodiversity and ecosystem services, thus kindling a societal demand for predictions that ecology as a science has yet to answer. Available models are poorly suited to predicting the ecological effects of such changes because they ignore variation in species' niche due to ecological interactions and evolution. Without understanding the functioning of ecological networks and how they are shaped by evolution, it is indeed difficult to predict how changes of the environment will cascade through ecosystems and make species traits evolve. Understanding the dynamics of ecological networks is a dual goal, both for fundamental research and for building informed programs on sustainable ecosystem services and species conservation. Accounting for species interactions and evolution to understand the consequences of global changes is the critical question we want to tackle through the post doc we propose here.

In this context, the post-doctoral fellow will develop models linking the coevolution of traits to the structure of ecological networks (both trophic and mutualistic networks). Such models will especially account for spatial aspects, i.e. heterogeneous landscapes and dispersal of individuals among habitat patches, and will focus on the structure of ecological communities emerging from evolutionary processes acting at the landscape scale. Modelling will be based on adaptive dynamics and/or theoretical quantitative genetics methods.

Application Process

This job is supported by a larger ANR project ARSENIC (2015-2019) involving a network of 8 different labs, most of them in France. More precisely, this position will involve collaborations between the Ecology, Evolution & Paleontology lab in Lille and of the Institute of Ecology and Environmental Sciences in Paris.

The post-doctoral fellow will work at IEES Paris (Institute of Ecology and Environmental Sciences of Paris). IEES is a new laboratory that merges different aspects of ecology, such as evolutionary ecology, community ecology and functional ecology. The post-doc fellow would be part of the team "Ecology and Evolution of Interaction Networks" (team leader: Nicolas Loeuille).

The post-doctoral position will particularly focus on the theoretical developments proposed above. We welcome applications from candidates with a PhD in ecology, evolutionary biology or applied mathematics, with good skills in ecological modelling, theoretical ecology and evolutionary ecology. Skills in game theory, adaptive dynamics or quantitative genetics modelling will be particularly appreciated.

The position is funded for two years. Salary depends on experience (eg, about 2200â¬ *twoyearsafterPhD*). *Applicationswillbeconsidereduntilthepos*

To apply, send a CV and a letter expressing why the project interests you to Nicolas Loeuille (nicolas.loeuille@upmc.fr) and François Massol (francois.massol@univ-lille1.fr), and have two researchers you collaborated with send us reference letters.

Francois Massol <francois.massol@univ-lille1.fr>

PennStateU EvolutionaryBioinformatics

A postdoctoral research position in bioinformatics is available immediately in the lab of Dr. Claude dePamphilis in the Department of Biology at Penn State. The successful candidate will be involved in several projects related to the study of horizontal gene trans-

fer in plant evolution and will be responsible for developing and implementing bioinformatic pipelines to examine genome- and transcriptome-scale datasets. A Ph.D. in computational biology, genetics, or a related field is required, and proficiency in computer programming is expected. Competitive candidates will have a strong record of prior publication in genome scale data analysis (including informatic pipeline construction, phylogenomics, or molecular evolution). This is a fixed-term position, funded for one year from date of hire, with future appointments dependent upon availability of funding. Applicants should include a cover letter detailing research interests and experience, a C.V., and a list of three professional references. Penn State requires all applicants to register and complete the application form at the Penn State employment website at https://app2.ohr.psu.edu/Jobs/External/-EVMS2_External/currentap1.cfm#54178 .Review of applications will begin immediately and continue until a suitable candidate is found.

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to http://www.police.psu.edu/clery/ , which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to minorities, women, veterans, disabled individuals, and other protected groups. Job URL: https://app2.ohr.psu.edu/Jobs/-External/EVMS2_External/currentap1.cfm#54178
cwd3@psu.edu

PennsylvaniaStateU EvolutionaryGenomics

The Assis lab (*http://www.personal.psu.edu/rua15/-index.html*) at Penn State is recruiting a highly motivated postdoctoral scholar.

Our lab uses computational approaches to study the origin of genotypic and phenotypic innovation. We are broadly interested in a number of problems in evolutionary genomics. One current focus of our research is on gene duplication, which is a major contributor of new gene functions. Potential projects related to gene duplication include examining the role of natural selection in the origin of new functions, elucidating the genic and functional targets of natural selection, comparing functions that arise under different evolutionary scenarios, and applying mathematical models to study gene expression evolution. There are also opportunities to study the origin and evolution of small RNAs, enhancers, and other noncoding functional elements in the genome.

The above lists only serve as examples, and candidates interested in alternative research projects in evolutionary genomics are encouraged to apply. Because our lab is solely computational, candidates should have knowledge of at least one programming language and experience using a Unix or Linux environment.

If you are interested in joining the lab, please email Raquel Assis (*rassis@psu.edu*) a current CV, copies of three representative publications, and a description of your research interests.

In addition, Penn State requires all applicants to register and complete an application on the Penn State employment website: *http://psu.jobs/search/-opportunities.html*. Review of applications will begin immediately and continue until the position is filled. This is a fixed-term appointment funded for one year from date of hire, with possibility of re-funding.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to minorities, women, veterans, disabled individuals, and other protected groups.

rassis7@gmail.com

QueenslandBrainInst StatisticalGenomics

The Queensland Brain Institute

The Queensland Brain Institute (QBI) was established as a research institute of the University of Queensland in 2003. The Institute is now operating out of a new state-of-the-art facility and houses 33 Principal Investigators with strong international reputations. The QBI is one of the largest neuroscience institutes in the world dedicated to understanding the mechanisms underlying brain function. Details of the current QBI interdisciplinary research programs can be found at http://-www.qbi.uq.edu.au . The Role

Multiple roles are available to work within the highly

successful Centre for Neurogenetics and Statistical Genomics, headed by Professors Peter Visscher and Naomi Wray. The appointee/s will work on the application and development of novel statistical genetics methods to aid our understanding of the genetic basis of common disease. There are opportunities to work with large population-based data sets and to be part of research teams, to address individually developed and collaboratively generated research questions, and to supervise honours, masters and doctoral students. The appointee/s will be supported in the development of independently driven research objectives.

The Person

Applicants should possess PhD qualifications in relevant disciplines eg. quantitative genetics, statistics, epidemiology, bioinformatics or other relevant areas. You should also have a strong desire to develop a successful and highly productive research career in quantitative genetics, good general research skills, excellent statistical and analytic skills, very good writing abilities, and the capacity to work with multidisciplinary research teams.

Remuneration

This is a full-time, fixed term appointment at Academic level A or B for up to 36 months in the first instance, commensurate with qualification, skills and experience.

The remuneration package will be in the range of:

Academic Level A - $74,625 - $80,107 p.a., plus employer superannuation contributions of up to 17% (total package will be in the range $87,312- $93,725 p.a.)

Academic Level B - $84,323 - $100,134 p.a., plus employer superannuation contributions of up to 17% (total package will be in the range $98,658 - $117,156 p.a.)

Enquires

To discuss this role please contact Professor Peter Visscher / Professor Naomi Wray / Dr Joseph Powell on +61 7 3346 6348 or peter.visscher@uq.edu.au / naomi.wray@uq.edu.au / joseph.powell@uq.edu.au

To submit an application for this role, use the Apply button on

http://jobs.uq.edu.au/caw/en/job/496673/-postdoctoral-research-fellow. Al

l applicants must supply the following documents: Cover letter, Resume and Selection Criteria responses.

Emma Read Human Resources Officer Queensland Brain Institute The University of Queensland Ritchie Building # 64A - Room A210 St Lucia QLD 4072 Australia Email: e.read@uq.edu.au Phone: 07 3346 6389 Fax: 07 3346 6424

QBI Human Resources <hr.qbi@uq.edu.au>

ReedC Portland BioinformaticsGenomics

Bioinformatics/Genomics Post-doc in the Schaack Lab at Reed College

A post-doc position is available in the Schaack lab at Reed College in Portland, OR. Reed is a highly rigorous undergraduate institution with a strong research emphasis, which offers a unique training environment for post-docs. Features include close collaboration with the PIs, the opportunity to work with talented undergraduates, and the chance to network with other post-docs in the department and with biologists throughout Portland and the region. The scientific and intellectual environment at Reed is stimulating and provides a number of opportunities for interactions (including an excellent weekly seminar series, journal clubs, and discussion groups). *The successful applicant will have the opportunity to participate in a variety of projects related to the invasion, colonization, and proliferation of transposable elements in eukaryotic genomes, as well as having the opportunity to participate in several other sequence analysis-based projects.*

Requirements: Experience with manipulating and analyzing genomic and transcriptomic NGS sequence data, programming expertise, and excellent computational and oral/written communication skills.

Start date is flexible. Funding is available for 1 year minimum, with the possibility of renewal for up to 2 additional years based on performance. Salary will be based on the NIH post-doc pay scale and will be commensurate with experience. To apply, submit a cover letter detailing your research interests, a CV, and contact information for 3 references (with BIONFO POST-DOC in the subject line) to* schaack@reed.edu <schaack@reed.edu>*

To receive full consideration, send materials on or before Jan 1, 2015, however applicants will be considered until the position is filled.

Reed College is an Equal Opportunity Employer. Candidates from underrepresented groups are strongly encouraged to apply.

Sarah Schaack, PhD Assistant Professor Reed Col-

lege https://sites.google.com/site/schaackwork/ Sarah Schaack <schaackmobile@gmail.com>

TexasAMU BehavioralGenomics

A post-doctoral position is available in the lab of Michel Slotman in the Department of Entomology at Texas A&M University (http://slotmanlab.tamu.edu/). Our lab focuses on the evolutionary and behavioral genetics/genomics of disease transmitting mosquitoes. The post-doc will conduct NIH-funded research into the genomic basis of outdoor feeding preference of the African malaria mosquito An. gambiae, using a pool-seq approach. In addition, the successful candidate will be expected to contribute to ongoing research into the genetic basis of the attraction of An. gambiae to human hosts.

The ideal candidate will have a background in population genetics, experience with analyzing next-generation sequencing data, and familiarity with R and Python (or Perl).

The position is available for two years with a negotiable start date. To apply please send a cover letter, CV, PDFs of representative publications, and contact information for three references to maslotman@tamu.edu. Feel free to contact me if you have any questions about the position.

The Texas A&M System is an Equal Opportunity/Affirmative Action/Veterans/Disability Employer committed to diversity.

Michel Slotman <maslotman@ag.tamu.edu>

TexasAMU ConifersEvolGenomics

POSTDOCTORAL POSITION IN CONIFERS EVOLUTIONARY GENOMICS

A postdoctoral position is available in the Casola Lab at Texas A&M University. We are mainly interested in studying the evolution of genome size and gene content in conifers and other gymnosperms using a blend of bioinformatics and wet lab approaches. One of our primary goals is to understand the evolutionary dynamics of transposable elements in conifers, with a particular emphasis on horizontal transfer events, TE-mediated gene regulation, and host silencing of TEs. We are also investigating the origin of conifer-specific genes by analyzing patterns and mechanisms of gene duplication. At the population level, we are interested in using next-gen data sets to identify gene duplication and gene loss events in loblolly pine, a conifer of major economic and ecological value. The postdoc will be expected to present and publish results of his/her research. More details on active projects in the lab are available online at http://agrilife.org/casolalab/ Candidates must hold a Ph.D. in computational biology, bioinformatics, evolutionary genomics, molecular evolution or a related field. Experience in comparative genome-wide analyses, next-gen sequencing data, and bioinformatics programming are preferred. Programming skills in perl, python, C or R 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: https://-greatjobs.tamu.edu/ NOV Number: 08096

Only electronic applications will be considered. Please send any questions about the position to Claudio Casola (ccasola@tamu.edu).

Texas A&M AgriLife is an Equal Opportunity/Affirmative Action/Veterans/Disability Employer

Claudio Casola, Ph.D. Assistant Professor Department of Ecosystem Science & Management 495 Horticulture Rd. College Station, TX 77843 Phone: (979) 845-8803 email: ccasola@tamu.edu http://agrilife.org/-casolalab/ ccasola@tamu.edu

TulaneU PlantBacteriaSymbioses

Postdoctoral position in Microbiology or Microbial Ecology

The Tulane / Xavier Center for Bioenvironmental Research (cbr.tulane.edu) at Tulane University invites applications for a postdoctoral position in Microbiology or Microbial Ecology. The CBR aims to recruit an outstanding researcher with a Ph.D. and prior postdoctoral experience. We are particularly seeking applicants with strong research and publication records.

We are seeking an applicant with expertise in plant-bacteria symbioses and/or remediation with bacteria.

The incumbent will work closely with the Director of the CBR, Dr. Michael Blum and Dr. Sunshine Van Bael from Tulane's Department of Ecology and Evolutionary Biology, to engage in independent and collaborative research exploring aspects plant-bacterial symbioses as they pertain to phytoremediation and coastal restoration in the Mississippi River Delta and elsewhere in the northern Gulf Coast. The incumbent will be expected to contribute to the following objectives (1) laboratory work screening bacteria for use in remediation efforts, (2) staining and microscopy of bacterial endophytes in planta, (3) use of next-generation sequencing and analyses to describe microbial communities in plants and soil (4) Training and mentoring of undergraduate and graduate students. The incumbent will be encouraged to pursue other research areas that complement these topics.

Preference will be given to candidates possessing in-depth topical knowledge in plant-bacterial symbioses and phytoremediation. The potential to obtain competitive extramural funding is also an important consideration. An initial appointment will be for one year, with continuation dependent upon performance and funding. Salary will be commensurate with experience and qualifications.

Please apply online - http://apply.interfolio.com/27548 - include a cover letter, curriculum vitae, statement of research interests, and the names and contact information of three professional references. Questions for Dr. Blum and Dr. Van Bael can be directed to cbr@tulane.edu.

Tulane University is an equal employment opportunity/affirmative action/persons with disabilities/veterans employer committed to excellence through diversity. Tulane will not discriminate against individuals with disabilities or veterans. All eligible candidates are encouraged to apply.

"Van Bael, Sunshine A" <svanbael@tulane.edu>

UAgder Norway Bioinformatics

Post-doctoral Research Fellow in Bioinformatics at the Faculty of Engineering and Science. Ref 108/14

The University of Agder (UiA) invites applications for a full-time fixed-term appointment as Post-doctoral Research Fellow in Bioinformatics at the Faculty of Engineering and Science, Department of Natural Sciences for a period of two years. The position will mainly be located in Kristiansand, Norway. However, the appointee may be required to stay for a period at the Institute of Marine Research, Fl©devigen (IMR). The preferred start date is 1 May 2015 (negotiable with the department).

The marine group at the Department of Natural Sciences includes 4 professors, 4 associate professors one Post-doc and currently three PhD fellows are associated. The post-doctoral fellow will also benefit from the Center for Coastal Research (CCR), recently established in cooperation with University of Oslo, Institute of Marine Research, GRID-Arendal, NIVA, Telemark University College (https://www.facebook.com/-marinecenternorway?ref=hl).

The postdoctoral-fellow will primarily work in an ongoing international project entitled Adaptation or plasticity as response to large scale translocations and harvesting over a climatic gradient in the marine ecosystem?± funded by the Research Council of Norway (RCN) under the Havkyst programme. This project aims at improving our understanding of adaptive process in marine fish in response to human and climatic stressors. During its development, large datasets will be generated by means of Next-Generation Sequencing (NGS) approaches, focusing the analysis on Rads and transcriptomics data. The candidate will also have the opportunity to get involved in other ongoing projects at CCR as well as to develop own initiatives.

The post-doctoral fellow will be expected to take part in a binding cooperation with the research group and contribute to an active research environment that will give opportunities for personal and professional development. The appointee must have the ability to work in a goal-oriented, organised, focused, and independent manner. During the assessment process emphasis will be placed on the applicants PhD work, examination results as well as any other previous research and development work. Relevant practical experience, personal suitability and good teamwork skills will also be emphasised.

The successful candidate should hold a PhD in bioinformatics, computer science or a closely related field. Applicants with a PhD in marine genomics and strong computational skills or a PhD in medical science and experience in NGS data analysis are also welcome. The qualified candidate should have experience with the major techniques in Bioinformatics. In addition, he/she will be familiar with Linux/Unix systems as well as programming in script-based language, e.g. Python and/or Perl. Teaching experience from college or university level is an advantage as some teaching tasks may be

expected.

Information about the appointment criteria for a Post-doctoral Research Fellow can be found in the Regulations Concerning Terms and Conditions of Employment for the Post of Post-doctoral Research Fellow, Research Fellow, Research Assistant and Resident, available for downloadhere < http://www.uia.no/en/vacancies2 >.

The Norwegian public service is committed to reflect the diversity of society and the personnel policy of the University of Agder aims to achieve a balanced workforce. All qualified persons are therefore encouraged to apply for the position irrespective of cultural background, gender, age or disability.

Short-listed applicants will be invited for interviews and with permission from the applicant the University will also conduct a reference check before appointment.

Appointment is made by the University of Agders Appointments Committee for Teaching and Research Positions. The successful applicant will have rights and obligations in accordance with the current regulations for the public service.

The position is remunerated according to the State salary scale, salary plan 17.510, code 1352, scale 24, salary grade 57 -72 (NOK 482.800-639.500). A 2 % compulsory pension contribution to the Norwegian Public Service Pension Fund is deducted from the pay according to current statutory provisions. For information on salary grades, see here.

Applicants are asked to submit their application and CV online. Please use the link Send application±.

The following documentation should be submitted online.

* Diplomas, transcripts and letters of reference * Complete list of scientific publications * A description of research interests, background for the problem that the applicant wishes to study and its relevance for the above mentioned project

In addition, the following documents in three hard copies should be

— / —

UAlberta EvolutionContractileVacuole

A 3 year postdoctoral position is available in the Dacks Lab at the University of Alberta, examining the evolution of the contractile vacuole. The contractile vacuole (CV) is an osmoregulatory organelle found in ecologically important and diverse freshwater and soil-dwelling organisms (eg. ciliates, dictyostelids). Nonetheless, CV cell biology is only now being assessed using modern methods. As the name implies, the CV is presumed to be a vacuole/lysosome homologue. This project will use molecular evolutionary and transcriptomic analysis to examine the evolution and function of the CV, specifically whether it is derived from a single homologous ancestor or derived independently from endolysosomal organelles.

The preferred candidate must have a doctorate degree (and be within 5 years of this degree) at the time of taking up the position, should have a background in microbial eukaryotic cell biology or evolution and have published in these areas. Technical expertise in cell biology of microbial eukaryotes, ideally Dictyostelium or a ciliate would be a significant asset. Salary will be competitive with UAlberta standards and includes benefits (~$37 000).

Interested applicants should email a cover letter, curriculum vitae and contact information for 2 potential referees to dacks@ualberta.ca. Application close date is December 15th, 2014. The position can begin as early as January 1st, 2015.

For information about

The Dacks Lab: (http://www.cellbiology.ualberta.ca/-en/FacultyMembers/JoelDacks.aspx)

The Department of Cell Biology: http://-www.cellbiology.ualberta.ca/ The University of Alberta: http://ualberta.ca/ Edmonton: http:/-/exploreedmonton.com/ Joel B. Dacks Canada Research Chair in Evolutionary Cell Biology Ingenuity New Faculty Associate Professor Department of Cell Biology University of Alberta, 5-31 Medical Science Building, Edmonton, Alberta, Canada Skype name:Jdacks T6G 2H7 Phone (office)=1-780-248-1493

Joel Dacks <dacks@ualberta.ca>

UArizona PopGeneticsTheory

_Postdoc position in eco-evolutionary theory _

A postdoc position is available to work with PI Joanna Masel (http://eebweb.arizona.edu/faculty/masel) at the University of Arizona in Tucson. A popular tourist destination surrounded on all four sides by mountainous national and state parks, Tucson is a vibrant city of nearly a million people with an attractive climate. The EEB department in Tucson was ranked in the top 10 by US News & World Report.

The postdoc will study evolutionary rescue in the presence of clonal interference, via a model of asexual population genetics (based on Desai & Fisher 2007). This model will be modified so that genotypes specify absolute fitness in a deteriorating environment, rather than relative fitness as is the norm in population genetics. The project is part of a broader effort to integrate the ecological density-dependence terms r and K with the classical population genetics fitness term of w, as part of an eco-evo theoretical synthesis: see http://arxiv.org/-abs/1407.1024 for the conceptual basis. We are just beginning an experimental evolution collaboration, and side projects applying the model to experimental evolution (and to other ecological and evolutionary theory) are encouraged. A strong quantitative background together with computational and/or modeling experience is required. A background in evolutionary and/or ecological theory is strongly preferred.

Contact Joanna Masel at masel@u.arizona.edu for more information and to apply. The position is available immediately and renewable over multiple years.

masel@email.arizona.edu

UCalifornia SantaBarbara SpatialMarineBiodiversity

*Quantitative Ecology Postdoctoral Scholar Position: *The Marine Science Institute at the University of California Santa Barbara seeks a quantitative ecologist for a post-doctoral research position with a focus on biodiversity. The candidate will work closely with UCSB PIs on estimating, monitoring, and modeling biodiversity across multiple spatial scales. Key research questions will include: 1) How can data from diverse sources can be combined to estimate biodiversity? 2) How does uncertainty in estimates of biodiversity depend on the types of sampling chosen? 3) How can local observations be combined with physical covariates and remote sensing data to obtain regional inferences about biodiversity?

The position will be part of the Marine Biodiversity Observation Network project, funded by NASA, the Bureau of Ocean Energy Management and the National Oceanic and Atmospheric Administration (NOAA). The MBON is an interdisciplinary project involving scientists from UCSB, the United States Geological Survey, NOAA, the National Marine Fisheries Service and UC San Diegos Scripps Institution of Oceanography. This five-year project aims to track the diversity of a broad range of marine organisms in the Santa Barbara Channel. The project benefits from extensive existing data about the biological and physical conditions in the region which will be integrated over large spatial scales using geostatistical models and remote sensing. This integration will be supported by new genetic and imaging techniques for observing marine biodiversity, also being developed by the project. In addition, mathematical models will be developed to examine the value of information on biodiversity in making management decisions, and to explore optimal allocation of resources across different methods of sampling.

The candidate should have training in the fields of quantitative ecology and expertise in spatial statistics or geostatistics (a PhD in quantitative ecology, statistics or related field is required) and strong skills in advanced statistical modeling, computational analysis, and scientific programming. An ideal candidate will have experience with quantification of multivariate spatial heterogeneity, change of support, spatial regression models, geostatistical prediction and simulation, and spatial sampling design. The ability to handle large amounts of data in a GIS environment is also an important qualification. The candidate will be expected to lead a portion of the research, in collaboration with the MBON team, including UCSB PIs Phaedon Kyriakidis, Bob Miller, Andrew Rassweiler and David Siegel. Excellent verbal and written communication skills, and proven capacity to publish in peer-reviewed journals are requirements.

Initial appointment will be for one year, with anticipated funding for three or more years, conditional upon performance, and UCSB offers competitive salary and benefits packages. Screening of applications will begin December 1, 2014 with an anticipated start in winter or

spring of 2015, but the position will be open until filled. For further information, please contact Dr. Phaedon Kyriakidis at phaedon@geog.ucsb.edu or Dr. Andrew Rassweiler at andrew.rassweiler@lifesci.ucsb.edu. Send applications including cover letter, Curriculum Vitae, and contact information for three references to:

https://recruit.ap.ucsb.edu/apply/JPF00414 The department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service. The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or any other characteristic protected by law including protected Veterans and individuals with disabilities.

Robert J. Miller Marine Science Institute University of California Santa Barbara Santa Barbara CA 93109-6150

rjmiller1@gmail.com

UChicago ComputationalGenomics

Postdoctoral Fellow in Statistical and Computational Genomics at University of Chicago

Applications are invited for postdoctoral researchers to join Dr. Xin He's group at Department of Human Genetics of University of Chicago. The research in our lab focuses on developing and employing computational/statistical tools to identify genes and regulatory elements involved in complex diseases and to understand the mechanisms of their functions. We take highly integrative approaches combining whole exome/genome sequencing data, expression and epigenomic data, and gene networks. For more information of our research, please visit: http://xinhelab.org . Some potential projects include: (1) Statistical methods for mapping disease genes from whole genome sequencing data, incorporating biological annotations of both coding and non-coding sequences. (2) Identification of transcriptional regulatory networks underlying human diseases. (3) Analysis and utilization of systems genetic data, such as expression or DNA methylation QTL, in the context of studying diseases.

The applicant(s) is expected to hold a doctoral degree in a related field, such as computational biology/bioinformatics, population and statistical genetics, (bio)statistics or computer science. Candidates with a degree in biological sciences are also encouraged to apply if they have demonstrated experience in computational or statistical work. The start date for this position is flexible and the salary will be competitive.

Please send your CV and a list of three references to xinhe@uchicago.edu. Candidates are welcome to include one or two of their best published or preprint manuscript(s).

xinhe2@gmail.com

UCLA LaKretzCenter CaliforniaConservationScience

The UCLA La Kretz Center for California Conservation Science (http://www.environment.ucla.edu/-lakretz/) invites applications for its Postdoctoral Fellowship in California Conservation Science. Consistent with our mission, we seek a postdoctoral scholar who simultaneously conducts innovative research and interfaces with the conservation and management agencies that direct and lead California conservation. Our emphasis is on biological conservation, and the successful candidate could work in any discipline that provides the scientific underpinnings for the preservation, protection, management, or restoration of at-risk species, environments, or ecological communities. We will consider candidates who have recently completed their PhD, or will have completed it by the start date for this position. We envision hiring one Fellow each year, building a team of conservation scientists with a passion for California and its biodiversity.

The La Kretz Fellowship is for two years, subject to review after the first year. Our expected start date is late summer, 2015. The successful applicant will be expected to conduct research that bridges the interests of at least one UCLA faculty member who is also a La Kretz affiliate (http://www.environment.ucla.edu/-lakretz/people/affiliates.asp) with priority science concerns of resource management agencies in California. Our primary partners are currently the National Park Service, CA State Parks, and the Santa Monica Mountains Recreation and Conservation Agency, although partnerships with other federal, state and local resource management groups and NGOs, including Natural History Museums, are also appropriate. We strongly encourage applicants to contact their faculty mentor to develop a research and agency collaboration plan,

and to describe that plan in their application. We also anticipate that the Fellow will also work with Brad Shaffer, Director of the La Kretz Cente r, to help develop collaborative research projects that further the mission of the Center. The position has an annual salary of approximately $40,000 plus full benefits, and the Fellow will have the option to reside at the newly renovated La Kretz Field Station (http:/-/www.environment.ucla.edu/lakretz/fieldstation/), located in the Santa Monica Mountains about 25 miles from campus.

Interested candidates should submit a cover letter, CV, short (1-2 page) description of research and management accomplishments, short (2 page) description of proposed research including potential faculty and agency mentor(s), and copies of two publications, all as a single PDF file, to Mario Colon, Administrative Assistant, at mario.colon@ucla.edu. You should also have three letters of recommendation, including one from your Ph.D. advisor, sent under separate emails. The deadline for completed applications is 20 January 2015. E-mail questions to Brad Shaffer (Director of the La Kretz Center) to brad.shaffer@ucla.edu.

The University of California is an affirmative action/equal opportunity employer with a strong institutional commitment to the development of a climate that supports equality of opportunity and respect for differences.

evanmelstad@ucla.edu

UFlorida Lepidoptera Collections

The Kawahara Lab at the University of Florida, Florida Museum of Natural History (FLMNH) is seeking a postdoctoral fellow to develop a project using museum collection data to study bat-moth interactions. The proposed project will involve the candidate applying for the NSF Postdoctoral Research Fellowship in Biology (PRFB), Track 2. The Kawahara Lab is currently conducting a large scale, NSF-funded study to understand how bats and moths have engaged in an evolutionary arms race for over 50 million years. Moths have evolved many different defensive strategies, including ultrasonic ears, stridulating genitalia, wing morphology, and additional anti-predatory behaviors. The ideal candidate will develop an innovative, collaborative research program (funded by an NSF fellowship) that complements ongoing work in the Kawahara Lab. The ideal research program would capitalize on the strengths of the FLMNH Lepidoptera collection (one of the largest Lepidoptera collections in the world) a nd the phylogenomics expertise in the Kawahara Lab. The candidate should be a US citizen.

The ideal candidate will have experience with museum collections, geometric morphometrics, and have an interest in using museum specimen data to link behavioral, morphological, and phylogenetic data.

The Kawahara Lab includes 3 postdocs, 5 graduate students, 2 technicians, and numerous undergraduate and high school students. The FLMNH is located on the University of Florida campus in Gainesville, Florida. It is home to iDigBio and the FLMNH collections includes over 40 million specimens, including 5-10 million Lepidoptera specimens. For further information, contact Akito Kawahara at: kawahara@flmnh.ufl.edu

Information on the PRFB can be found at: http://-www.nsf.gov/funding/pgm_summ.jsp?pims_id=503622
kawahara@flmnh.ufl.edu

UGeorgia DiseaseEvolution

Postdoctoral opportunity: Forecasting emerging and re-emerging infectious diseases

Applications are being accepted for three postdoctoral associates to join a multi-institutional study (University of Georgia, University of Michigan, Penn State University) of the dynamics of emerging and re-emerging childhood infections (http://daphnia.ecology.uga.edu/-midas).

The overarching goal of this project is to identify statistical patterns that may serve as early warning signals of emergence. Sub-projects include developing new epidemiological theory, case studies, statistical methods and algorithms, and software. Interested applicants should consult the website for more details.

Qualified applicants will have a PhD in ecology, epidemiology, biostatistics, statistical physics, computational statistics or related quantitative discipline.

Successful applicants may be based either at the University of Georgia with Drs John Drake and Andrew Park, or the University of Michigan with Dr Pej Rohani. To apply, send CV and covering letter to *jdrake@uga.edu* <jdrake@uga.edu>. The letter should include a description of research interests, con-

tact information for three references, and any preferences for location of employment. Also describe any relevant skills and prior research experiences. Review of applications will begin on 1 December 2014 and continue until all positions are filled.

– John M. Drake, Ph.D.

Associate Professor, Odum School of Ecology < http://www.ecology.uga.edu/ >, University of Georgia < http://www.uga.edu/ > Director, Population Biology of Infectious Diseases REU Site < http://-drakeresearchlab.wordpress.com/ >

phone: 706.583.5539 fax: 706.542.4819 email: jdrake@uga.edu skype: john.drake.uga lab: http:/-/daphnia.ecology.uga.edu/drakelab John Drake <john@drakeresearchlab.com>

UIdaho ConservationGenomics

Conservation Genetics/Genomics Postdoc

Lisette Waits, University of Idaho, Moscow ID

A one-yearpostdoctoral position, with the possibility of extension, is available to join our interdisciplinary conservation genetics research group (http://-www.uidaho.edu/cnr/fishwild/lisettewaits). Our group focuses on using molecular methods to study the ecology, evolution and conservation status of wildlife populations. We conduct research on genetic diversity and gene flow, landscape genetics, mating system and behavior, predator-prey interactions, hybridization, environmental DNA monitoring, and noninvasive genetic monitoring of population demographics of wildlife. This active research group includes nine graduate students, 1 research scientist, 2 laboratory technicians and multiple undergraduate students.

The successful candidate will (1) conduct research and contract work in conservation genetics; (2) assist in training and mentoring undergraduate and graduate students; and (3) assist in teaching a graduate level conservation genetics course with opportunity to develop and implement an online course. The successful candidate will be based in the Department of Fish and Wildlife Sciences and will be a member of the Laboratory of Ecological, Evolutionary and Conservation Genetics (http://www.uidaho.edu/cnr/-research-outreach/facilities/leecg) at the University of Idaho. We have state-of-the art facilities for genetic and spatial analyses and collaborate extensively with faculty and students in the Institute for Bioinformatics and Evolutionary Studies ' IBEST (http://-www.ibest.uidaho.edu).

Application Deadline: Dec 5, 2014

Please Apply at: https://uidaho.peopleadmin.com/-postings/6847

Lisette Waits, PhD Professor and Head Dept Fish and Wildlife Sciences University of Idaho 875 Perimeter Drive MS 1136 Moscow ID 83844-1136 Phone: (208) 885 7823 lwaits@uidaho.edu http:/-/www.uidaho.edu/cnr/fishwild/lisettewaits "Waits, Lisette (lwaits@uidaho.edu)" <lwaits@uidaho.edu>

ULaval PDF PhD LobsterPopulationGenomics

1 Ph.D. and 1 Postdoctorate position in lobster population genomics

I am currently searching to fill 2 positions 1 for a Ph.D. candidate and 1 for a postdoctorate candidate for conducting a research project on the population genomics in the American lobster. The recruited candidates would join the Canadian Research Chair in Genomics and Conservation of Aquatic Resources (Quebec City, Canada) directed by Louis Bernatchez, as well as a multidisciplinary team combining expertise in genomics, ecology and modelling. The main objective of this project is to generate new knowledge that will contribute to maintaining the long-term sustainability of lobster stocks (Homarus americanus), as well as the major fishery it supports throughout Eastern Canada. This study aims at providing by means of the most recent genomics tools combined with ecological data and modelling, concrete results that can be applied towards new management and conservation policies for this species. More specifically, the candidates will be involved in the following research objectives: i) Document neutral and potentially adaptive genomic variation at large scale in order to test the concordance between the natural population genetic structure and administrative regions currently used to manage the species; ii) Investigate the mechanisms responsible for genetic differentiation at small spatial scales by comparing the genetic structure of different life stages of the species.

This will involve the use of Genotype-By-Sequencing (GBS) methods, as well as bioinformatic treatment and

statistical analysis of large data base. The ideal candidates should thus possess strong skills in any of those applications, as well as a solid background in evolutionary and marine biology, and interest for conservation genomics.

To apply, please send a cover letter describing your research interests, a complete CV and names of three references by e-mail to Louis.Bernatchez@bio.ulaval.ca

To know more about; Quebec City: http://-/www.quebecregion.com/e/ Laval University: http://www2.ulaval.ca/en/home.html Our laboratory : http://www.bio.ulaval.ca/louisbernatchez/-presentation.htm Louis Bernatchez, MSRC, FRSC

Chaire de recherche du Canada en Génomique et Conservation des Ressources Aquatiques Département de biologie, Institut de Biologie Intégrative et des Systèmes (IBIS) Pavillon Charles-Eugène-Marchand 1030, Avenue de la Médecine Local 1145 Université Laval Québec (Québec) G1V 0A6 Canada

Tél.: 1 418 656-3402 Téléc.: 1 418 656-7176 Courriel:Louis.Bernatchez@bio.ulaval.ca Web: http://-www.bio.ulaval.ca/louisbernatchez/ Louis Bernatchez <Louis.Bernatchez@bio.ulaval.ca>

ULondon Pollinator PopulationGenomicsRNAseq

We are recruiting an evolutionary-minded person with strong population genomics and bioinformatics skills for a 3 year postdoc position analysing large pollinator genomics and transcriptomics datasets to examine pollinator health and impact of pesticides using novel molecular approaches. This is a NERC-funded position in collaboration with Richard Gill, Nigel Raine and Lars Chittka.

Full ad is on QMUL's HR website:

http://www.jobs.qmul.ac.uk/5213 Apply by November 15th.

Potential applicants are encouraged to submit an informal application (CV and covering letter outlining your suitability for the position) to Yannick Wurm (y.wurm@qmul.ac.uk) before the formal deadline.

Yannick Wurm - http://yannick.poulet.org Ants, Genomes & Evolution â y.wurm@qmul.ac.uk â skype:yannickwurm â +44 207 882 3049 5.03A Fogg â School of Biological & Chemical Sciences â Queen Mary, University of London â Mile End Road â E1 4NS London â UK

Yannick Wurm <y.wurm@qmul.ac.uk>

ULouvain DuplicateEvolution

Postdoctoral Research Associate: Directed Evolution of an Oligomeric Enzyme after Gene Duplication

University of Louvain, Life Sciences Institute, Louvain-la-Neuve, Belgium

A postdoctoral research position is opened for a research in molecular evolution of oligomeric enzymes.

It is generally accepted that oligomerisation is an advantage for complexifying the properties of a protein such as affording allosterism but the impact of oligomerisation on the evolutionary mechanisms of proteins is poorly documented. In this fundamental project, we propose to experimentally tackle two questions. What is the advantage of oligomerisation for the evolvability of a protein? Can we take advantage of the combinatorial nature of oligomeric proteins for rapidly evolving them in the lab? By simulating an evolutionary scenario starting by the duplication of a gene encoding a model homomeric enzyme in E. coli, we will study the potential of the system to evolve towards new functions (specificity change, allostery) by introducing mutations in both copies of the gene and we will evaluate how paralogous heteromerisation between the encoded proteins can promote enzyme evolution.

The position is for 18 monthes with a possible renewal.

"Patrice Soumillion" <patrice.soumillion@uclouvain.be>

The candidate is required to possess the following:

. Ph.D. in Biochemistry, Molecular Biology, Microbiology or related field and any level of post-graduate ndustry and/or academic experience;

Preferred Skills/Experience:

.Experiences working in molecular biology and enzymology;

.Familiar with classical bioinformatic tools (alignments, database searching, structure analysis, docking)

Patrice Soumillion <patrice.soumillion@uclouvain.be>

UMaryland EvolutionaryGenomics Mutation

Post Doctoral Position Available in the lab of Charlie Fenster, University of Maryland

Collaborators: Stephen Wright (University of Toronto), Matt Rutter (College of Charleston), Detlef Weigel (Max Planck Institute, Tübingen).

The open postdoc position is an opportunity for the basic discovery of mutations. Specifically, we seek a postdoc that will use computational approaches to quantify the mutational origins of genetic variation at the sequence level to further our understanding of the role of mutation and selection as determinants of patterns of genetic variation at the within and among species levels. The postdoc will also have the opportunity to help set-up the field experiments to study de novo mutations in the Swedish and French sites. The Weigel lab will identify the mutations and the postdoc will analyze the results. Funding is for 3 years. Preferred starting date is April 1, 2015. Salary is in the low $ 40 K, but also includes generous benefits.

Briefly, the role of mutation to evolutionary process depends on the rate and type of mutation and the effects that the new mutations have on fitness. Yet how the effects of naturally occurring mutations both enable and shape the evolution of diversity remains largely unexplored. Quantifying and analyzing these parameters requires broad, integrative approaches. Recent conceptual and experimental advances now allow a more comprehensive treatment of the effects of mutations on evolutionary diversification. In particular, whole-genome sequencing is now so inexpensive that it is possible to directly confirm and define the action of mutation.

This postdoctoral position will be headquartered at the University of Maryland, which is on the subway line of the culturally vibrant Washington DC metropolitan area. In addition to the interactions available in a top 100 world-wide ranking of research universities, there are ample opportunities to exchange ideas with colleagues from NIH, USDA and the Smithsonian Institute. The postdoc is expected to be a key component in the integration of the various labs. Consequently there are incredible opportunities to collaborate with one of the world's most productive plant molecular labs (Weigel Lab including H. Burbano), a leader in the intersection of genomics and evolution (Wright lab), and additional leaders in theoretical and evolutionary genetics and plant population ecology (J. Ågren Uppsala University, T. Lenormand CNRS Montpellier, and E. Imbert University of Montpellier). We also offer the opportunity to interact with one of the leading investigators at the forefront of integrating outreach with basic research, a.k.a., broader impacts (Rutter lab). The Fenster lab is diverse with interests and students spanning from plant floral evolution to evolutionary genetics.

OUR SPECIFIC AIMS 1. To completely determine mutations in 100 Arabidopsis thaliana mutation accumulation (MA) lines that have already been associated with fitness measures in the field 2. To completely determine mutations in 320 lines from new MA lines that originate from 8 novel genetic backgrounds derived from native populations and whose fitness will be measured in the original founder field sites as part of an ongoing NSF funded project 3. To completely determine mutations in 50 wild-collected plants from North American populations and additional herbarium specimens to track a natural analog of a MA experiment 4. To use the data from Aims 1-3 to quantify the rates of different classes of mutation, of genetic background effects on mutation, on the relationship between mutations and fitness, and on the contribution of mutation to differentiation in nature 5. To develop a web-based educational tool for undergraduates that will explore recent advances in the study of mutation This postdoc will begin with an available data set reflecting aim 1 above. Thus we believe there is the opportunity for rapid publications spanning the fields of genomics, bioinformatics, evolutionary modeling and with sequence and fitness data, the chance to discover new patterns with important evolutionary consequences.

If interested, please contact C. Fenster: Cfenster@umd.edu & cc Matt Rutter: RutterM@cofc.edu Please include in one attached document a brief statement of interest, relevant skills, publication list and the names of at least two colleagues who can provide letters of reference.

References: Ossowski, S , K. Schneeberger, J.L. Lucas-Lledo, N. Warthmann, R.M. Clark, R.G. Clark, D. Weigel, and M. Lynch. 2010. The Rate and Molecular Spectrum of Spontaneous Mutations in Arabidopsis thaliana. Science 327: 92-94

Rutter, M. T., F. H. Shaw and C. B. Fenster. 2010. Spontaneous mutation parameters for Arabidopsis thaliana measured in the wild. Evolution, 64: 1825-1835.

Rutter, M., A. Roles, J. Conner, R. Shaw, F. Shaw, K. Schneeberger, S. Ossowski, D. Weigel and C. B. Fen-

ster. 2012. Brief Communication:

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UMassachusetts Amherst EvolutionaryMorphology

POST-DOCTORAL POSITION in Evolutionary Morphology, University of Massachusetts at Amherst

The Dumont Lab at the University of Massachusetts at Amherst (UMass Amherst) seeks a Postdoctoral Research Associate to work collaboratively on projects that focus on the form, function and evolution of the skulls and jaw of vertebrates. This is a fully benefited, full-time Postdoctoral Research Associate position. Initial appointment for one year; reappointment beyond first year is contingent upon availability of funding and job performance. Salary is subject to bargaining unit contract. The postdoctoral associates primary responsibilities will be to contribute to a Collaborative NSF Dimensions of Biodiversity grant that focuses the evolution of sensory systems in bats (http://-www.nsf.gov/awardsearch/showAward?AWD_ID=-1442278&HistoricalAwards=false), by collecting and analyzing data and contributing to co-authored manuscripts for peer-reviewed publication and to mentor undergraduate and graduate students. Independent projects related the labs mission and participation in mentored undergraduate teaching experiences are encouraged. For more information on the Dumont Lab visit http://www.bio.umass.edu/biology/dumontand www.biomesh.org.

*Minimum requirements*include a completed PhD in a related field (e.g., evolutionary biology, zoology, paleontology). Ability to make regular day trips to Cambridge, MA to use ct-scanning facilities.

*Preferred requirements*include training in some combination of comparative anatomy, comparative methods, geometric morphometrics staining specimens for ct-scanning, 3D visualization of ct-scans, manipulation of 3D images, and mentoring or teaching experience.

Postdoctoral Research Associates at the University of Massachusetts are unionized and receive standard salary and benefits, depending on experience.

Please apply online by submitting a cover letter, CV, summary of research interests, summary of mentoring/teaching experiences, and the contact details of three references to:

URLhttp://umass.interviewexchange.com/-jobofferdetails.jsp?JOBID=54381 For information email: bdumont@bio.umass.edu.

Review of applications will begin November 17th.Applications received by November 17th will be given priority consideration.

/The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members. /

Lisa Barry Biology Department Morrill Science Center South, Room 348 611 North Pleasant Street University of Massachusetts Amherst, MA 01003

Phone: 413-545-2602 Fax: 413-545-3243

Lisa Barry <lisak@bio.umass.edu>

UMontpellier HumanEvolution

The Human Evolutionary Biology Lab at the Institute of Evolutionary Sciences (University of Montpellier, France) is opening a post-doc position in January 2015. The postdoc position is available for 1 year (with a possible extension for an additional year). The objective is to *model the evolution of several life history traits using simulated robots driven by artificial neural networks, in order to study the emergence of interactions and antagonistic effects*.

We are looking for a highly motivated and qualified individual with a good background in evolutionary biology and advanced computational skills, and with strong oral and written communication abilities.

The Institute of Evolutionary Sciences offers a very international and stimulating research environment, particularly in evolutionary biology. Montpellier is ideally located in southern France, and provides rich cultural and outdoor activities.

The *net salary* would be around 24,000 euro per year, and this includes many french social advantages such as health care. The position is expected to start early in 2015.

Please send, before December 1st 2014, an application letter stating your motivation for the position, a CV, and the contact information of two references to Michel Raymond (michel.raymond@univ-montp2.fr) and Jean-Baptiste André (jeanbaptisteandre@gmail.com).

See also:

Human Evolutionary Biology Lab: http://-www.evolutionhumaine.fr http://www.isem.univ-montp2.fr/recherche/teams/human-evolutionary-biology/presentation/?lang=en

Institute of Evolutionary Sciences http://-www.isem.univ-montp2.fr michel.raymond@univ-montp2.fr

UppsalaU PlantEcoEvolutionaryDynamics

Position for one Postdoc in Plant Eco-Evolutionary Dynamics at Uppsala University, Sweden

We seek a Postdoc to join a project examining how adaptive genetic variation and demographic processes influence evolutionary response and population dynamics in a changing environment. The research uses the perennial herb Primula farinosa as a model system, and focuses on the importance of variation in floral traits and life history in relation to differences in abiotic conditions, the intensity of biotic interactions, and climate. The project will combine demographic studies, field experiments, and population modeling, to address three main questions: (1) How is population viability influenced by local environmental conditions, grazing intensity and climatic variation?, (2) How does variation in abiotic environmental factors and grazing influence the genetic structure of plant populations?, and (3) How does the presence of genetic variation in traits of adaptive significance and evolutionary responses influence population viability in a changing environment? Specific subprojects can be tailored to the skills and interests of the successful candidate.

The project is a collaboration between the labs of prof Jon Ågren at the Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University, and prof Johan Ehrlén at the Department of Ecology, Environment and Plant Sciences, Stockholm University. We are currently recruiting one postdoc to be placed at Uppsala University, and one PhD student to be placed at Stockholm University.

We are looking for a candidate with a keen interest in population biology and eco-evolutionary dynamics. Previous experience of modelling, and field or experimental work is desirable. Proficiency in English is a requirement.

The successful postdoc candidate should have a PhD completed within 3 years of the application deadline (reasons such as prolonged periods of illness and parental leave can motivate a longer period). The postdoc position lasts for two years.

Deadline for application is 27 November 2014

Please find the announcement, with all information about how to apply, at:

http://www.uu.se/en/join-us/jobs-detail-page/-?positionId=46084 For informal enquiries, please contact Jon Ågren, jon.agren@ebc.uu.se, +46-18-471 2860, or Johan Ehrlén johan.ehrlen@su.se, +46-8-16 12 02.

Jon Ågren Plant Ecology and Evolution Department of Ecology and Genetics, EBC Uppsala University Norbyvägen 18 D SE-752 36 Uppsala Sweden

Jon Ågren <jon.agren@ebc.uu.se>

URochester EvolutionaryGenomics

A postdoctoral position in evolutionary genomics will be available in the Larracuente lab at the University of Rochester Department of Biology beginning as early as January 2015. The lab uses molecular, genetic and genomic techniques to study intragenomic conflict and genome evolution (http://-blogs.rochester.edu/selfishDNA/). The Larracuente lab is part of the program in Ecology and Evolutionary Biology (http://blogs.rochester.edu/EEB/)Xa vibrant group with strengths in evolutionary genetics and genomics.

Requirements: The successful applicant will have a PhD in Bioinformatics, Genetics, or a related field and a strong publication record. Preference will be given to individuals that are proficient in at least one programming language and experienced in analyzing next generation sequence data.

Interested applicants should send a CV, a brief description of research accomplishments and interests, and contact information for 3 professional references to alarracu@bio.rochester.edu. Review of applications will be-

gin immediately and continue until the position is filled.

The University of Rochester is an Equal Opportunity Employer.

Amanda M. Larracuente, Ph.D. University of Rochester, Department of Biology office: (585) 273-1693 email: alarracu@bio.rochester.edu webpage: http://blogs.rochester.edu/selfishDNA/ "Larracuente, Amanda" <alarracu@UR.Rochester.edu>

UToronto EcologyEvolutionaryBiology

The Department of Ecology and Evolutionary Biology at the University of Toronto invites applications for Departmental Postdoctoral Fellowships in the areas of Ecology and Evolutionary Biology, broadly defined. The position may continue for two years, subject to review after one year, and can begin as early as July 1, 2015. The salary starts at $40,000 Canadian per year, with research expenses covered by the Post-Doctoral Advisor. Opportunities for teaching in an upper level course may be available, if the candidate wishes to teach.

The Fellow will be a fully participating member in the Department. Candidates must identify and communicate with a potential advisor (or advisors) in advance of the application process. All full-time faculty members at the St. George (downtown) campus of the University of Toronto are eligible to serve as advisors See the list of potential supervisors here: http://www.eeb.utoronto.ca/about-us/-employment/postdocs/2014eebpostdoc.htm To apply, applicants should first contact and obtain the agreement of a faculty advisor (or co-advisors). Afterwards, applicants should submit a cover letter clearly indicating the proposed faculty advisor(s) and the date that they will be available to begin the position, a curriculum vitae that includes the names and e-mail addresses of two potential referees, and a short (1-3 pages) description of past research accomplishments and future research plans; all of this information should be provided in a single document in the order described here. Copies of two publications should also be provided. All application materials must be submitted as PDF's in a single email to: Elizabeth Rentzelos chair-sec.eeb@utoronto.ca

Applications are due Dec. 1, 2014.

The University of Toronto is a leading academic institution in Canada with over 60 faculty members specializing in ecology and evolution. Strong links exist between the Department of Ecology and Evolutionary Biology and the Royal Ontario Museum, the Centre for Global Change, the School of the Environment, and the Faculty of Forestry. The University owns a nearby field station dedicated to ecological research (the Koffler Scientific Reserve, www.ksr.utoronto.ca). The department also has a partnership with the Ontario Ministry of Natural Resources that helps provide access to infrastructure, including lab facilities in Algonquin Provincial Park (www.harkness.ca), funding, and long-term data sets. Genomic analyses are supported by the Centre for the Analysis of Genome Evolution and Function (www.cagef.utoronto.ca).

helen.rodd@utoronto.ca

UWisconsin Madison EvolutionaryGenomicsOfYeasts

Dear Colleagues,

I am seeking a highly motivated postdoctoral researcher with an exceptional background in bioinformatics, functional genomics, or evolutionary genomics. Experience analyzing Illumina sequence data, computer programming proficiency, and training in ecological or evolutionary genetics are highly desirable.

We recently received generous funding for yeast evolutionary genomics research from the National Science Foundations Dimensions of Biodiversity Program (http://www.nsf.gov/news/news_summ.jsp?cntn_id=-132506) and the Pew Charitable Trusts (http:/-/www.pewtrusts.org/en/about/news-room/press-releases/2014/06/24/pew-grants-22-young-scientists-support-for-biomedical-research).

With Antonis Rokas (Vanderbilt) and Cletus P. Kurtzman (USDA), the Y1000+ Project (http://-www.nsf.gov/awardsearch/showAward?AWD_ID=-1442148&HistoricalAwards=false) seeks to sequence and analyze the to complete genomes of all ~1,000 known species of Saccharomycotina yeasts and determine the genetic basis of their metabolic, ecological, and functional diversification. Yeasts are genetically more diverse than vertebrates and have remarkable metabolic dexterity, but most remain minimally characterized. They compete vigorously for nutrients in every continent and biome and can produce everything

from beer to oil. The history of yeasts is recorded in their genome sequences. Now is the time to read it and tell their story!

The Hittinger Lab has diverse funding for other basic and applied research from NSF, DOE, and USDA, but we are specifically expanding our basic research in ecological and evolutionary genomics.

The complete advertisement and application instructions can be found here: http://-/hittinger.genetics.wisc.edu/Research/Funding/-PostDocAd2014.html .The precise start date is flexible, but candidates should apply by November 30th to receive full consideration.

Sincerely,

Chris Todd Hittinger, Assistant Professor of Genetics Genome Center of Wisconsin J. F. Crow Institute for the Study of Evolution University of Wisconsin-Madison 425-G Henry Mall, 2434 Genetics/Biotechnology Center Madison, WI 53706-1580 cthittinger@wisc.edu, (608) 890-2586 http://hittinger.genetics.wisc.edu Chris Hittinger <cthittinger@wisc.edu>

UZurich EvolutionaryBiology

University of Zürich – Switzerland – URPP "Evolution in Action"

Academic Fellow Position (4 years)

About the URPP Evolution in Action The University Research Priority Program (URPP) "Evolution in Action: From Genomes to Ecosystems" invites applications for an Academic Fellow position. Evolutionary biology is a core area of biology and understanding the underlying mechanisms is of crucial importance for both basic and applied aspects of biology and medicine. Beyond the biological and medical fields, evolutionary concepts are an important theme in the social and economic sciences. The URPP Evolution in Action is set in this wide area of research (see http://-www.evolution.uzh.ch/index.html). It brings together multiple research groups of the Faculty of Science, the Faculty of Medicine, and the Faculty of Arts, and plays an important integrative role for diverse disciplines at the UZH.

Tasks This is an opportunity for young scientists to pursue a period of independent research before taking a faculty position. The successful candidate will direct his/her own research under the mentorship of a senior faculty member. A central aspect of the URPP Evolution in Action is the use of next generation sequencing data to address important evolutionary questions. The research topic of the Academic Fellow must be linked to the research theme of the URPP Evolution in Action, and preferably include an integrative/interdisciplinary approach. The position in the midst of the diverse groups of the URPP Evolution in Action offers the unique opportunity to network and collaborate with both senior and junior scientists in a diverse range of disciplines.

Requirements We are seeking outstanding young scientists who have recently received their Ph.D. degree or have completed a first postdoctoral position (application is possible up to 4 years after obtaining the Ph.D. degree). Applicants should have a strong and demonstrated background in the research area they propose to pursue as Academic Fellow. This position requires strong communication skills and the ability to interact with the diverse areas of expertise within the URPP Evolution in Action. The working language of the URPP Evolution in Action is English; German skills are helpful, but not essential.

Offers We offer a friendly, international, dynamic and team-oriented scientific environment at the UZH. The UZH is the largest University of Switzerland with internationally leading institutes in the Life Sciences. The Academic Fellow position is available earliest in January 2015 and runs on a fixed-term contract of four years. The salary is competitive and the Academic Fellow position also includes a generous budget for running costs and support personnel. The UZH is an equal opportunity employer. Part-time work is possible. Zurich is an attractive city in beautiful surroundings, a multinational population, and many educational and recreational opportunities.

Contact For questions relating to the position, kindly contact the Program Coordinator of the URPP Evolution in Action, Dr. Annegret Lesslauer.

E-Mail annegret.lesslauer@uzh.ch

Application Please send your application as single PDF-File by e-mail to Dr. Annegret Lesslauer, annegret.lesslauer@uzh.ch. Applications should include: full CV and publication list, a statement of research interests not exceeding three pages, and three academic references. Please use the keyword "Application Academic Fellow 2015" in the subject line. Application deadline is December 21, 2014.

Frédéric Guillaume SNSF Assistant Professor Institute

of Evolutionary Biology and Environmental Studies University of Zürich Winterthurerstrasse 190 CH-8057 Zürich tel: +41 (0)44 635 66 23 office: Y13-G-38

http://www.ieu.uzh.ch/research/evolbiol/ecoevo.html
frederic.guillaume@ieu.uzh.ch

UZurich HIVEvolution

Postdoc position: Computational HIV Vaccinology (University of Zurich) We are looking for a highly motivated Postdoc with a strong quantitative background to work on a project at the interface of bioinformatics, virology, and the immunology of HIV. The project is based on unique immunological and clinical data from the Swiss HIV Cohort Study (www.shcs.ch), the Zurich Primary HIV Study (http://www.viralinfectiousdiseases.uzh.ch/ZPHI.html) and currently running high-throughput experimental analyses. The project aims to identify the determinants of antibody-neutralization in HIV and is funded for 3 years. This highly interdisciplinary and translational project is a close collaboration between the Institute of Medical Virology (University of Zurich, Alexandra Trkola), the Division for Infectious Diseases (University Hospital Zurich, Huldrych Günthard & Roger Kouyos), and the Institute for Integrative Biology (ETH Zurich, Roland Regoes).

This position provides: 1) A highly interdisciplinary and translational research environment with links both to clinical practice and basic science. 2) Strong interactions with leading experimental and theoretical groups. 3) Unique immunological and clinical data and the opportunity to shape follow-up experimental analysis on a key question in HIV vaccinology.

The analysis of these complex data requires mathematical and bioinformatics approaches beyond standard statistics. Accordingly, the applicant should have strong quantitative/computational skills and hold a PhD in a discipline relevant to the project (e.g. Bioinformatics, Bio-Statistics, Bio-Mathematics, or Life-Sciences with a strong quantitative or computational component).

Start date: As soon as possible.

Applicants should send a cover letter, a detailed CV, a list of their publications, and contact information for two or three academic references to: roger.kouyos@uzh.ch.

Roger Kouyos, PhD Division of Infectious Diseases and Hospital Epidemiology University Hospital Zurich University of Zurich Rämistr. 100 CH-8091 Zürich Switzerland

ph +41 44 255 36 10

roger.kouyos@uzh.ch

Yale MacroevolutionTerrestrialVertebrates

NSF 'VertLife' Project Postdoc: Macroevolution of Terrestrial Vertebrates (Yale University, 2 years)

A postdoc position is available in the new NSF Genealogy of Life project "VertLife Terrestrial: A complete, global assembly of phylogenetic, trait, spatial and environment characteristics for a model clade". Project members include Walter Jetz (Yale, Lead), Alex Pyron (GWU), Rauri Bowie (UC Berkeley), Jake Esselstyn (LSU), and Rob Guralnick (CU Boulder). The position will be based in the Ecology and Evolutionary Biology Department at Yale University (http://jetzlab.yale.edu), with visits to collaborating research groups.

We are looking for a talented young scientist with an interest in macroevolution and macroecology and with superior skills in phylogenetic analysis and models of trait evolution and diversification. Additional background in spatial analysis and informatics tools development is highly welcome. The successful candidate will have a compelling publication record, an interest in developing own research questions, and a proven ability to work both independently and in larger teams.

Terrestrial Vertebrates comprise ca. 33,000 species with a wide range of life histories and ecological adaptations. The VertLife Terrestrial project will undertake concerted phylogenetic and trait data assembling efforts that will advance the species-level completeness of key evolutionary and ecological attributes. It aims to help establish terrestrial vertebrates as a global model system for macroevolution, macroecology, comparative biology and global change research. Online analysis and visualization tools are planned that will connect to existing projects such as Map of Life. The postdoc is expected to develop and address macroevolutionary and macroecological questions building on these resources. For additional information see http://www.nsf.gov/news/news_summ.jsp?cntn_id=132716 . Yale has a

thriving community of postdocs and graduate students in evolution, ecology, and global change science associated with the EEB Department, the Yale Institute for Biospheric Studies, the Program in Spatial Biodiversity Science and Conservation, the Peabody Museum, the Yale Climate & Energy Institute, and the Yale School of Forestry and Environmental Studies. The town and campus are renowned for their classic Ivy League setting, 75 miles north of New York City.

To apply please email a short cover letter, CV and contact details of three referees (all in one pdf) to walter.jetz@yale.edu with "VertLife postdoc" in the subject line. US applicants are encouraged to simultaneously consider an NSF PRFB (http://www.nsf.gov/pubs/2015/nsf15501/nsf15501.htm, Area 2) to come to Yale. Applications from both within and outside the US are welcome. Start date is flexible, but should preferably be around Spring 2015. Review of applications will begin on 25th of November 2014 and continue until the position is filled.

Dr. Walter Jetz Associate Professor, Ecology and Evolutionary Biology, Yale University Adjunct Associate Professor, Yale School of Forestry & Environmental Studies Director, Yale Program in Spatial Biodiversity Science and Conservation Yale University, 165 Prospect Street, New Haven, CT 06511, USA Phone: +1-203-432-7540; Email: walter.jetz@yale.edu; URL: http://jetzlab.yale.edu walter.jetz@yale.edu

WorkshopsCourses

CostaRica SistematicadePlantasTropicales

Hello all (my apologies for cross posting),

OTS is offering a graduate level course on Tropical Plant Systematics in Spanish for 2015. This course is an intensive, five-week field introduction to the identification, inventory, classification, and phylogenetic analysis of tropical vascular plants. This course is primarily for plant systematists but will also interest ecologists, zoologists, and conservation biologists - anyone whose research requires a broad knowledge of plant relationships and classification.

Faculty:

Mario Blanco, Ph.D. Universidad de Costa Rica. Lucas C. Majure, Ph.D. Desert Botanical Garden, AZ.

For more information go to: http://bit.ly/1EKLyiS I would appreciate your help letting graduate students know about this opportunity.

Best,

Andrés Santana Graduate Education Department Organization for Tropical Studies San Pedro, Costa Rica. 676-2050 (506) 2524-0607 ext. 1511 Skype: andres.santana_otscro www.ots.ac.cr twitter: @ots_tropicaledu

Andrés Santana Mora <andres.santana@ots.cr>

France SMBESatMeeting May26-29

Dear colleagues,

It is my pleasure to announce that the SMBE satel-

lite meeting "Investigating biological adaptation with NGS: data and models" is going to take place at the Hameau de l'étoile, which is a conference center close to Montpellier (South of France).

More details about the meeting are available online: http://smbeba2015.imag.fr The deadline for pre-registration is December 17, 2014.

Michael BLUM (University of Grenoble)

SCENE Glasgow AdvancingInR Apr20-24

A repeat of the course titled 'ADVANCING IN R' has been arranged for April 20th - 24th 2015

The content designed to bridge the gap between basic R coding and more advanced statistical modelling.

The course is aimed at PhD students and post docs (although people at any stage of their career are welcome) with basic to moderate knowledge in R.

It will be held at SCENE (Scottish Center for Ecology and the Natural Environment), Glasgow, United Kingdom.

Course content is as follows and will be based on biological/ecological data...

Module 1 Introduction & data visualization using (graphics) and (ggplot2) Module 2 Univariate regression, diagnostics & plotting fits Module 3 Adding additional continuous predictors (multiple regression); scaling & collinearity Module 4 Adding factorial (categorical) predictors & incorporating interactions (ANCOVA) Module 5 Model selection & simplification (likelihood ratio tests, AIC) Module 6 Mixed effects models in theory & practice Module 7 Generalised Linear Models (binomial and count data) Module 8 Nonlinear models (polynomial & mechanistic models) Module 9 Combining methods (e.g., nonlinear mixed effect (NLME) models & generalised linear mixed effect (GLMM) models) Module 10 One-on-one consultations/other advanced topics

Cost is £385 for the 5 days including lunches and refreshments or £585 for an all inclusive option which includes the addition of accommodation, all meals and refreshments.

There is also the possibility (depending on time) to have one on one sessions regarding your own data!

For further details or questions please email oliverhooker@prstatistics.co.uk or visit www.prstatistics.co.uk Oliver Hooker PhD research student University of Glasgow +44 (0) 1360 870 510 +44 (0) 7966 500 340 o.hooker.1@research.gla.ac.uk

Oliver Hooker <o.hooker.1@research.gla.ac.uk>

Smithsonian Panama EvolutionSymbioses

*COURSE ANNOUNCEMENT *

Tropical Behavioural Ecology and Evolution, Smithsonian Tropical Research Institute (Panama) and University of Copenhagen (Denmark)

We invite applications for a course focusing on evolutionary processes that shape the ecology and behavior of key invertebrate model systems in a diverse tropical forest with a special emphasis on symbioses. The course is designed for graduate students interested in field biology and includes a proposal writing phase (completed in Copenhagen or online) that allows the student to be trained in research design with guidance from course instructors. The project will be implemented at the world renowned Smithsonian Tropical Research Institute in Panama (May 2015). In addition, the students will work on a small group project, review and discuss the work of their peers, and attend lectures, tutorials and trips throughout the 26 day stay in Panama. A final project report will be submitted two weeks following the field component. This intense course provides unique opportunities to interact with a global community of scientists and learn successful research strategies while working in a Neotropical rainforest!

*Course Instructors**: *Dr. Jacobus Boomsma (Director of the Centre for Social Evolution at the University of Copenhagen & STRI Senior Research Associate), Dr. Rachelle Adams (Postdoctoral Fellow, University of Copenhagen), Dr. Jonathan Shik (Postdoctoral Fellow, University of Copenhagen)

*Important Dates**: *March 8 2014 (Course applications and 400 deposit due) April 6 (Start preparation), April 29 (Proposal due), May 3-28 (STRI field course), June 12 (Research paper due)

*Tuition fees**: *1,200.00 (covers course expenses, room and board)

*Web Sites**: http://www1.bio.ku.dk/english/-

research/oe/cse/kurser/ or www.megalomyrmex.com/-Teaching.html. To see quotes from past students (http://socialevolution.ku.dk/kurser/tbe2013/quotes)

*How to Apply**: *Contact Rachelle Adams at rmmadams@gmail.com or Jonathan Shik at jonathan.shik@gmail.com for a formal course application and further details. Up to 16 students will be chosen based on applications.

J Shik <jonathan.shik@gmail.com>

UAustraldeChile Phylogenetics Dec11-12

Workshop on Evolutionary Biology: Phylogenetic Statistical Methods. 11-12, December 2014.

Dear colleagues,

We are pleased to invite you at the Biological Adaptation Workshop: Phylogenetic Statistical Methods, which will be held at Universidad Austral de Chile is the beautiful city of Valdivia.

Comparative methods are widely employed in evolutionary biology but also they had have a strong impact on ecological studies for inferring adaptations to many environmental conditions. These methods are mainly based in the species comparison taking into account the phylogenetic relationships between them, which is useful to any kind of environment (terrestrial, aquatic) and taxonomic group (vertebrates, invertebrates, fungi, bacteria). The workshop will focus on theoretical aspects of comparative methods as well as discussion analysis sessions. On of the most important parts of the workshop will the possibility to get advise for your own dataset.

Dates: 11-12, December 2014

Target audience: Advanced Master students, PhD students, Postdoctoral research fellows, and Faculty Members.

Speakers: Dr. Enrico Rezende, University of Roehampton (UK).

Organizers: Dr. Luis Castañeda (Universidad Austral, Chile).

Registration: Send an e-mail containing a short motivation letter to lecastane@gmail.com (Luis Castañeda).

For more information about the workshop, program and registration please send an-email to Luis Castañeda (lecastane@gmail.com).

See you at Valdivia, Chile!

Best,

Luis Castañeda

Luis E. Castañeda

Programa Vino, Cambio Climático y Biodiversidad Instituto de Ecología y Biodiversidad (IEB) & Instituto de Ciencias Ambientales y Evolutivas Universidad Austral de Chile 5090000 - Valdivia CHILE

E-mail: lecastane@gmail.com Website: https://-sites.google.com/site/lecastane/ http://www.ieb-chile.cl Skype: lecastane

“Luis E. Castañeda” <lecastane@gmail.com>

UppsalaU ModellingBiodiversityClimate Apr20-23

The EBC graduate school on genomes and Phenotypes at Uppsala University invites PhD students to attend the course: Modeling species distribution under past and future climate. Dates: 20-23 April 2015.

Place: Evolutionary Biology Centre (EBC), Uppsala University, lecture room 4. Teachers Signe Normand, Aarhus University, Denmark

Jens-Christian Svenning, Aarhus University, Denmark

Peter Pearman, University of the Basque Countrys, Spain.

Registration: The course is free of charge and number of participants is limited to 25. Everyone can apply, but priority will be given to PhD students from the EBC graduate school on Genomes and Phenotypes at Uppsala University.

Deadline for application: February 15th 2015.

Apply by sending a mail with your name, affiliations and a short description of your research interests to laura.parducci@ebc.uu.se. In the mail specify also if you are a PhD student from the EBC graduate school student at Uppsala University.

More information: http://www.ebc.uu.se/education/-postgrad/gradschool/Courses/ Laura Parducci Dept of Ecology and Genetics Plant Ecology and Evolution Evolutionary Biology Centre Uppsala

University SWEDEN Phone: +46-18-471 6414 www.ebc.uu.se/Forskning/IEG/ Laura Parducci <Laura.Parducci@ebc.uu.se>

Weggis Switzerland AdaptationGenomics Mar1-7

WHERE: Weggis, Switzerland WHAT: Winter School "Bioinformatics for Adaptation Genomics: Adaptation genomics in the realm of Next-Generation Sequencing data analysis" WHEN: 1 - 7 March 2015

The rapid development of next-generation sequencing technologies and their application to adaptation genomics research holds great promise to increase our understanding of genotype-phenotype-environment interactions, and the pioneering findings of recent years have inspired the launching of genome-scale projects in an ever-increasing number of organisms. A great effort has been made to develop software that can handle the large datasets that typically characterise ecological genomics studies, while still providing robust analytical platforms for supporting their application in non-model systems. However, due to the sheer number and complexity of available packages, it is often difficult for investigators to assess the potential and limitations of alternative methods, and determine which are best suited for their particular question and dataset. This winter school aims at providing an opportunity for investigators to gain insight into the rationale behind some of the established analytical pipelines in adaptation genomics research and acquire knowledge on the best practice to perform analyses and experimental design.

The School aims to address primarily evolutionary biologists and bioinformaticians who want to gain deeper knowledge on state-of-the-art methods to detect adaptive patterns from genome-wide nucleotide data. Applications from early career researchers (PhD and postdoctoral level) as well as faculty with a background in ecology, genetics, or bioinformatics will be considered. The workshop is particularly aimed at candidates with experience of the Unix environment and with previous practice on analytical pipelines for genomic data. Participants will be requested to bring their own laptop with which to connect to the server for the practical sessions. The school will have a limited number of participants (ca. 30) and lecturers (5).

AIM & OBJECTIVES The Winter School provides an opportunity for investigators to penetrate the âblack box' behind the complex approaches available for investigating adaptation genomics throughout the analytical pipeline; from the assumptions and requirements necessary to produce a high quality SNP dataset from raw next-generation sequence data, to the in-depth interpretation of methods designed to detect signature of selection, demographic patterns and associations between genotypes and environment, and/or phenotypes.

Specifically, the following objectives will be addressed: -the rationale and assumptions intrinsic to different available analytical approaches

-comparison of the implementation and results of alternative analytical methods as applied on the same or similar datasets

-interpretation of the outputs from the programs at different stages in the analysis

-best practice to implement the available packages when addressing different evolutionary questions, and how this conditions experimental design

Lessons will include initial lectures on the theoretical background of the programs and practical demonstrations given by the instructor followed by hands-on exercises performed by the participants under guided supervision. Computing activity will rely on individual connections to the Genetic Diversity Centre (GDC, ETH Zurich) server that will provide resources for demonstrations and practical training. Emphasis will be given to interpretation of the output of the programs, with slots of discussion time allowed to facilitate interactions between the instructor and the audience.

VENUE The school will be hosted at the Alexander & Gerbi Hotel in Weggis, Switzerland (http://-www.alexander-gerbi.ch). Weggis is a scenic town located on the shore of Lake Lucerne in central Switzerland. The location was chosen to provide a friendly and stimulating work environment. The area is known for its relaxing character in a peaceful mountain scenery. Full board (Breakfast, Lunch, Dinner and coffee breaks) and lodging in double rooms will be provided at the Alexander & Gerbi Hotel during the workshop, and is paid by ESF and ACE.

REGISTRATION We ask that all interested participants submit a cover letter (1 page max) detailing their research interests, their level of bioinformatics experience, and motivation for attending the workshop, as well as their CV (2 pages max) to BioinfAdapt@env.ethz.ch by December 15th 2014.

Participants will be notified of the outcome of the selection process by December 23rd 2014.

For competing applications, priority will be given first

to applicants from the contributing member countries of the congenomics network, then to candidates from ESF member and ESF non-member countries in Europe. Member countries of the congenomics network are: Belgium, Denmark, Finland, Germany, Greece, Italy, Luxembourg, Netherlands,

— / —

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

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.