
E v o l D i r

September 1, 2015

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

Foreword

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

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

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



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Conferences

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Asilomar AmericanSocNaturalists Jan10-14

Registration is now open for the 2016 Asilomar conference of the American Society of Naturalists.

The American Society of Naturalists will be holding a small independent meeting at the Asilomar Conference Center on the Monterey Peninsula in coastal California, January 10-14, 2016. The goal of the meeting is to promote integration between evolution and ecology by attracting a more diverse community of biologists than typically attend the evolution meetings held jointly each summer by ASN, SSE, and SSB. Information about the conference can be found on the conference website: <http://www.amnat2016.org> including a general schedule and information about three afternoon symposia and exiting evening events.

To register, visit: <http://www.amnat2016.org/-register.html> Lodging must be booked separately:

<http://www.amnat2016.org/foodandlodging.html> Seating for this conference is limited to 200 people due to meeting space constraints, so we expect the conference will fill up completely. We therefore encourage potential attendees to register shortly after the registration period opens.

We look forward to seeing you there!

Sincerely,

Volker Rudolf

ASN Organizing Committee Chair

Volker H.W. Rudolf, Ph.D. Associate Professor of Ecology & Evolutionary Biology Department of Bio-Sciences Rice University MS-170 6100 Main Street, Houston, TX, 77005 Email: volker.rudolf@rice.edu Phone: 713-348-2834 Fax: 713-348-5232 Web-page: <http://www.owl.net.rice.edu/~volker.rudolf/> volker.rudolf@rice.edu

Edinburgh Conservation Oct14

Scottish Postgrad Conference: Ecology, Environment and Conservation

Scottish Natural Heritage and the Scottish universities are running a postgraduate student conference on Ecology, Environment and Conservation on Wednesday 14th October 2015 at the Royal Society of Edinburgh

The conference is for PhD and Masters students, including those who have recently completed studies. It covers ecology, the environment and conservation, with emphasis on work related to or carried out in Scotland. It's an ideal opportunity to meet and exchange ideas with your peers and leading professionals in the field. We're look-

ing for presentations, poster submissions and delegates. There will be desks dedicated to organisations/NGOs to help you with career opportunities.

Invited Speakers Dr Trent Garner-Zoological Society of London's Institute of Zoology. Professor Bob Furness-Glasgow University, Chairman of SNHs Scientific Advisory Committee.

PhD Student Speakers include... Janet MacLean-Rhododendron Control James Fitton- National coastal erosion risk assessment for Scotland Amanda Trask- A lethal genetic disease

Cost: Free, lunch provided!

How to apply: Abstract submission deadline-14th Sept 2015 Registration deadline-28th September 2015 , Visit <http://tinyurl.com/njq39xh> Conference organisers- Josephine Pemberton, Des Thompson, David O'Brien, Chris Spray, Kirsty Park, Dan Haydon, Xavier Lambin, Amanda Trask, Charles Warren, Paul Robertson.

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

PEMBERTON Josephine <J.Pemberton@ed.ac.uk>

FtLauderdale Florida ASN Aug7-12 CallProposals

FortLauderdale.ASN@ESA.Aug7-12,2016

Call for ASN Symposium to be held at the 2016 ESA Meeting

Due September 14th, 2015

The American Society of Naturalists invites symposium proposals for a special symposium to be held at the 2016 Ecological Society of America annual meeting August 7-12, 2016 in Ft Lauderdale, FL. By holding an annual symposium at ESA, ASN hopes to strengthen ties between the society and ecologists.

Symposium topics should support the Society's goal to advance the conceptual unification of the biological sciences and further knowledge in evolution, ecology, behavior and organismal biology. Proposals are encouraged on topics that are synthetic, interdisciplinary or that address important emerging issues in evolution, ecology and behavior.

Because the 2016 symposium is in conjunction with

the ecology meeting, special weight will be given to integrative topics of interest to ecologists. The ESA theme for 2016 is Novel Ecosystems in the Anthropocene. esa.org/ftlauderdale/

A travel, registration, and accommodation budget of \$8,000 is provided to help with expenses.

Proposals should include (1) a title; (2) a description of the symposium topic (one page); (3) a tentative list of six speakers, including institutional affiliations; (4) a justification for the symposium explaining why the topic and speakers are appropriate for a Society-sponsored symposium (up to one page).

Because ESA has a tight schedule we need proposals to be submitted by midnight Eastern Standard Time on September 14, 2015 by email (emilies@umn.edu) as a single pdf attachment, under subject heading: ASN Symposium Proposal: ESA 2016. Proposals that include women, young investigators, and individuals from underrepresented groups are especially encouraged.

The Society's selection committee will evaluate proposals based on the significance and timeliness of the topic, and on it being substantively different from recent symposia sponsored by the Society. All applicants will be notified of the decision by late September 2015.

Emilie Snell-Rood ASN Symposium Committee Chair
Department of Ecology, Evolution and Behavior University of Minnesota emilies@umn.edu

Emilie Snell-Rood <emilies@umn.edu>

Manhattan KS EcologicalGenomics Nov6-8 2

***LESS THAN ONE MONTH FROM EARLY REGISTRATION DEADLINE!!!

Thirteenth Ecological Genomics Symposium in Manhattan, Kansas

Outstanding speakers and expanded speaking opportunities!

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

among submitted abstracts.

Featured speakers include:

- * Scott Edwards, Harvard
- * Michael Lynch, Indiana University
- * Melissa Pespeni, University of Vermont
- * Stacey Smith, University of Colorado Boulder
- * Joan Strassmann, Washington University, St. Louis
- * Michi Tobler, Kansas State University Early registration fee is \$235 (\$135 for graduate and undergraduate students). All meals are included in registration fee this year. Early registration deadline is Friday, September 18.

POSTER SESSIONS: Poster sessions will be held on Friday evening and Saturday afternoon. Poster topics should be related to the field of Ecological Genomics. A NUMBER OF SUBMITTED POSTER ABSTRACTS WILL BE SELECTED FOR ORAL PRESENTATIONS. Abstract submission deadline is also Friday, September 18.

NEW THIS YEAR: An option tour of Konza Prairie will be offered on Sunday afternoon after the conclusion of the symposium for an additional fee. You may register for this tour when you register for the symposium.

Visit <http://ecogen.k-state.edu/> to register. We hope to see you in Manhattan!

Jennifer Rhodes <jenniferrhodes@ksu.edu>

Manhattan KS EcologicalGenomics Nov6-8 Registration

Registration is now open!!!!

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Jennifer Rhodes <jenniferrhodes@ksu.edu>

Marseilles 19thEvolBiol Sep15-18 Deadline 4

Dear all , the registrations for the "19th evolutionary biology meeting at Marseilles" will be closed the 2nd September.

only spots for poster presentations are available

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

Pierre

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

Portland Oregon Evolutionary Endocrinology Jan3-7

We would like to invite early career scientists (grad students through early Assistant Profs) to submit abstracts for consideration for inclusion in a complementary session to our Society-wide Symposium at the next meetings of the Society for Integrative and Comparative Biology (SICB) to be held in Portland, Oregon, USA (3-7 January 2016).

In the past two decades, the field of *Evolutionary Endocrinology* has emerged not only as a means of understanding the evolution of the endocrine system itself, but also as a framework for exploring the roles of hormones in shaping fundamental evolutionary phenomena. Originally centered on classic quantitative-genetic approaches to the study of endocrine phenotypes, this field has recently expanded to include exciting new ideas about the evolutionary significance of hormones in structuring genetic covariance, resolving genomic conflict, shaping life-history evolution, facilitating or constraining adaptation, and mediating non-genetic inheritance and maternal effects. Our symposium, '*Evolutionary Endocrinology: Hormones as mediators of evolutionary phenomena*', aims to bring together evolutionary biologists and comparative endocrinologists addressing these and other topics in a range of vertebrate and invertebrate systems, and encompassing a variety of hormones and endocrine axes. Our overarching goals are to (1) develop an integrative framework for exploring the roles of hormones in mediating key evolutionary phenomena, one that will guide and inspire the expanding field of evolutionary endocrinology, and (2) develop new connections between endocrinologists and evolutionary biologists. More information about the symposium, including our list of invited speakers, can be found at: <http://sicb.org/meetings/2016/symposia/-evolendo.php> We will be holding a social for symposium and complementary session speakers, with opportunities for networking and developing mentoring relationships between early career biologists and leaders in our field. Our symposium has received funding, which will be used in part to support travel and registration costs for speakers who contribute talks for our complementary session.

To be considered for inclusion in the complementary session, please submit an abstract following all instructions

on the SICB web site (<http://sicb.org/meetings/2016/-abstracts/index.php>), and select our symposium under the 'Complementary Sessions' dropdown list.

best,

Fran Bonier, Bob Cox, and Joel McGlothlin

—
Fran Bonier Assistant Professor Queen's University Biology Department Biosciences Complex 3523 Kingston, ON K7L 3N6 Canada

phone: 613-533-6000 x77024 email: bonierf@queensu.ca
<http://post.queensu.ca/~bonierf/index.html> Frances Bonier <bonierf@queensu.ca>

San Francisco Evolution Cancer Dec10-13

International Biannual Evolution and Cancer Conference 2015

Evolutionary tradeoffs and clinical consequences

<http://cancer.ucsf.edu/evolution/conference-2015>

Dates: Thursday December 10 - Sunday December 13

Location: Mission Bay conference center, UCSF, San Francisco, USA

We are pleased to announce the Third International Biannual Evolution and Cancer Conference (IBECC 2015). Tradeoffs are pervasive in biological systems, and the evolutionary dynamics underlying cancer are no exception. IBECC 2015 will explore the ways in which tradeoffs have shaped the evolution of cancer suppression systems and the role of tradeoffs in the progression of tumors from benign to malignant. A consideration of evolutionary tradeoffs can also help us to identify challenges and opportunities in cancer therapy and new horizons for cancer prevention.

We welcome scientists coming from different disciplines, including but not limited to oncology, cell biology, evolutionary biology and mathematics. Abstract submissions relating to the theme of evolutionary tradeoffs and clinical consequences are encouraged but submission on all evolution and ecology of cancer topics are welcome.

Confirmed speakers

Marco Gerlinger, Institute for Cancer Research, London (Cancer Keynote Address)

Susan Rosenberg, Baylor College of Medicine (Evolution

Keynote Address)

Barbara Natterson, University of California, Los Angeles (Public Lecture)

Bob Gatenby, Moffitt Cancer Center (Plenary)

Sarah Hill, Texas Christian University (Plenary)

Hanna Kokko, University of Zurich (Plenary)

Dan Nettle, Newcastle University (Plenary)

Aurora Nedelcu, U. New Brunswick (Plenary)

Registration and abstract submission for talks and posters opens September 15. Speakers for parallel session talks will be selected from submitted abstracts. Aurora M. Nedelcu University of New Brunswick Department of Biology PO Box 4400 Fredericton, NB Canada E3B 5A3 phone: (506) 458-7463

Aurora Nedelcu <anedelcu@unb.ca>

GradStudentPositions

AdamMickiewiczU Evolution ncRNA 6	UGreifswald Germany BirdEvolutionaryPhysiology 16
ClarkU EvolutionaryGenomics 7	UInnsbruck WolbachiaEvolution 2 17
CornellU EvolSocialBehav 7	UKiel PopulationGenomics AntibioticResistance ... 18
HelmholtzCentre Kiel FishEvolution 8	UlmU Germany MolecularEvolution 19
JamesCookU ShrimpEvolutionaryGenomics 9	UMelbourne EvolutionAnimalColourSignals 19
Lausanne Switzerland ExperimentalEvolution 10	UNewBrunswick StJohn 2 CodPopulationGenomics 20
MarinLutherU HoneybeeEvolution 10	UOtago EpigeneticInheritance 21
MonashU PlantEcologicalGenomics 11	URhodeIsland ComputationalNGS 21
NTNU Norway EvolutionaryEcology 11	USaskatchewan LentilGenomics 22
OtagoUNewZealand PopulationGeneticTheory 12	UTasmania BeetleBarcoding 22
PlymouthU 7 AdaptationToClimateChange 12	UTronse Norway Metabarcoding 23
PotsdamU AmphibianEvolutionaryGenomics 13	UWuerzburg SexEvolution 24
Switzerland RapidAdaptationGenomics 13	UZurich 2 Evolution 24
TexasTechU GenomicsMolecularEvolution 14	UZurich EvolutionaryGenomics 25
TrentU AdaptiveGenomics 15	Vienna GenomeArchitecture 26
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UColorado Boulder 2 LichenGenomics 16	

AdamMickiewiczU Evolution ncRNA

PhD studies available at Adam Mickiewicz University in Poznan, Poland A PhD position is available within a

grant from National Science Centre entitled “The regulatory roles of long non-coding RNAs in the context of RNA:RNA interactions” (2014/15/D/NZ2/00525). The project is centered around long non-coding RNAs (lncRNAs), including prediction of novel lncRNAs, deciphering their functions, expression estimation using next-generation sequencing data, evolutionary analyses and developing biological databases. Moreover, labora-

tory tests will be performed to provide experimental evidence for selected predictions. As a result, it is required that the candidate possesses basic knowledge in the area of molecular biology, while experience in bioinformatics and/or programming skills will enhance the application greatly. A short description of the project is available at: http://rhesus.amu.edu.pl/fg/Project_short_version.pdf
Requirements: * Masters degree in biological sciences * Knowledge of basics of molecular biology * Fluency in English * Writing and editing scientific texts * Optionally: programming skills, experience in bioinformatics

Conditions: * A scholarship from National Science Centre of 3000 PLN/month * Term of scholarship: 36 months

Candidates are asked to submit their applications at miszcz@amu.edu.pl, including: * Motivation letter * Curriculum Vitae * At least one reference letter * Any additional documents that might enhance candidate's application

Deadline: September 10th, 2015.

Best regards, MichaÅ Szczesniak, PhD Adam Micklewicz University in Poznan, Poland

Michal Szczesniak <szczesniak.pl@gmail.com>

ClarkU EvolutionaryGenomics

The Gibbons lab (<https://wordpress.clarku.edu/jgibbons/>) in the Biology Department at Clark University is accepting applications for PhD students to start in August 2016.

The overarching research theme of our lab is to understand how evolutionary forces shape the genome and how these changes influence phenotype. Our lab uses an evolutionary genomics lens to broadly study (1) microbial domestication, and (2) fungal copy number variation. 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 comparative and population genomic 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/>).

Interested applicants should send an email with the subject "evolutionary genomics phd position", 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" <JGibbons@clarku.edu>

CornellU EvoSocialBehav

The Sheehan lab (<http://mjsheehan.weebly.com>) in the Department of Neurobiology & Behavior at Cornell University is accepting applications for PhD students to start in Fall 2016.

The lab uses tools from evolutionary biology, behavioral ecology and genomics to understand basic questions about animal social interactions. Major areas of research include the evolution of both the signals and processing that underlie animal communication (especially individual recognition) as well as variation in social systems across populations. Students are encouraged to develop their own independent research projects related to ongoing work in the lab. Some major ongoing projects in the lab include: (1) the evolution of color patterning used for individual recognition in paper wasps, (2) the population and evolutionary genomics of pheromone scent marks in house mice and (3) the ecological causes of variation in cooperative breeding among paper wasps.

The Department of Neurobiology and Behavior and the associated graduate field have faculty (<http://www.nbb.cornell.edu/faculty.shtml>) with a wide range of expertise in animal behavior and neurobiology, with the potential for students to develop integrate research projects under the guidance of multiple mentors. Outside of Neurobiology and Behavior there are numerous biology departments and centers with excellent faculty - making Cornell a top institution for pursuing graduate education in the biological sciences.

Students interested in studying the evolution of communication and/or cooperation using either paper wasps or house mice as model systems are encouraged to apply. Interested students should first send an email with a short description of their interests and why they are interested in the lab as well as a CV or short description of research experiences to msheehan@cornell.edu

Michael J Sheehan

Assistant Professor Neurobiology and Behavior Cornell University 215 Tower Rd Ithaca NY, 14853

(607) 254-4302

msheehan@cornell.edu

Michael Sheehan <msheehan@cornell.edu>

HelmholtzCentre Kiel FishEvolution

PhD Position in the research unit “Evolutionary Ecology of Marine Fishes” at GEOMAR Helmholtz Centre for Ocean Research Kiel

The PhD student will be employed on the research project “implications of anthropogenic stressors on rapid co-adaptation in a tripartite species interaction”. The research program is embedded in the DFG funded priority programme “Rapid Evolutionary Adaptation: Potential and Constraints” (SPP1819), which consists of a group of experts working on rapid adaptation distributed all over Germany. Regular meetings with all experts guarantee a unique opportunity to establish a solid network and to discuss research ideas and data. The project leader is Dr. Carolin Wendling (GEOMAR, Kiel) in collaboration with Dr. Olivia Roth (GEOMAR, Kiel) and Dr. Heiko Liesegang (University of Göttingen). A close cooperation with a second PhD student from the University of Göttingen in the same project is expected.

Project description:

The project aims on investigating rapid evolutionary adaptation in response to anthropogenic stressors in a three-way host-parasite interaction. The work will be conducted on an established model system consisting of pipefish *Syngnathus typhle* (i.e the final animal host), bacteria of the genus *Vibrio*, and their associated temperate phages (i.e. viruses that infect *Vibrio* bacteria). In a unique research approach we will address (1) the implications of bioinvasion (2) the effects of temperature heterogeneity and (3) the exposure to antibiotics on the coevolutionary dynamics between the

three players. In each of the three goals the empirical approach will consist of an *in vitro* evaluation of local adaptation among the players involved. We will then use evolution experiments and whole genome sequencing to investigate how each of the anthropogenic stressors affects phage-bacteria adaptation *in vitro* and how this correlates with bacterial virulence against local pipefish *in vivo*.

The GEOMAR, the University of Kiel and the Max Planck Institute for Evolutionary Biology in Plön offer a stimulating research environment with focus on evolutionary biology. The PhD student will have the possibility to join one of our two graduate schools, either the International Max-Planck-Research School (IMPRS) “Evolutionary Biology” or the “Integrated School of Ocean Sciences” (ISOS). Kiel is the capital of the most Northern state of Germany, directly located at the coast of the Baltic Sea. The town offers many opportunities for leisure activities; in particular people enjoying water sports will love the environment.

Qualification

The successful candidate is required to have a Master or Diploma in Biology or related topics. We expect a motivated PhD student with a high commitment to science that has a strong background in evolutionary biology, preferably experimental evolution and/or skills in applied bioinformatics to analyse NGS-generated high-throughput genomic data. Knowledge of microbiological and molecular biology methods as well as applied bioinformatics is desired. In addition, the PhD student should have good English language skills and the ability to work in team. Furthermore, the candidate is expected to spend some time in the cooperating group at the University of Göttingen (Dr. Liesegang).

The position is available for a 3-year funding. The salary will be 65% according to class E13 TVöD of the German tariff for public employees.

The GEOMAR | Helmholtz Centre for Ocean Research is an equal opportunity employer and encourages female scientists and scientists with disabilities to apply.

Applications including a one-page statement of research interests and motivation, CV and contact details of 2 referees should be sent as a single PDF file (max size 1MB) no later than 20th September 2015 to the following e-mail address with a single pdf file, using the keyword “Rapid Evolution”:

alaessig@geomar.de

For further information do not hesitate to contact Carolin Wendling (cwendling@geomar.de) or visit the webpage: www.geomar.de/en/mitarbeiter/fb3/ev/

cwendling Dr. Carolin Wendling PostDoc GEO-MAR | Helmholtz-Zentrum für Ozeanforschung Kiel
Düsternbrooker Weg 20 24105 Kiel, Germany

Tel.: 0431 600 4569 Fax: 0431 600 4553

cwendling@geomar.de

Carolin Wendling <cwendling@geomar.de>

JamesCookU ShrimpEvolutionaryGenomics

PhD projects@JCU on Advanced Shrimp Breeding and Evolutionary Genomics

As part of a large collaborative project in Advanced Shrimp Breeding and Genomics, we are looking for various motivated students with skills in genomics, transcriptomics and evolutionary bioinformatics for the following projects:

Project 1 Comparative, evolutionary and functional genomics of the black tiger prawn (James Cook University & University of Sydney)

This project will be a component of the full genome assembly of an inbred black tiger prawn (*Penaeus monodon*) based on a combination of short-read sequences and standard mate-pair end Illumina together with the use of long-read sequencing data based on PacBio, HiC, Nanopore platforms for improved hybrid assembly (scaffold/chromosome level). After genome annotation, the project will aim to find synteny and reconstruct the evolutionary history of Decapods/crustaceans by comparing the *P. monodon* genome to the genomes of *Daphnia*, *Artemia*, *Litopenaeus vannamei* and potentially other decapods/crustaceans.

Project 2 “ Functional transcriptomics of viral infection in the black tiger prawn (James Cook University and CSIRO)

This project will examine whether the manner in which a black tiger prawn (*Penaeus monodon*) is challenged with Gill-associated virus (GAV) affects what defence response pathways can be activated to protect the prawn against infection/disease. Essential components of the project will be GAV challenge trials in *P. monodon* and the generation and interrogation of RNAseq data to identify/predict genes and gene pathways activated in response to GAV challenge via the various infection routes examined. Silencing of gene expression using RNA interference (RNAi) will also be employed to fur-

ther explore the functioning of genes predicted to have pivotal roles in the prawn defense response.

Requirements

The desired candidates will preferably have a background in molecular genetics (mainly for project 2) complemented with proven skills in next-generation sequencing approaches and computational analyses (project 1 and 2). Successful candidates will either be enrolled through James Cook University (or University of Sydney), and will work embedded or alongside partners of the ARC Research Hub for Advanced Prawn Breeding depending on the project (ie CSIRO, AGRF). The student will need to obtain an Australian Postgraduate Award (APA) or a JCU PGRS award for national/international students through James Cook University; therefore a first class Honours or Masters Degree and/or evidence of publishing in international peer-reviewed scientific journals are highly recommended.

About James Cook University

James Cook University is one of Australia’s most distinctive universities with a focus on creating a brighter future for life in the tropics worldwide. The University is located in the vibrant regional community of tropical Queensland, which has one of the fastest growing economies in Australia, adjacent to the Great Barrier Reef and Wet Tropics World Heritage Areas. The University’s internationally recognized research is matched by strong commitment to its region, partners and teaching.

For more information on additional PhD opportunities, including what the Hub will achieve and partners please visit <https://research.jcu.edu.au/itrh-apb>

For further details on projects and information on how to apply, please contact Professor Dean Jerry (dean.jerry@jcu.edu.au), Director ARC Hub for Advanced Prawn Breeding, Townsville, Australia.

Gregory Maes, Ph.D. Lecturer in Evolutionary and Applied Genetics Centre for Sustainable Tropical Fisheries and Aquaculture School of Marine and Tropical Biology James Cook University Ph: +61 (0)7 4781 4790; E-mail: gregory.maes@jcu.edu.au Office: ATSIP DB145-314 (Molecular Ecology and Evolution Laboratory) Personal webpage: <https://research.jcu.edu.au/portfolio/gregory.maes/> School webpage: <http://www.jcu.edu.au/mtb/> ”Maes, Gregory“ <gregory.maes@jcu.edu.au>

Lausanne Switzerland Experimental Evolution

PhD position: physiological basis of experimental adaptation to malnutrition in *Drosophila*

Tadeusz Kawecki's research group, Dept. of Ecology and Evolution, University of Lausanne, Switzerland.

The proposed project builds upon an evolution experiment in which replicate populations of fruit flies have adapted to larval malnutrition over 180 generations, evolving high tolerance to nutrient shortage at the expense of increased vulnerability to a food-borne pathogen (Vijendravarma et al, *Ecology Letters* doi: 10.1111/ele.12490). The project will address the physiological and molecular changes underlying these evolutionary changes; it will involve comparisons of gut physiology and histology, gene expression patterns, enzymatic activities, nutrient absorption/storage rates (using stable isotopes), as well as microbiome manipulations and genetic experiments. The ideal candidate should have a broad understanding of evolutionary concepts and some experience with basic molecular biology techniques. More information about the research group can be found under <http://www.unil.ch/dee/en/home/menuinst/research/group-kawecki.html>. The position is foreseen for 4 years, with the initial salary of CHF 47,000 per year (plus a possible supplement for a contribution to teaching), the initial date between October 2015 and March 2016. The research environment is English-speaking and no-preexisting knowledge of French is required, but learning basic French would make living in Lausanne easier. It is a formal requirement that the student will have completed a Master or equivalent degree before starting the PhD (although not necessarily at the time of application).

Lausanne is a medium-sized city on the shores of Lake Geneva, surrounded by a wine growing region recognized as a UNESCO World Heritage Site, and within one hour of the Alps. It offers a great variety of cultural, recreational and outdoor opportunities. With over 20 research groups, the Department of Ecology and Evolution (www.unil.ch/dee), is a strong center of research in evolutionary biology and a vibrant community which has just hosted the congress of European Society for Evolutionary Biology (wp.unil.ch/eseb2015/). The student will have the opportunity to participate in a variety of courses and workshops in the framework of

doctoral programs "Ecology and Evolution" (<http://biologie.cuso.ch/en/ecologie-evolution>) and "Staromics" (<http://biologie.cuso.ch/staromics>).

To apply, send a single pdf file with a motivation letter, cv, a description of your research experience and interest, and names of 2-3 referees to tadeusz.kawecki@unil.ch, with "PhD position" on the subject line. The review of applications will start on September 2, 2015 and will continue until a suitable candidate is found.

– Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Biophore, office 3111 CH 1015 Lausanne, Switzerland

Tadeusz Kawecki <tadeusz.kawecki@unil.ch>

MarinLutherU Honeybee Evolution

PhD student Position in Molecular Ecology and Evolution

We offer a fixed-term position in the Molecular Ecology research group at the Martin-Luther-University Halle-Wittenberg (Germany).

Duration: 3 years (start: expected November 2015)

Salary: 50% E13 TV-L

We are seeking a person with a Master of Science or Diploma in Biology.

The successful candidate will be familiar with molecular biological methods (incl. gene expression analyses or Transcriptomics) and the biology of social insects. Practical and theoretical knowledge in the field of microbiology, immunology, statistics or experience in working with honeybees is desirable, but not mandatory.

Excellent command of the English language in both writing and speaking is essential.

The successful candidate will participate in the DFG project 'Self-medication and innate immunity in the honeybee *Apis mellifera*' and in teaching activities in ecology and population genetics at the BSc/ MSc. The group has excellent laboratory facilities with all state-of-the-art equipment including a next generation sequencing platform.

The research focus of the group is on evolutionary biology of social bees with the honeybee being used as the model system for many studies. A detailed research profile can be found at <http://www.mol-ecol.uni-halle.de/>, and more project related

details at http://www.mol-ecol.uni-halle.de/research/-host_parasite/self_medication/ More detailed information can be obtained by Dr. Silvio Erler, Tel: 0049-(0)-345-55-26305, E-Mail: silvio.erler@zoologie.uni-halle.de

Please submit your application before Sep 15. 2015 referring to Reg.-No. 5-6495/15-D together with your CV, certificates, name of at least one referee (all as single PDF file) by e-mail to: silvio.erler@zoologie.uni-halle.de

or in hard copy to: Dr. Silvio Erler, Molekulare Ökologie, Institut für Biologie/Zoologie, Martin-Luther-Universität Halle-Wittenberg, Hoher Weg 4, 06120 Halle (Saale), Germany

– Dr. rer. nat. Silvio Erler

Martin-Luther-Universität Halle-Wittenberg Institut für Biologie-Zoologie Molekulare Ökologie Hoher Weg 4 06099 Halle, Germany

Mail: silvio.erler@zoologie.uni-halle.de Phone: +49-(0)345-5526305 Fax: +49-(0)345-5527264

Website: <http://www.mol-ecol.uni-halle.de/staff/erlers/> ResearcherID: <http://www.researcherid.com/rid/-B-4162-2012> Silvio Erler <silvio.erler@zoologie.uni-halle.de>

MonashU PlantEcologicalGenomics

The Hodgins lab is currently seeking outstanding PhD candidates interested in studying plant ecological genomics (www.zoology.ubc.ca/~hodgins/). Our laboratory studies the genetic basis for adaptation in plants. We are particularly interested in using introduced species as a model for studying rapid adaptation. We also study adaptation to climate in forest trees and plant domestication. To address evolutionary questions relating to these topics, we use a combination of genomics, ecological fieldwork and experimental approaches.

The project can commence any time during 2016 and will be developed in collaboration with the student. Teaching is not required for the duration of the PhD (3.5 years in Australia). Research funding as well as attendance in one conference per year is guaranteed.

Two fully funded PhD stipends are available. The stipends include all course fees plus approximately \$25,000 AUD per annum tax-free. All Australian and New Zealand citizens are eligible to apply. International funding is also available. A top-up scholarship will be awarded to the successful recipient of an Australian Post-

graduate Award (tax-free 2016 rate of approximately \$25,000 AUD, top up of \$5000, approximate equivalent of \$40000 before tax).

Melbourne is diverse and thriving city with a desirable climate. It is one of the most livable cities in the world and is a cultural and recreational hub.

Monash is a member of the Group of Eight, a coalition of top Australian universities recognized for their excellence in teaching and research.

Please send your CV, a transcript, a brief statement of your research interests and the contact details of two referees to kathryn.hodgins@monash.edu

The deadline for scholarship applications at Monash University is October 31, 2015 for a January 1, 2016 start date.

Kristin Nurkowski <kristin.nurkowski@monash.edu>

NTNU Norway EvolutionaryEcology

PhD position in Evolutionary Ecology

In the project “Evolutionary Responses to Variable and Unpredictable Environments” we will build a series of models to understand how within generation adaptations to variability and predictability in the environment (e.g. plasticity, insurance, and variance-sensitivity) co-evolve with bet-hedging. We are seeking a PhD candidate to be part of a team of investigators on this project. We will be using different types of models, including individual-based simulation models and analytical models based on quantitative genetics. We are seeking a person with good understanding of evolutionary theory and preferably with some background in evolutionary ecology. Our candidate should have some competence in mathematics and computing, a strong logical sense and be interested in developing theory.

Further information about the position can be found here: <http://t.co/VhxcH8vPij> or obtained from Dr. Irja Ida Ratikainen, Department of Biology, NTNU, Tel. +47 47344606, E-mail: irja.i.ratikainen@ntnu.no. Further information about the Department can be found at <http://www.ntnu.edu/biology> Applications must be submitted electronically through www.jobbnorge.no. The reference number of the position is: NT- 54/15

Application deadline: September 4th 2015

Irja Ida Ratikainen Researcher, CBD (Centre for Biodiversity Dynamics) Department of Biology Norwe-

gian University of Science and Technology <http://www.nt.ntnu.no/users/irja/> Irja Ida Ratikainen
<irja.i.ratikainen@ntnu.no>

OtagoUNewZealand PopulationGeneticTheory

Two PhD Projects Available

University of Otago, Dunedin, New Zealand

1. Evolution of Polymorphism. I am seeking a PhD student to construct and analyze population-genetic models of natural selection and mutation that can explain the levels of genetic variation found in natural populations.
2. Population Epigenetics. I am seeking a PhD student to construct and analyze models that incorporate epigenetics into standard population-genetic models, with a view to understanding patterns of epigenetic variation in natural populations.

Candidates should be comfortable working with equations and have some computing experience. The projects will involve a combination of analytical modelling and computer simulation. An excellent command of both written and spoken English is essential.

My laboratory will provide funding for research costs, but the student will need to be admitted to the University of Otago's PhD programme (see <http://www.otago.ac.nz/study/phd/handbook/-index.html>) and be awarded a University of Otago Doctoral Scholarship (see <http://www.otago.ac.nz/study/-scholarships/database/otago014687.html>), which will cover normal living expenses and tuition fees for three years. Interested applicants should contact me, including (1) a brief cover letter outlining their research interests, (2) a comprehensive CV, (3) an academic transcript and (4) contact details of two referees.

Professor Hamish G. Spencer E:
hamish.spencer@otago.ac.nz W: <http://www.otago.ac.nz/zoology/staff/-spencer.html> "hamish.spencer@otago.ac.nz"
<hamish.spencer@otago.ac.nz>

PlymouthU 7 AdaptationToClimateChange

Plymouth University (UK) is advertising 50 PhD projects, fully funded for European students, including 7 projects in the School of Biological Sciences (this is a competitive scheme and not all projects will necessarily be funded).

Projects in the School include those investigating evolutionary and ecological responses to climate change - project titles are listed below; full details for each project are available at the Graduate School website (<https://www.plymouth.ac.uk/student-life/your-studies/the-graduate-school/fully-funded-phd-studentships/science-and-engineering>).

Applications to be made via the Graduate School website.

Project titles in the School of Biological Sciences:

1. Development of an ex vivo model to assess dietary induced inflammation in fish
2. A biologically meaningful evaluation of phenological responses to climate change
3. Evolutionary mechanisms of adaptation to temperature variation
4. Analytical, toxicogenomics and modelling approaches to determine the impacts of radionuclides and metals
5. Biotechnological potential of methanotrophic bacteria for production of fish/animal feeds
6. Facing up to climate change: the role of aspect and micro-climate in species colonisation and persistence
7. Sustainable shellfisheries and water quality

Dr Michael Thom Lecturer in Evolutionary Biology School of Biological Sciences University of Plymouth PL4 8AA +44(0) 1752 5 84473 <https://www.plymouth.ac.uk/staff/-michael-thom> "michael.thom@plymouth.ac.uk"
<michael.thom@plymouth.ac.uk>

PotsdamU AmphibianEvolutionaryGenomics

DFG-funded PhD position in Evolutionary Genomics of Amphibians at Potsdam University

A 3-year PhD position (TVEL 13; 65%) is available at the Unit of Evolutionary Biology/Systematic Zoology at the University of Potsdam, starting October 1st 2015.

The Unit of Evolutionary Biology/Systematic Biology has a strong focus on population genetic and speciation research, involving various taxonomic groups and a suite of molecular, morphological, and behavioural approaches (see <http://www.uni-potsdam.de/ibb/arbeitsgruppen/ordentliche-professuren/evolutionsbiologie-spez-zoologie.html> for recent work).

The successful applicant will work on the genomic basis of adaptation in the Fire-bellied toad (*Bombina orientalis*). The project will have a strong bioinformatics component as well as it will include both field work and experimental approaches. The project is part of the DFG-funded priority program Rapid evolutionary adaptation: Potential and constraints).

Applicants must hold a university degree (Diplom oder Master of Science in biology, bioinformatics, or a related discipline). Familiarity with modern molecular genetic techniques (PCR etc.), genomic data analysis, multivariate statistics and/or field/experimental work on amphibians is desirable.

The University of Potsdam is an equal opportunity employer. If equally qualified, disabled applicants will be preferably considered. The University of Potsdam aims at increasing the number of female researchers and encourages qualified females to apply.

Potsdam is a beautiful city in close vicinity to the German capital of Berlin. Potsdam University takes an effort to assist its members in family-related issues and has repeatedly been awarded the total e-quality award.

Please send your application by email (preferably in a single pdf) before 31st of August 2015 to: Prof. Dr. Ralph Tiedemann, University of Potsdam, Institute of Biochemistry and Biology, Evolutionary Biology/Systematic Zoology, Karl-Liebknecht-Str. 24-25, Haus 26, D-14476 Potsdam, Germany, Email: tiedeman@uni-potsdam.de

Prof. Dr. Ralph Tiedemann Unit of Evolutionary Biology/Systematic Zoology Institute of Biochemistry and Biology University of Potsdam Karl-Liebknecht-Str. 24-25, Haus 26 D-14476 Potsdam Germany Tel: +49-331-977-5249, -5253 (secretary) Fax: +49-331-977-5070 Email tiedeman@uni-potsdam.de www.uni-potsdam.de/ibb/evolution Ralph Tiedemann <tiedeman@uni-potsdam.de>

Switzerland RapidAdaptationGenomics

The Department of Fish Ecology and Evolution (FishEc) located in Kastanienbaum (Lucerne, Switzerland) has a vacancy for a 1 PhD-student in Genomics of Rapid Adaptation.

The notion that evolution can be rapid, when adaptive changes and changes in population size occur at the same time scale, raises questions regarding the genetic basis of adaptive traits and the need to understand the temporal dynamics of adaptive evolution, i.e., how frequent adaptive changes are and what influences the rate of change. Experiments with chemostat systems showed that host (*Chlorella* green algae) and virus rapidly evolved resistance and counter adaptation. The entanglement of the coevolutionary and population size dynamics (eco-evolutionary dynamics) makes this a fascinating study system of rapid evolution. The experiments are replicated and fitness of the populations and individual clones at different time can be assessed.

The PhD project advertised here is aiming to study the underlying genomic changes evolving during experimental host virus coevolution. A goal will be to differentiate between neutral and adaptive changes and characterizing the dynamics of those changes across the time course of the experiments. This will require the development of innovative analysis methods, which make full use of the replicated and innovative experimental setup aiming to disentangle the effect of selection and demography.

The successful candidate will have substantial opportunities to develop his or her own research skills and to assist in the supervision of Bachelors, and Master students. The work will consist of the analysis of next generation whole genome data, the development of bioinformatics pipelines and tools, and the interpretation and publication of the results. This study will be carried out in a close collaboration between the Fish Genomics group at Eawag Kastanien-

baum (<http://www.eawag.ch/en/department/fishec/-main-focus/fish-genomics/>) and Lutz Becks and the group of Community Dynamics at the Max Planck Institute for Evolutionary Biology in Plön (<http://web.evolbio.mpg.de/comdyn/Site/Welcome.html>).

Applications are sought from individuals with a profound interest in Bioinformatics and Evolutionary Genomics. Applicants should have earned a MSc-degree (or equivalent) in a relevant field of evolutionary biology, or bioinformatics. Excellent communication skills in English and skills in team work are essential. The position is financed by the Swiss National Science Foundation.

We are a research department of Eawag (Department of Fish Ecology and Evolution; <http://www.eawag.ch/forschung/fishec/index.EN>) and a division (Aquatic Ecology) of the Institute of Ecology and Evolution of the University of Bern, and the successful candidate will have a unique possibility to take advantage of both these excellent academic environments. The work place is at Eawag's Center for Ecology, Evolution and Biogeochemistry in Kastanienbaum, Lucerne, which besides the Fish Ecology and Evolution Department hosts research group from the Departments "Aquatic Ecology" and "Surface Waters - Research & Management" and offers a beautiful workplace at the shores of Lake Lucerne, a friendly international working climate and a strong cross-disciplinary research environment. The successful candidate will be enrolled in the University of Bern PhD-student program.

Applications must be submitted by 31 September 2015 and should include an application letter describing your interests and their relevance to this position, a CV, university diplomas, and the names and contact information for two references. Eawag is an equal opportunity employer. Women are explicitly encouraged to apply. The starting date for the position is anticipated as soon as possible. For further information, please contact Philine Feulner (philine.feulner@eawag.ch; +41 58 765 21 06)

We look forward to receiving your application through our webpage, any other way of applying will not be considered. Please follow the link <https://apply.refline.ch/673277/0393/pub/1/index.html>, this will take you to the application form.

"Feulner, Philine" <Philine.Feulner@eawag.ch>

TexasTechU GenomicsMolecularEvolution

The Ray laboratory in the Department of Biological Sciences at Texas Tech University is looking for motivated graduate students to perform research in the area of animal genomics, molecular evolution, and bioinformatics. The laboratory focuses on using cutting edge computational resources and bioinformatic tools to study the evolution of genomes at a broad taxonomic scale. In particular, we examine patterns of transposable element activity, small RNAs, genome structure and transcriptomics in a variety of taxa including bats, rodents, crocodylians, and insects. We study the impact of all of these processes on taxonomic diversity. Recent (2014/2015) publications have appeared in Science, Molecular Biology and Evolution, Genome Biology and Evolution, Genomics, and Mobile DNA. Research includes a combination of field and laboratory studies.

Multiple positions are open and we encourage students to apply for the academic year beginning in August of 2016. Applicants should preferably have or should be finishing a master's degree and have a desire to learn and use bioinformatics tools and/or develop their own. Teaching and research assistantships are available to support graduate students in an active and competitive research environment. For more information on our research, field work, and a comprehensive list of publications, please direct your browser to www.davidraylab.com or write to david.a.ray@ttu.edu.

Texas Tech harbors a vibrant research community in the South Plains of West Texas. The Department of Biological Sciences at TTU has particular strengths in Evolutionary Biology, Genomics, Molecular Biology and Ecology. We have a close working relationship with the Genetic Resources Collection at the Natural Sciences Research Laboratory (NSRL) housed at the Museum of Texas Tech. For more information about the department, visit <http://www.biol.ttu.edu>. – David A. Ray

Associate Professor Department of Biological Sciences Texas Tech University Phone: (806) 834-1677 www.davidraylab.com www.crocgenomes.org/-david.4.ray@gmail.com

Even the best of us have bad days. "I am very poorly today and very stupid and hate everyone and everything."
- Charles Darwin - Oct. 1, 1861

David Ray <david.4.ray@gmail.com>

TrentU AdaptiveGenomics

Graduate Students in Adaptive Genomics

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

Please submit applications to:

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

or

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

UBasel HostPathogenCoevolution

University of Basel, Switzerland

PhD-position in host-pathogen interactions

is available in the group of Dieter Ebert at Basel University, Basel, Switzerland. I am looking for a highly motivated candidate with interests in evolutionary genetics and host-parasite interactions. The PhD project is concerned with the coevolution of the bacterium *Pasteuria ramosa* and its host *Daphnia magna*. The aim of the project is to gain insights into the genetic interactions of the pathogen and its host using field-based, experimental and population genetic/genomic approaches. The position is supported by the Swiss National Science Foundation and the University of Basel. The Ebert research group covers the entire range from epidemiological and ecological aspects of host-symbiont interactions, to studies on the population genetics and genomics of hosts and symbionts. For more information see: <http://evolution.unibas.ch/ebert/> Starting date for the PhD is negotiable (any time from October 2015 onwards). Speaking German is helpful in every day life in Basel, but is not a requirement. The working language in the group is English. A Diploma or Master degree (or equivalent) in biology or related subject is necessary for admission.

Please send your application by email (all material in one PDF please) to Dieter Ebert. Applications should include a CV, a list of publications and a statement about research interests (motivation letter). Please give names and email addresses of two persons who are willing to write a letter of recommendation. Application deadline is 7. Sept. 2015.

Further information and address for application: Prof. Dr. Dieter Ebert, University of Basel, Institute of Zoology, Basel, Switzerland, Email: dieter.ebert@unibas.ch Tel. +41-(0)61-267 03 60. Web: <http://evolution.unibas.ch/ebert/> You may come and find me during the ESEB meeting in August in Lausanne.

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

UColorado Boulder 2 LichenGenomics

We are currently seeking applications for 2 PhD students – one to be based at The University of Colorado, and one to be based at The New York Botanical Garden – to advance research on a recently funded project on biodiversity gradients in a global lichen diversity hotspot: the Southern Appalachian Mountains of eastern North America.

The PhD students will be expected to develop an independent research project pertinent to the theme of lichen biodiversity gradients in the southern Appalachians. This research will draw evidence from diverse fields such as genomics, fieldwork, and systematic biology including:

-intensive field study and biodiversity inventory -
molecular systematics, taxonomy, phylogenomics -
biodiversity gradients, biogeography, endemism -large
scale genome assemblies for algal and fungal symbiotic
partners -outreach and conservation

Prior experience or training in lichenology or mycology are preferred. The PhD position is to be begin in the fall of 2016 (refer to our respective websites for information on admissions to our programs).

Prospective students should inquire directly with Erin Tripp (erin.tripp@colorado.edu; University of Colorado) or James Lendemer (jlendemer@nybg.org; New York Botanical Garden), including your CV as well as statement of interest in your inquiry.

Assistant Professor, Department of Ecology & Evolutionary Biology Curator of Botany, Museum of Natural History (COLO Herbarium) University of Colorado, Boulder C105 Ramaley Hall, Campus Box 334 Boulder, CO 80309-0350 phone: 303.492.1862 (EBIO) phone: 303.492.2462 (Herbarium) fax: 303.492.0823 (or 4195)

Erin Tripp <erin.tripp@colorado.edu>

UGreifswald Germany BirdEvolutionaryPhysiology

University of Greifswald, Zoological Institute and Museum

PhD position in Animal Ecology

Application deadline: 30.09.2015

The Department of Animal Ecology, Zoological Institute and Museum at the University of Greifswald invites applications for a PhD position.

Starting date: November 1st 2015.

Duration: 3 years.

Salary: German salary scale (TV-L 13, 65%).

We are seeking a highly motivated PhD candidate with interests in ecophysiology, behavioural ecology and evolution. The general aim of the PhD project is to characterize the threat that heat waves may constitute for a tropical bird species (Gouldian finch), and how variation in terms of oxidative status may participate to this threat. Towards this end, the candidate will measure the effects of high temperature on (i) oxidative markers, (ii) fertility and fecundity markers, and (iii) ageing markers. The candidate will also examine whether these effects can be alleviated by the consumption of natural food resources of high antioxidant potency. The whole project will be conducted in captivity at the University of Greifswald, but also includes collaborative work with the universities of Groningen, Neufchatel and Strasbourg.

The successful candidate will hold a Masters in Biology or equivalent (e.g. Dr. Vet. Med), and will have a strong background in behavioural ecology and/or physiology. Prior work with birds or mammals and laboratory work will be advantageous. English communication skills are essential and some German knowledge might also be useful. The successful candidate will be expected to take actively part to the set-up and the organization of the project, as well as to take care of birds. Finally, she/he will have the opportunity to take part to the Graduate School RESPONSE as associated doctoral researcher (<http://www.mnf.uni-greifswald.de/institute/-fr-biologie/graduierntenkolleg-rtg-2010.html>).

The department of Animal Ecology works in the field of evolutionary ecology, focusing on life-history evolution, stress adaptation and reproductive biol-

ogy. Current projects focus on temperature stress resistance, temperature-mediated plasticity, reproductive resource allocation, sexual selection and sexual conflict. For further information on our research, please visit <http://www.mnf.uni-greifswald.de/-institute/fr-biologie/institute-und-forschung/zool-institut-museum/tieroekologie.html> and https://www.researchgate.net/profile/Michael_Beaulieu2

Greifswald is a small and pleasant university town located on the coast of the Baltic Sea between the islands of Rügen and Usedom. The region offers great opportunities for outdoor activities and bird watching. Large cities like Berlin and Hambourg are easy to reach.

Applications should include:

- (1) a cover letter with a short statement of motivation,
- (2) a short statement of research accomplishments (max. 1 page),
- (3) a CV,
- (4) a list of publications (if any),
- (5) the contact details of one or two academic referees.

Applications should be submitted electronically as a single PDF file to: Dr. Michaël Beaulieu e-mail: beaulieum@uni-greifswald.de

The University of Greifswald is an equal opportunity employer.

For any enquiries, please contact Michaël Beaulieu via e-mail.

Dr. Michaël Beaulieu Zoological Institute & Museum Greifswald University J.-S.-Bach-Str. 11/12 D-17489 Greifswald Phone: +49-3834-864266 Fax: +49-3834-864252 "Dr. Michaël Beaulieu" <beaulieum@uni-greifswald.de>

Michael Beaulieu <miklvet@hotmail.fr>

UInnsbruck Wolbachia Evolution 2

MOLECULAR ECOLOGY, INSTITUTE OF ECOLOGY, UNIVERSITY OF INNSBRUCK PhD student position in Wolbachia transinfection: deadline for application extended to 20 August 2015

We seek to hire a PhD student with training in ecological and especially molecular-biological methods; some research experience with arthropods and/or Wolbachia or other bacterial endosymbionts would be an asset but is not required. The position is a 48-months position at

the Molecular Ecology group of the Institute of Ecology, starting from 1 October 2015; for details, see below.

Focusing on the Alpine Space, the group's mission is interdisciplinary research, embedded in international collaboration networks. A list of research topics can be found at: http://www.uibk.ac.at/ecology/-forschung/molecular_ecology.html.en .

Responsibilities
 1. transinfecting the climate-change study system *Drosophila nigrosparsa* with *Wolbachia*
 2. characterising endosymbiont phenotype(s), e.g. cytoplasmic incompatibility, sex ratio distortion
 3. characterising endosymbiont tropism(s)
 4. evaluating endosymbiont influence on host life history traits
 5. evaluating endosymbiont influence on host gene expression using Illumina sequencing (RNA-seq)
 6. manuscript writing
 7. contact and collaboration with scientists at other Austrian and international research facilities
 8. teaching 1 hour/week

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

Salary The annual minimum gross salary is Euro 18,634. The salary will be higher if you have worked in a similar position before. The contract includes full social (health, unemployment, annuity) insurance and 5 weeks of holidays annually.

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

D. nigrosparsa using egg cytoplasm microinjection. After successful transinfection, the fly lines will be used to study tropism, phenotypes, and life history trait alterations of the novel endosymbiont/host interaction in the laboratory.

How to apply To apply, please submit via the job portal of the university at http://orawww.uibk.ac.at/-public/karriereportal.details?asg_id_in=3D8484: a cover letter, systematic point-by-point replies as to your readiness for the responsibilities and how you meet the selection criteria, curriculum vitae, and complete list of publications. Arrange for at least one letter of recommendation to be sent to <birgit.schlick-steiner@uibk.ac.at>.

Applications must be written in English. The deadline for receipt of all applications has been extended to 20 August 2015. ***The research institution and its environment*** Detailed information about the Molecular Ecology group can be found at <http://www.uibk.ac.at/-ecology/forschung/molecular.ecology.html.en>. The University of Innsbruck has a long-standing and internationally renowned tradition in life sciences and offers a vibrant research atmosphere. It has 28,000 students and 4,500 staff members. Innsbruck is situated in the Alps and very close to Switzerland, Germany, and Italy; scenery and outdoor recreation are fantastic.

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

Birgit C. Schlick-Steiner

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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>

UKiel PopulationGenomics AntibioticResistance

The Department of Evolutionary Ecology and Genetics at the Zoological Institute of the University of Kiel is seeking to fill a position within the research project “Population Genomics of antibiotic resistance” for a

PhD student (m/f)

Deadline for applications: 30 August 2015. Start of position: October 2015 or soon afterwards.

The position will be for three years. The regular weekly working hours amount to 65% of a full time position (at the moment 25.155 hours). The salary will be according to the German TV-L-13 pay scale.

*Project: *

The alarming spread of resistant bacteria is complicating even the most routine clinical interventions. Case in point are highly resistant *Pseudomonas aeruginosa*/, which cause almost untreatable respiratory and wound infections in the hospital, and play a driving role in cystic fibrosis.

Our research program is aimed at investigating ways in which existing antibiotics can be intelligently used to prevent or at least slow down the evolution of resistance. The project will involve *in vitro*/experimental evolution using *Pseudomonas aeruginosa*/and subsequent phenotypic, genomic and functional-genetic analyses of resistant strains. The aim of this PhD project is to study the role of population-genetic/genomic processes in rapid evolution of resistance during combination therapy.

The project is funded by the German Science Foundation (DFG, Priority Program SPP1819 Rapid Evolution) and will be based in the Department of Evolutionary Ecology and Genetics at the University of Kiel, Northern Germany, under the supervision of Dr. Gunther Jansen (<http://www.uni-kiel.de/zoologie/evoecogen/-antibiotics/>). The department provides an international and interactive atmosphere, while Kiel University and connected institutes (e.g., Max Planck Institute in Ploen) offer a stimulating research environment with a particular focus on evolutionary biology. The city of Kiel is a medium-sized pleasant town located at the coast of the Baltic Sea. It is the capital of the most Northern state of Germany, Schleswig-Holstein. It offers many opportunities for leisure activities, including theatres, an opera, the Schleswig-Holstein classical music festival, the world’s largest metal festival in Wacken, sailing, surfing, cycling, and the famous festivities of the “Kieler Woche” – one of the major sailing events in Europe.

Requirements for the position:

Master in biology, genetics, microbiology, biochemistry or related topic; excellent background in microbiology, evolution, genetics and statistics; knowledge of basic molecular techniques; experience with complex experimental designs; high motivation; a collaborative spirit; fluency in English is a must.

The University of Kiel strives to increase the proportion of women in research and education. It therefore encourages qualified women to apply. Women will be preferred

in cases of comparable qualifications. It also explicitly welcomes applications from people with a migratory background. The University further makes an effort to employ disabled people and will prefer such candidates in case of equal qualification.

Please send applications with CV, one-page statement of research interests, and two references, as a pdf-file by email to gjansen@zoologie.uni-kiel.de. Please refrain from submitting photos. For further details and questions, you are welcome to contact me at gjansen@zoologie.uni-kiel.de.

I look forward to your application!

–

Gunther Jansen, PhD Department of Evolutionary Ecology and Genetics Zoological Institute Christian-Albrechts-Universitaet zu Kiel Am Botanischen Garten 1-9 24118 Kiel Germany Tel.: +49 431 880 4148 Fax: +49 431 880 2403 Email: gjansen@zoologie.uni-kiel.de URL: <http://www.uni-kiel.de/zoologie/evoecogen/jansen/> <http://www.uni-kiel.de/zoologie/evoecogen/evolreservoirs/> Gunther Jansen <gjansen@zoologie.uni-kiel.de>

UlmU Germany MolecularEvolution

*Two MSc projects at the Institute of Evolutionary Ecology and Conservation Genomics, Ulm University, Germany** ** *Start September/October 2015*

Project description The Greater Flamingo, *Phoenicopterus roseus*, is a partially long-distance migratory and dispersing waterbird species. It is the most abundant avian species in Mediterranean wetlands and feeds intensively in areas where a large number of birds have defecated in shallow waters, which increases the risk of gastrointestinal pathogen infection. It is therefore an ideal model organism to investigate the interactions between MHC diversity, gastrointestinal bacterial communities and fitness of a long-distance dispersing host.

We are seeking two master students to carry out the following two projects:

1. By using a relatively large sample ($n < 400$) of contemporary samples (2014) the student will investigate the association between MHC Class II exon 2 diversity and gastrointestinal bacterial community of breeding populations across the Mediterranean basin.
2. By combining a large number of samples collected in

France ($n < 1000$), a long-term life-history dataset (1995-1998) and recently available next-generation sequencing methods, the master student will identify MHC-fitness trait correlations.

Project qualifications The applicants should have a degree in Molecular Biology/Zoology/Ecology/Evolution or similar discipline. We are looking for candidates who have some experience working in a molecular laboratory and are prepared to learn state of the art next generation sequencing methods. Both successful applicants will be expected to work closely in the lab since they will be both doing very similar work, albeit on different samples. The students must also be enthusiastic about both working in the laboratory and learning complex statistical models (particularly project 2 which will require capture-mark-recapture models). Finally candidates should be proficient in speaking and writing in English.

How to apply To apply please send a CV and a letter of motivation by email to:

mark.gillingham@uni-ulm.de

More project information can be found at <http://www.uni-ulm.de/nawi/bio3/prof-dr-simone-sommer/-research-associates/dr-mark-gillingham.html>. Prospective applicants are also welcome to inquire about further information.

– Dr. Mark Gillingham University of Ulm Institute of Evolutionary Ecology and Conservation Genomics Albert-Einstein Allee 11 D-89069 Ulm Tel.: 0049-731-5022660 Fax: 0049-731-5022683 mark.gillingham@uni-ulm.de

Mark Gillingham <mark.gillingham@uni-ulm.de>

UMelbourne EvolutionAnimalColourSignals

PhD Project Available (Commencing 2016) School of BioSciences, The University of Melbourne, Victoria, Australia, 3010 Causes of Colour: Mechanisms of colour production and evolution of animal signals.

We are seeking a PhD student to work on an ARC-funded project starting in 2016, investigating how stress affects both pigment deposition and nano-structures of cells and tissues which together produce colour.

The mechanisms underlying colour production have fundamental implications for the costs and constraints on

colour signals. This project will investigate how diverse colours are produced in reptiles and the information these colours convey about individual health, condition and performance.

The main aims are to identify the factors driving the evolution of two different classes of pigment (pteridineâ versus carotenoid) based signals among species; test whether pteridine and carotenoidâbased signals differ in the information they convey about individual health, condition and performance; evaluate how stress influences pteridineâ versus carotenoidâ based colours, the underlying reflective structures, and their interaction. This PhD project may involve fieldwork throughout Australia, as well as laboratory work.

The student will need to obtain an Australian Post-graduate Award (APA; \$25,849 per year, or an IPRS for international students) through The University of Melbourne; therefore a first-class Honours or Masters Degree and/ or evidence of publishing in international peer-reviewed scientific journals are essential.

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

Closing date for applications is 25th September 2015.

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

Dr. Devi Stuart-Fox

d.stuart-fox@unimelb.edu.au

devistuartfox.com

Katrina Rankin <katrina.rankin@unimelb.edu.au>

UNewBrunswick StJohn 2 CodPopulationGenomics

PhD Position in Ecological Genomics at University of New Brunswick Saint John: Atlantic Cod Population Genomics (Winter or Summer 2016)

A position is available for a PhD student to participate in an integrated Atlantic Cod genomics research program. The student will use cutting edge genomics techniques to assess population structure, adaptive genetic variability, and genotype-phenotype associations in recovering Atlantic Cod populations in Atlantic Canada. The student will be part of a new Canada Research

Chair lab in Aquatic Molecular Ecology and Ecological Genomics at the University of New Brunswick in Saint John.

Funding is available for a stipend or top-up bonus for students with funding. The student will use state-of-the-art laboratory equipment, including robotics, to streamline repetitive tasks and will have priority access to a high-powered computer with 1.5 TB of RAM for bioinformatics. The lab is located at the Canadian Rivers Institute (www.canadianriversinstitute.ca).

Strong candidates will have a solid quantitative background with experience in genetics and genomics lab work and/or bioinformatics. Candidates must have a positive attitude and willingness to work with a team. Experience in programing with R, Python or Perl computer languages is a plus.

The position will begin in the winter or summer term of 2016. Submit a Cover Letter, CV, contact information for three references and unofficial transcripts that include course names to Dr. Scott Pavey (scott.pavey@unb.ca). Application packages will be accepted until the position is filled.

MSc. Position in Ecological Genomics at University of New Brunswick Saint John: Striped Bass Adaptation (Winter or Summer 2016)

A position is available for a Masters of Science student to participate in an integrated Striped Bass genomics research program. The student will use ecologically divergent populations and full-genome re-sequencing to determine the genetic basis of adaptation. The student will be part of a new Canada Research Chair lab in Aquatic Molecular Ecology and Ecological Genomics at the University of New Brunswick in Saint John.

Funding is available for a stipend or top-up bonus for students with funding. The student will use state-of-the-art laboratory equipment, including robotics, to streamline repetitive tasks and will have priority access to a high-powered computer with 1.5 TB of RAM for bioinformatics. The lab is located at the Canadian Rivers Institute (www.canadianriversinstitute.ca).

Suitable candidates will have a solid quantitative background with experience in genetics and genomics lab work and/or bioinformatics. Candidates must have a positive attitude and willingness to work with a team. Experience in programing with R, Python or Perl computer languages is a plus.

The position will begin in the winter or summer term of 2016. Submit a Cover Letter, CV, contact information for three references and unofficial tran-

scripts that include course names to Dr. Scott Pavey (scott.pavey@unb.ca). Application packages will be accepted until the position is filled.

– Scott A. Pavey PhD Canada Research Chair in Aquatic Molecular Ecology and Ecological Genomics Department of Biological Sciences & Canadian Rivers Institute 100 Tucker Park Road University of New Brunswick Saint John Saint John, New Brunswick, Canada, E2L 4L5 Office: CRI 201 Lab: CRI: 215 Lab website: www.scottpavey.com < <http://www.unb.ca/saintjohn/sase/research/kiddlab/index.html> > CRI website: www.canadianriversinstitute.com Ph. 506-638-2434

Scott Pavey <scottpavey@gmail.com>

UOtago EpigeneticInheritance

PhD position studying the effect of parental experience on transgenerational epigenetic inheritance in fish

Parents influence their offspring in multiple ways, but recent studies have highlighted the role of non-genetic (epigenetic) pathways. Revolutionary new work suggests that life-history challenges experienced by parents may be transmitted epigenetically to increase offspring fitness. We seek a highly motivated and enthusiastic student to investigate whether environmental challenges experienced affect the fitness of multiple generations, and to identify key candidate genes for transgenerational effects. This work will use a vertebrate model, the zebrafish (*Danio rerio*), and involves extensive experimental work manipulating environmental stressors (e.g. toxins, hypoxia), personality and life-history phenotyping, breeding the lines through to obtain multi-generational data, and the generation and analysis of next-generation sequence data. This work involves an exciting multidisciplinary team led by Dr. Sheri Johnson (Department of Zoology, University of Otago, New Zealand): two collaborators from Otago (Prof Neil Gemmell and Dr Tim Hore in the Department of Anatomy), a collaborator at the University of New South Wales (Associate Prof Shinichi Nakagawa) and a collaborator from Uppsala University (Associate Prof Simone Immler).

Selection criteria: We seek a student with a strong academic record, a keen interest in behavioural ecology, appropriate practical and technical experience, and a demonstrated ability in written and oral communication.

Application/scholarship details: If you are interested in joining our exciting project at Otago, please send an e-mail with an expression of interest, explaining why you are interested in this project, and your CV to Sheri Johnson (sheri.johnson@otago.ac.nz). High quality applicants will apply for an Otago PhD scholarship, which covers tuition and provides a stipend (\$25000 NZD/year).

The position will remain advertised until filled.

For information on PhD study at the University of Otago, including entry requirements, see: <http://www.otago.ac.nz/postgraduate/index.html> . For information on the Department of Zoology, see: <http://www.otago.ac.nz/zoology> . Sheri L. Johnson, PhD

Lecturer of Behavioural Ecology
sheri.johnson@otago.ac.nz Department of Zoology |
M102 University of Otago | Te Whare Wānanga o
Ōtago Box 56 Dunedin 9054 New Zealand ☎340
Great King St ☎P (64) (3) 479- 7929 ☎F (64) (3)
479-7584 ☎<http://www.otago.ac.nz/Zoology> Sheri
Johnson <sheri.johnson@otago.ac.nz>

URhodeIsland ComputationalNGS

The Zhang lab at the University of Rhode Island invites applicants for graduate students positions in the computational analysis of next-generation sequencing data. We are specifically interested in the comparative analysis of meta-omics and mathematical modeling of metabolic activities. More information can be found at <http://zhanglab.uri.edu/> Applicants for this position should have a BS or MS degree in bioinformatics, microbiology, environmental sciences, computer sciences, or related fields. Proficiency in computer programming (e.g. in Python, C, etc) and familiarity with the Linux command-line systems are expected. Good analytical skills and previous trainings in statistics will be considered favorably. Some experience with basic laboratory skills in molecular biology, including DNA/RNA extraction, PCR, electrophoresis and DNA sequencing will be an asset, but not required. Interested applicants should contact Dr. Ying Zhang (yingzhang@uri.edu) to discuss eligibility and potential projects.

Thanks, Ying

*** New email address: yingzhang@uri.edu ***

Ying Zhang Assistant Professor Department of Cell and

Molecular Biology College of the Environment and Life Sciences University of Rhode Island

Ying Zhang <yingzhang@uri.edu>

USaskatchewan LentilGenomics

Graduate student opportunity

START DATE: September 2015 or January 2016

SUMMARY OF RESEARCH: The overall goal of our large scale lentil genomics project is to develop and apply genomic tools in the lentil breeding program at the University of Saskatchewan to improve the productivity of Canadian lentils. Extensive genotyping and phenotyping will be conducted to characterize the primary and secondary gene pools of the genus *Lens*. The information will then be used to gain better understanding of the adaptation and domestication processes of lentil in three main growing regions of the world. Specifically, this position will involve population genomic analysis of exome capture and other next generation sequencing datasets as well as analysis of phenotypic datasets. It is anticipated that resources and tools arising from this project will allow breeders to better use exotic germplasm and wild relatives to expand the genetic diversity of the Canadian lentil breeding program.

QUALIFICATIONS: Ph.D. applicants should have (or expect to soon complete) a M.Sc. degree from a recognized University. A publication record is a definite asset.

****PLEASE NOTE:** The graduate student must be able to travel to the United States on a regular basis to complete some of the research components**

Successful applicants will have a strong academic background and will be expected to apply for scholarship funding if selected for the position. A strong commitment to pursuing a research career, good communication and writing skills, and the ability to work in a team environment are essential qualities. A successful application to the College of Graduate Studies and Research at the University of Saskatchewan will be required. Information on College admission requirements and application forms can be obtained at www.usask.ca/cgsr **ORGANIZATIONS/LOCATIONS:** The Pulse Crop Research Group at the Department of Plant Sciences, University of Saskatchewan, Saskatoon, Canada is unique in its scope and expertise in pulse crop research, and is home to one of the largest pulse crop (lentil, pea, chickpea,

common bean, faba bean) breeding programs in the world.

<http://agbio.usask.ca/departments/plant-sciences/-index.php> This project is in collaboration with Florida International University (FIU) in Miami, Florida, USA. FIU, located at the edge of Everglades National Park, is the largest Hispanic-serving public university in the US with strengths in ecology and agroecology. Faculty and students at FIU work closely with several botanic gardens, including the US National Tropical Botanic Garden and Fairchild Tropical Botanic Garden.

ADDITIONAL INFORMATION: Please refer to <http://agbio.usask.ca/students/graduate/index.php> for additional information regarding graduate programs at the Department of Plant Sciences, College of Agriculture and Bioresources. **SALARY:** \$24,000/yr for 4 years for a Ph.D. student

TO APPLY: Submit your curriculum vita, a one-page statement of research experience and interests, names and contact information for three (3) references to Drs. Kirstin Bett and Eric von Wettberg (c/o: Crystal Chan, crystal.chan@usask.ca)

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

Eric J Bishop-von Wettberg <ebishopv@fiu.edu>

UTasmania BeetleBarcoding

PhD project in molecular approaches to applied forest conservation and biomonitoring - Tasmania, Australia

The project is supported by an Australian Research Council Linkage grant "A new integrated approach for ecologically sustainable forest management" in collaboration with state forest management agencies Forestry Tasmania and VicForests. The project will compare managed tall wet eucalypt forest landscapes in Tasmania and Victoria with varying amounts and configurations of mature forest. A challenge in both landscapes is balancing timber supply with habitat conservation for biodiversity. Advanced technologies will be developed for monitoring forest biodiversity and assessing biological responses to forest age and fragmentation. Decision theoretic approaches will be developed to assist forest managers to optimise retention strategies for conservation.

One of the PhD projects (based in the Biological Sci-

ences School at UTAS) will develop next generation DNA technology for beetles. Traditional morphology-based identification will be combined with the latest molecular methods to develop metabarcoding approaches that can identify species and potentially provide information on relative abundance of beetles from field-samples. Responses of beetles to forest landscapes will be quantified, and patterns of community assemblage investigated phylogenetically. A background in molecular approaches and good quantitative (bioinformatics) skills would be beneficial.

Eligibility The ARC grant provides funding for project running costs and top-up scholarships (\$7,000 per year for 3.5 years). Students would need to be able to obtain their own base-level scholarship, most likely through the UTAS competitive scheme (~\$23,000 per year for 3.5 years), where scholarships are available to both domestic (Australian and New Zealand) and International candidates. Successful applicants will hold a first class Honours or Masters degree or an equivalent combination of qualifications and experience. In addition, at least one previous publication in a reputable international journal will greatly improve the likelihood of attaining a scholarship. Applicants with other sources of scholarship funds will be considered. With respect to the project, applicants must be proficient in spoken and written English and molecular laboratory techniques (NGS desirable). Note that Scholarship application rounds at UTAS close at the end of September and October for International and Domestic applicants, respectively.

Environment The University of Tasmania is one of Australia's top 10 research Universities, and within which, the School of Biological Sciences is the research-leading school, containing a vibrant mixture and diversity of research activities, students, and academics. Hobart provides a low-cost-of-living environment with benign climate and proximity to wilderness areas (including World Heritage Areas). Animal-based DNA-related research within the School are detailed at www.evogentas.org. Enquiries Interested applicants should contact Dr Chris Burridge (chris.burridge@utas.edu.au). Please include a statement of your background and interest, your Curriculum Vitae, and a copy of your undergraduate academic transcripts.

Chris Burridge | Senior Lecturer, Molecular Ecology & Evolution School of Biological Sciences | University of Tasmania | Private Bag 55 | Hobart | Tasmania 7001 | Australia Room 320a Life Sciences Building | Ph +61 3 6226 7653 | Fax +61 3 6226 2698 | https://rmdb.research.utas.edu.au/public/rmdb/q/indiv_detail_warp_trans/3975#research-tab-5 <http://scholar.google.com.au/citations?user=3D4cYH8ZYAAA&hl=3Den> [evogentas.org](http://www.evogentas.org)

"Chris.Burridge@utas.edu.au"
<Chris.Burridge@utas.edu.au>

UTromse Norway Metabarcoding

UTromsøe_Norway.PhD.candidate.Metabarcoding

Application deadline: 15.09.2015

Ref.no: 2015/399

Tromsø University Museum has a PhD position vacant from 1st of July 2015 for applicants who wish to obtain the degree of Philosophiae Doctor (PhD). The position is attached to the research group in taxonomy and biodiversity.

The appointment is for a period of four years.

The PhD position will be connected to two ongoing projects. 1) The Norwegian Barcode of Life project (NorBol, <http://www.norbol.org/en/>) is a national network of research institutions collaborating on DNA barcoding of organisms in Norway and a regional node in the International Barcode of Life Project (iBOL <<http://www.ibol.org/>>). For vascular plants, we do low coverage shotgun sequencing of genomic DNA and assemble the whole plastid DNA, nuclear rDNA and large parts of mitochondrial genome. 2) The After Ice DNA Metabarcoding project (<http://en.uit.no/ansatte/-inger.g.alsos>) explores the occurrence of boreal species at northern latitudes by ancient DNA analyses using the P6 loop of the plastid DNA trnL (UUA) intron. Lake sediments have been collected at key sites for palaeoenvironmental reconstructions in Norway and Svalbard.

The PhD candidate will bridge these projects by developing laboratory and bioinformatic tools to apply shotgun sequencing on the ancient samples. This will provide valuable data which the candidate will use to explore effects of past climate change on e.g. species turnover, dispersal, extinction, and phylogenetic diversity. In both projects, we collaborate with colleagues at the University Joseph Fourier in Grenoble, who run similar projects focused on the Alps, and the candidate is expected to spend a 3-6 month research stay there.

[http://www.jobbnorge.no/ledige-stillinger/-116506/phd-candidate-in-metabarcoding-at-tromsøe-university-museum?](http://www.jobbnorge.no/ledige-stillinger/stilling/-116506/phd-candidate-in-metabarcoding-at-tromsøe-university-museum?) Prof. Inger Greve Alsos Tromsø University Museum NO-9037 Tromsø Norway Telephone: +47 77 62 07 96 Telefax: +47 77 64 51 05 Email: inger.g.alsos@uit.no <http://en.uit.no/ansatte/->

inger.g.alsos

UWuerzburg SexEvolution

Evolution of sex determining regulatory networks

Sex can be determined by a plethora of mechanisms and the different mechanisms do not follow a phylogenetic pattern. Moreover sex determination is highly variable, sometimes even among closely related groups of organisms. The current understanding is that the primary signal, which triggers the genetic sex determination cascade, differs between the various groups of organisms, while the downstream regulatory network remained evolutionarily highly conserved. Our recent results and a detailed re-examination of previous work indicate however, that also downstream of the primary sex determiner a great variety of molecular mechanisms exist. This is in stark contrast to the molecular control of other vertebrate organ systems. So far, no explanation has been offered how such a variety in the molecular pathways of sexual development is possible and why it exists.

Teleost fish show a particular wide variety of sex determination mechanisms were even sister species can have totally different modes how the male vs. female decision during embryogenesis is made. We use fish of the genus /*Oryzias*/ (medaka and related species) as models to approach three major questions:

- 1.) Are different SD mechanisms triggering the same, related or totally specific molecular pathways during the process of the fate differentiation of the gonad anlage?
- 2.) How stable are SD mechanisms in evolutionary terms?
- 3.) What is the evolutionary meaning of the high variability of sex determination mechanisms?

The PhD project will focus on the identification of chromosomal sex determination mechanisms in different species of the genus and a comparative molecular characterization of regulatory interactions of a known sex determining genetic network from the medaka /*Oryzias latipes*/ in related species with similar or divergent sex determining mechanisms. On the methodological level the project will include up to date new sequencing technologies (RAD-tags, RNA-seq, ChIP-seq) and the toolbox for functional analyses in evolutionary developmental biology (in-vivo bioimaging, conventional transgenesis and genome editing by CRISPR/Cas9).

The PhD project is embedded in a binational collaboration between the INRA institute for fish physiology and genomics in Rennes, France and the Biocenter of the University in Würzburg, Germany. The PhD student will be enrolled at the International Graduate School of Würzburg and work at both locations according to the experimental plan during the progress of the project.

For more details and practical information, please contact Prof. Dr. Manfred Schartl (phch1@biozentrum.uni-wuerzburg.de) at Würzburg.

For application, please send a detailed CV, letter of motivation, copies of Bachelor/Masters certificate (or equivalent) and a transcript of records.

Manfred Schartl <phch1@biozentrum.uni-wuerzburg.de>

UZurich 2 Evolution

Two PhD positions. University of Zurich, Institute of systematic Botany and Institute of Plant Biology.

RESEARCH PROJECT: The most prominent biphasic organisms are multicellular land plants, where a haploid gametophyte phase alters with a diploid sporophyte phase. It is widely agreed that embryophyte land plants have originated from a haplontic ancestor with the evolution and subsequent elaboration of the sporophyte and a parallel reduction of the gametophyte phase. The bryophytes, the most basal group of extant land plants, have subordinate, unbranched, monosporangiate and upright sporophytes that remain attached to and nurtured by the gametophyte generation. By contrast, vascular land plants have established complex branched sporophytes consisting of a diversity of vegetative and reproductive organs. In spite of its evolutionary significance, information on the detailed developmental and genetic mechanisms underlining the elaboration of the sporophyte phase remains fragmentary. Advancement in the field is primarily hindered by the lack of appropriate model systems in basal groups of land plants.

Our project proposes to fill this gap by providing a detailed account on the regulatory mechanism governing sporophyte development in the most basal group of extant land plants, the bryophytes. Importantly, we have recently established two new model species, one for mosses and one for hornworts, making this research feasible. More specifically, we propose (1) to investigate the regulatory networks governing the development of

the sporophyte in two major groups of bryophytes, the mosses and hornworts, using laser capture micro dissection assisted RNA sequencing; (2) to reconstruct the putative regulatory networks of bryophyte sporophyte development and to assess their homology with developmental mechanisms of angiosperms; and (3) finally, to begin to experimentally verify the regulatory function of candidate genes using reverse genetics.

This project is funded by a Swiss National Science Foundation (SNSF) grant.

The Institute of Systematic Botany hosts research groups working on the evolutionary and ecological drivers of biodiversity, on the macroevolution of plants, on plant-insect interactions/pollination, on the evolution of mating systems, hybridization and speciation. The Institute of Plant Biology hosts many groups working on plant molecular and developmental biology, epigenetics, community genomics and plant adaptation. Both institutes are housed in the beautiful Botanical Gardens and host a diverse community of researchers in plant biology.

Ideal candidates will have an MSc in biology with a specialization in evolution, developmental genetics and/or bioinformatics. They should be experienced in laboratory techniques (DNA/RNA extraction, PCR and RT-PCR, DNA sequencing, molecular cloning, plant transformation, In Situ Hybridization) with advanced skills in handling, analyzing and interpreting high-throughput next-generation sequencing and RNA-seq data. The position is initially for three years. Selected candidates will be enrolled in one of the two affiliated PHD schools in evolution or plant sciences.

CLOSING DATE: The positions are opened until filled, but all application material including CV, a summary of research experience, a letter of motivation, copies of relevant publications (published or submitted) and names and contact information of three reference persons should be received by the 1st of September 2015 to ensure full consideration. The position will start at the earliest possible date but it is negotiable (October 2015). Candidates should indicate in a cover letter when they could take up the position.

Â Please send all application material to: Peter Szovenyi, peter.szoevenyi@uzh.ch, as a single pdf document. For enquiries please contact Peter Szovenyi (peter.szoevenyi@uzh.ch).

Peter Szovenyi Oberassistent University of Zurich Institute of Systematic Botany Zollikerstr 107 CH-8008 Zurich Phone: (+41) 044 63 48418 <http://www.systbot.uzh.ch/Personen/ProfessorenundDozenten/szovenyi.html>

AND/OR <http://peterszovenyi.weebly.com> peter.szoevenyi@systbot.uzh.ch

UZurich Evolutionary Genomics

Ph.D. student in molecular evolution at the University of Zurich:

We are seeking a highly motivated Ph.D. student to undertake an interdisciplinary project on the evolution of transcriptional regulation. The project combines experimental and computational approaches to elucidate the relationship between mutational robustness and cryptic diversity in transcription factor binding sites, and to understand how such diversity may facilitate evolutionary innovation in transcriptional regulation. The project - funded by SystemsX V will be carried out in the laboratory of Prof. Andreas Wagner at the University of Zurich. Dr. Yolanda Schaerli and Dr. Joshua L. Payne will co-mentor the student in the experimental and computational portions of the project, respectively. The duration of funding is three years.

The successful candidate will have a strong background in molecular biology and microbiological techniques. Prior programming experience or coursework in computer science is also highly desirable, as is a demonstrated interest in evolution.

We are looking for an individual with a Masters Degree or equivalent, who is highly motivated and can work independently. The working language in the laboratory is English. German skills, although helpful, are not essential.

Zurich is a highly attractive city in beautiful surroundings, with a multinational population, and many educational and recreational opportunities.

Lab members are a group with very diverse backgrounds and research projects, unified by their interests in evolution and /or fundamental organizational principles of life.

To be considered, please send a single (!) PDF file merged from the following parts to anette.schmid@ieu.uzh.ch: CV including publication list (if available), a scanned academic transcript (list of grades in university courses), a statement of research interests not exceeding two pages, and three references. Please write for SystemsX iPhD position in the subject line. Applications will be considered until the position is filled. The desired starting date is January 1st, 2016

or earlier.

Further information about Prof. Wagner and Drs. Schaerli and Payne can be found at the following links:

<http://www.ieu.uzh.ch/wagner/> <http://www.ieu.uzh.ch/staff/leaders/schaerli.html>
<http://www.ieu.uzh.ch/staff/leaders/joshuapayne.html>
 Joshua Payne <joshua.payne@ieu.uzh.ch>

Vienna GenomeArchitecture

PhD Project Available (Commencing 2016)

Gregor Mendel Institute, Vienna, Austria

Evolution of genome architecture

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

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

use Marchantia and other related land plant ancestors as models.

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

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

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

Closing date for applications is 01 October 2015

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

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

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

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AgnesScottC EvolutionaryBiol

Although the ad specifies ecology, we are hoping to find an evolutionary ecologist.

Lock

The Agnes Scott College Biology Department invites applications for a tenure-track Assistant Professor in ecology and related areas, to begin August of 2016. A strong commitment to both undergraduate teaching and research is expected. The ideal candidate should be prepared to conduct and publish original research and incorporate undergraduates into his or her research program. The 3/2 teaching load includes introductory biology, a senior seminar course, courses in areas of specialty, and contribution to the college global learning or leadership objectives. A Ph.D. is required by August of 2016, but post-doctoral experience is desired. The successful candidate will possess teaching experience, research publications, and a commitment to work with a socially and economically diverse student population.

Interested applicants should e-mail their curriculum vita, teaching and research statements, and three letters of recommendation to: Prof. Karen J. Thompson, Chair, Department of Biology, biosearch@agnesscott.edu. Teaching evaluations will be solicited from selected candidates later in the hiring process. Review of applications will begin on October 1, 2015.

In addition to the biology major program, the biology department contributes to neuroscience and molecular biology and biochemistry BS programs as well as to en-

vironmental and sustainability studies and public health programs. The biology faculty benefit from excellent laboratory space on campus in a building dedicated to the sciences, and the opportunity to work with other biologists in the Atlanta area. Agnes Scott College is a highly selective, independent national liberal arts college for women located in metropolitan Atlanta, a cosmopolitan and ethnically diverse region with a vibrant cultural life. The college is committed to providing its faculty with a supportive academic environment that includes a balance of teaching, research, and service. Excellence in undergraduate teaching, the establishment of an effective and sustainable research program, and service to the department and the college are necessary for tenure and promotion. Support for faculty development includes travel funding, a one-semester research leave at full pay after successful completion of the third-year review, a post-tenure sabbatical program, and the opportunity to apply for many internal professional development awards. Agnes Scott College has a strong commitment to diversity. The College urges members of underrepresented groups to apply. EOE. www.agnesscott.edu "Rogers, Lock" <lrogers@agnesscott.edu>

BGBM Berlin Germany SciencePolicyCoordinator

The Botanic Garden and Botanical Museum Berlin (BGBM) is a research and collection institution with a strong international network. Our focus is on exploring and conserving, presenting and explaining the world's plant diversity. The BGBM is not only a central sci-

entific hub of the Freie Universität Berlin, but also on the national and international level. It is one of the five largest botanic gardens worldwide.

We are looking for a Science Policy Coordinator Starting date: 1 October 2015, Salary: according to TV-L FU, E 13 (100%)

Responsibilities: - Scientific and administrative assistance to the director in order to strengthen the scientific profile of the BGBM, including: conceptualizing inter- and transdisciplinary research projects on biodiversity and raising research funds, administrating the BGBM's Research Board, and disseminating relevant scientific and political topics within the institution; - Liaison with counterparts at inner-university, local, national and international levels, including the communication and coordination with partner institutions; - Representation of the BGBM and active participation in relevant scientific and political organisations and bodies, on the local, national and international level.

Required qualifications: - University degree in Biology or a related field

Further desired qualifications: - PhD in Botany or another discipline that is relevant for the candidate's responsibilities - in-depth knowledge of the national and international scientific landscape, including research funding schemes, and of the current topics in science and environmental policy; - profound experience and competence in science and project management; - excellent communication and organizational skills; - strong command of German and English (oral and written), and preferentially also Spanish; - demonstrated ability to work efficiently and accountably in an interdisciplinary team, outstanding enthusiasm and a strong commitment to promote and advance our projects.

Please submit your application and documents (CV, certificates) with reference code "Koordinator/in" until 27 August 2015 to av-p@bgbm.org (in PDF format) or to:

Freie Universität Berlin ZE Botanischer Garten und Botanisches Museum Berlin Ms. Sylke Gottwald Königin-Luise-Str. 6-8 14195 Berlin

The original job announcement (in German) can be found here: <http://www.fu-berlin.de/service/stellen/-st.2015/st-20150803/index.html> . — 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@fu-berlin.de" <ludo.muller@fu-berlin.de>

BrighamYoungU Biodiversity

Faculty Position in Biodiversity

The Department of Biology seeks to fill a full-time, Continuing Faculty Status (BYU's equivalent to tenure-track) position focusing on biodiversity. Qualified applicants with a PhD, postdoctoral experience, and expertise in a biodiversity related discipline (including, but not limited to, systematics, evolution, ecology, conservation, organismal biology, population or quantitative genetics, evolutionary development, and biodiversity informatics) are encouraged to apply. The successful candidate is expected to maintain an externally funded research program involving both undergraduate and graduate students. Excellence in teaching is required. Teaching responsibilities will include general biology, and both an undergraduate and graduate course in the candidate's area of expertise. The department offers competitive start-up packages and reduced teaching loads for new faculty. Interested persons should apply online at <https://yjobs.byu.edu> by completing a faculty application, and attaching a current CV and statements of teaching and research interests. Questions may be directed to: Steven L. Peck, Biodiversity Search Committee Chair, 4102 LSB, Department of Biology, BYU, Provo, UT 84602 or bio@byu.edu.

The review process will begin Oct 1. Additional department and college information is available at: <http://-biology.byu.edu/home>. Brigham Young University, an equal opportunity employer, does not discriminate on the basis of race, color, gender, age, national origin, veteran status, or against qualified individuals with disabilities. All faculty are required to abide by the university's honor code and dress and grooming standards. Preference is given to qualified candidates who are members in good standing of the affiliated church, The Church of Jesus Christ of Latter-day Saints. Successful candidates are expected to support and contribute to the academic and religious missions of the university within the context of the principles and doctrine of the affiliated church.

Steven Peck <stevepkrahe@gmail.com>

BroadInst Massachusetts MalariaBioinformatics

Associate Computational Biologist II Broad Institute of MIT and Harvard, Cambridge, MA (USA)

We are searching to fill an associate computational biologist position for the Malaria Genome Sequencing and Analysis group at the Broad Institute. The person filling this position will assist in performing bioinformatic analyses on genomic and transcriptomic data from infected blood samples. She or he will work collaboratively with other bioinformatic scientists as well as wet lab biologists to interpret data and make it accessible to a large interdisciplinary group. The scope of activities may range from generating analysis pipelines that will be used many times to carrying out one-off analyses to ask a specific question of a particular dataset. The broader goals of the work will be to develop differential genomic and transcriptomic diagnostic markers of malaria and other co-morbid infectious diseases affecting the developing world, to better understand the biology, evolution, and transmission of malaria parasites, and to determine how genomic diversity contributes to drug-resistance, immune evasion, and other etiologies in malaria.

CHARACTERISTIC DUTIES:

Perform bioinformatic analyses to extract biological meaning from next-generation sequencing, genotyping and RNA-seq transcription data Research and identify proper approaches for interrogating data using primary literature Work collaboratively with wet lab scientists at the Broad as well as other institutions to make data accessible and interpretable Learn, utilize, and extend existing tools and pipelines for data analysis within the group Submit large datasets to public archives Perform other duties as necessitated by the position or as assigned

B.S. degree in computer science, bioinformatics, biological sciences, or related field required, M.S. degree strongly desired.

REQUIREMENTS:

Proficiency in: R statistical programming language Unix Scripting languages such as Perl or Python

Working knowledge of: Basic sequence analysis tools (BLAST, alignment, etc.) Other statistical tools (Matlab, etc.) Next generation sequence data analysis tools

(BWA, samtools, GATK, etc.) RNAseq analysis and visualization tools (Tuxedo Tools, Trinity, etc.) Bioinformatics tools (Cufflinks, GenePattern, IGV, GENE-E) Relational databases

General abilities required: Must be able to run traceable and reproducible analyses. Must have an aptitude for data display and interpretation. Must be able to multi-task, work independently and collaboratively, adapt to changing priorities, and work in face-paced environment. Strong verbal, written, and presentation communication skills are essential.

Apply to Requisition Number 1925 here: <https://www.broadinstitute.org/careers/job-openings> neafsey@broadinstitute.org

ChicagoBotanicGarden ConservationBiol

Due some issues with advertising the post, the deadline for this position has been extended to Oct 2nd. All applications and any questions about the position should be sent directly to Kayri Havens-Young (khavens@chicagobotanic.org). Anyone who has already applied please also contact Dr Havens-Young to ensure that the application has been received.

The Chicago Botanic Garden seeks a conservation ecologist with research strengths in landscape ecology, community ecology, plant/animal interactions, or seed ecology for its Plant Science and Conservation Division. Duties include developing a conservation-oriented research program, seeking external funding, collaborating with a wide range of academic stewardship organizations, and teaching/mentoring. The successful candidate will be expected to teach Plant Community Ecology at Northwestern University as part of the joint Chicago Botanic Garden/Northwestern University graduate program in Plant Biology and Conservation and will mentor graduate students as well as other students in the Garden's Science Career Continuum.

For more details please check out the following website http://www.chicagobotanic.org/jobs/conservation_ecologist Genetics Lab <Lab@chicagobotanic.org>

Claremont College Physiology Genomics

Two Positions in Biology at the Claremont Colleges

1. Assistant Professor in Animal Physiology

The W.M. Keck Science Department of Claremont McKenna College, Pitzer College, and Scripps College invites applications for a tenure-track appointment in Animal Physiology at the Assistant Professor level to begin July 2016. The department, which houses the biology, chemistry, physics, and environmental science faculty for three of the five undergraduate Claremont Colleges, offers innovative and interdisciplinary programs in the natural sciences.

We seek a broadly trained animal physiologist who is committed to excellence in teaching and to working within a cross-disciplinary and integrative department, and who will develop a vibrant research program that fully engages undergraduate students. We are especially interested in applicants whose work involves integrative, comparative/evolutionary, or computational approaches. The position offers opportunities to teach an animal or human physiology course with laboratory, introductory biology, biology courses for non-majors, and to design new courses in the candidates field. Candidates should hold a Ph.D. degree with focus in physiology or a related field. Postdoctoral experience and a record of scholarly publication are preferred.

Please apply online https://webapps.cmc.edu/jobs/-faculty/faculty_opening_detail.php?PostingID=14027. Uploaded materials should include a cover letter, curriculum vitae, a statement of teaching philosophy, a description of current and future research with equipment needs, and a diversity statement outlining the applicants philosophy for fostering an educational environment that is inclusive of all students. Please also ensure that three reference letters be uploaded. Inquiries about the position should be addressed to Dr. Donald McFarlane at dmcfarlane@kecksci.claremont.edu. Additional information about the department can be found at <http://www.kecksci.claremont.edu>. Review of applications will begin September 21st 2015, and the position will remain open until filled.

2. Assistant Professor in Genomics

The Keck Science Department invites applications for a tenure-track appointment in biology at the Assistant

Professor level to begin July 2016. The department, which houses the biology, chemistry, and physics faculty for Claremont McKenna, Pitzer, and Scripps Colleges (three of the five undergraduate Claremont Colleges), offers innovative and interdisciplinary programs in the natural sciences and prides itself on its small class sizes and emphasis on hands-on, investigative learning by students in both classroom and research laboratory settings. The colleges are located near Los Angeles, surrounded by other colleges and universities.

Strong candidates will be committed to excellence in teaching and will develop a vibrant research program that fully engages undergraduate students. Of particular interest are candidates who use genomics-based approaches with an empirical, laboratory component to address important problems in, but not limited to, molecular/cellular biology, plant biology, microbiology, or evolutionary biology. Teaching responsibilities include an upper division course in genomics with bioinformatics, Introductory Biology (cell/molecular), and other courses in the candidates field. A Ph.D. degree, post-doctoral experience, and a record of scholarly publication are required.

Please apply online at <https://webapps.cmc.edu/jobs/-faculty/home.php>. Uploaded materials should include 1) a cover letter, 2) a curriculum vitae, 3) a statement of teaching philosophy, 4) a description of proposed research with equipment needs, 5) a diversity statement (one page) outlining the applicant's philosophy for fostering a learning environment that is inclusive of all students. Please also ensure that three letters of recommendation are uploaded. Inquiries about the position should be directed to Dr. Emily Wiley at ewiley@kecksci.claremont.edu. Additional information about the department may be found at www.kecksci.claremont.edu. Review of applications will begin September 21, 2015, and the position will remain open until filled.

Sarah Gilman <sgilman@kecksci.claremont.edu>

ClarksonU EvolutionaryBiology

Clarkson University is a nationally ranked research university and the institution of choice for more than 3,400 enterprising, high-ability undergraduate and graduate students. The Department of Biology seeks an excellent teacher and productive researcher to fill a tenure-track position at the rank of Assistant Professor beginning

with the 2016V17 academic year.

The successful applicant will hold a Ph.D. and have postdoctoral experience in evolutionary biology, bioinformatics, or a related field with a focus in one or more of the following: evolutionary ecology, evolutionary genetics, phylogenetics, epidemiology, zoology, or other relevant area. Teaching duties will include evolution, bioinformatics, and other undergraduate and graduate courses in the areas of the successful applicants expertise. The successful candidate will develop a strong, externally funded research program that complements our strengths in environmental biology, biotechnology, and health sciences. The Clarkson University Biology Program values excellent undergraduate teaching and innovative research involving undergraduates and graduate students in our Interdisciplinary Bioscience and Biotechnology doctoral program. We value research collaboration among researchers; the successful candidate will be expected to develop research and teaching collaborations with Clarkson colleagues, including researchers affiliated with the Trudeau Institute and Institute for a Sustainable Environment. Applications should be received by 1 October 2015 for full consideration.

To submit your application, go to <https://clarkson.peopleadmin.com/postings/2495> . An equal opportunity /affirmative action employer, Clarkson University actively seeks and encourages applications from minorities, women and people with disabilities.

James Schulte <schultej@beloit.edu>

CSIRO Australia 3 EvolutionaryBiol

National Research Collections Australia Commonwealth Scientific and Industrial Research Organisation (CSIRO)
3 research positions open:

* Help build CSIRO's research collections in tropical plant diversity at the Australian Tropical Herbarium
* Contribute to the research output for the Australian National Wildlife Collection * Undertake research on the largest and most significant collection of Australian insects in the world

National Research Collections Australia (NRCA) is a world class, collections-based, research facility that manages Australia's six national biological research collections based in Canberra, Hobart and Cairns. NRCA scientists conduct basic and applied research in evolutionary biology, taxonomy, phylogenetics, biogeography, population genetics and conservation biology and contribute strongly to the development of biodiversity management plans and policy. NRCA also hosts the National Collaborative Research Infrastructure Strategy (NCRIS) supported Atlas of Living Australia, a world leading biodiversity data synthesis, visualization and analysis web-portal.

Three challenging and exciting opportunities currently exist within the NRCA for experienced Research Scientists who are innovative, results focussed and able to build strong and enduring relationships with clients and partners. The successful candidates will contribute their expertise to projects and activities in three areas across the NRCA group, specifically the Australian Tropical Herbarium (ATH), the Australian National Insect Collection (ANIC) and the Australian National Wildlife Collection (ANWC).

We welcome applications from suitably qualified individuals with strong research and publication history in plant molecular systematics, evolutionary genomics, systematic entomology, vertebrate evolutionary biology, or an alternative discipline relevant to the positions listed below. Candidates must enjoy the challenges of leading and/or contributing to systematic research projects at significant scale, and have the motivation to carry out independent individual research to achieve organisational and professional goals.

Ref: Position: Location: Salary Range:

3282 Research Scientist - Plant molecular systematics: Australian Tropical Herbarium Cairns, Qld AU\$ 92K - AU\$100K *

3602 Research Scientist - Insect systematics: Australian National Insect Collection Canberra, ACT AU\$ 92K - AU\$100K *

3501 Senior Research Scientist - Vertebrate evolutionary biology: Australian National Wildlife Collection Canberra, ACT AU\$106K - AU\$124K *

About CSIRO: Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities.

Copy the relevant link below for further details and instructions on how to apply.

Applications close: Wednesday 30 September, 2015

*Salaries in Australian Dollars & will include additional employer contributed superannuation (pension fund) of

up to 15.4%

Links:

3282 Research Scientist - Plant molecular systematics (ATH) <https://jobs.csiro.au/job/Cairns%2C-QLD-Research-Scientist-Plant-molecular-systematics/-290203600/>

3602 Research Scientist - Insect systematics (ANIC) <https://jobs.csiro.au/job/Canberra%2C-ACT-Research-Scientist-Insect-systematics/290222100/>

3501 Senior Research Scientist - Vertebrate evolutionary biology (ANWC) <https://jobs.csiro.au/job/Canberra%2C-ACT-Senior-Research-Scientist-Vertebrate-evolutionary-biology/290230800/> Recruitment.Team3@csiro.au

FWS Georgia FishConservationGenetics

Regional Geneticist

U.S. Fish and Wildlife Service

Warm Springs Fish Technology Center

Warm Springs, GA

The Warm Springs Fish Technology Center (Center), Warm Springs, GA, provides applied fishery research and development capabilities to the U.S. Fish and Wildlife Service (Service) Southeast Region. The Center's applied research programs assist aquatic restoration, and recovery efforts through the scientific development and evaluation of new methods, concepts, systems, and technologies. The Center maintains research in the fields of conservation genetics and cryopreservation, and also manages the National Fish Strain Registry and the National Triploid Grass Carp Inspection and Certification Program.

The incumbent serves as the Regional Fish Geneticist and head of the Conservation Genetics Laboratory at the Center. The incumbent is the Southeast Region's Fisheries Program's lead authority and subject matter expert on conservation genetics issues for aquatic species and provides technical expertise and recommendations to the Regional Directorate on international, national, and Region-wide conservation issues and policies. The incumbent serves as the primary liaison for the Service to: other Federal and State agencies; tribal governments; and non-governmental organizations on the application of conservation genetics techniques used in the conserva-

tion and management of aquatic resources. The incumbent supervises professional and technical staff. The conservation genetics program consists of: the development of program and Regional policies to fully protect and conserve genetic resources of wild/natural populations; the genetic characterization of hatchery and wild/natural stocks; the establishment of propagation guidelines to prevent loss of genetic variation and conserve genetic diversity in hatchery and wild/natural stocks; and the monitoring of change in the genetic resource and life history patterns of hatchery and wild/natural stocks.

Major duties include the following:

- Develop complex applied study proposals and experimental designs to address issues critical to the Service and its partners. Implement genetic monitoring and assessment studies for conservation, restoration, and or recovery of genetic resources, with an emphasis on aquatic species. This includes designing studies and projects to develop technology, techniques, and procedures for the management and culture of species for which no information currently exists.

- Implements, coordinates, and conducts monitoring of captive and wild/natural stocks, determines whether genetic changes have occurred and to what extent, and develops complex methodologies for monitoring genetic resources and life history patterns of wild/natural stocks with which captive stocks may interbreed or interact.

- Develops project proposals, scope of work, grants, and budgets for applied research investigations, which are submitted to internal (Service) and external funding sources.

- Provides direct supervision of technical and professional staff in the Center's Conservation Genetics Laboratory.

- Prepares a wide variety of written materials including manuscripts for publication in peer-reviewed scientific journals, popular articles, technical bulletins, study proposals, and progress reports based on activities and findings. This includes the ability to provide expert reviews and detailed comments on highly technical study proposals, scientific reports, and manuscripts referred to incumbent by colleagues, peers, and editors of scientific journals.

- Prepares and delivers oral reports of findings at regional, national, and international professional conferences, workshops, seminars, program reviews, and public meetings. Provides authoritative advice, policy guidance, and technical assistance to Headquarters and Regional Service personnel, other professionals, agencies, tribal governments, and educational institutions on analytical techniques, conservation genetics, and research accomplishments.

-Conducts interactions with other professionals in the fields of genetics and other related sciences by reviewing articles and reports, attending professional meetings, and responding to questions and challenges among subject matter experts and other professionals to maintain professional credentials, discuss findings with other experts in the field, to sustain a dialogue of current findings and trends, and to continue to develop and build upon the Service's conservation genetics community of practice.

Requirements:

Ph.D. with work experience in genetics or related discipline. The incumbent must be highly motivated, outgoing, with demonstrated ability in successful coordination and teamwork, and supervision of technical and professional employees.

Salary: \$70,192 to \$108,507/year

Closing Date:

September 9th, 2015

Contact:

Applications accepted only from U. S. citizens. Applications MUST be

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Gregor Mendel Inst Vienna Evolutionary Genomics

The Gregor Mendel Institute (GMI) is recruiting a Group leader. The GMI is devoted to basic research in plant biology, a field we consider ripe with opportunity. Presently, we are targeting evolutionary genomics, however, we welcome all applications with relevance to plant biology. Our main criterion is scientific excellence and we favor projects with a potential for high impact. Candidates are expected to develop an independent research program at the highest level. The GMI offers outstanding research support, including a very substantial yearly research budget and access to state-of-the-art facilities. The initial contract will be for five years (a three-year extension is subject to review).

The GMI is part of the Vienne Biocenter, a research cluster with over 1,700 researchers from over 40 countries, located close to the center of Vienna, and 20 minutes from the airport. English is the working language. The working environment is family-friendly, with subsidized on-campus child care facilities. The GMI is core-funded by the Austrian Academy of Sciences and also receives funding from numerous national and international agencies.

Please send your application, including a curriculum vitae, a brief description of your proposed research (no more than four pages), and contact details for at least three referees to Carmen Huegel (carmen.huegel@gmi.oeaw.ac.at).

Informal inquiries can be directed to Dr. Magnus Nordborg (magnus.nordborg@gmi.oeaw.ac.at).

Review of applications will begin September 1, 2015 and will continue until the position is filled.

"matthew.watson@gmi.oeaw.ac.at"
<matthew.watson@gmi.oeaw.ac.at>

GroningenU TheoreticalEvol

3 Postdoc and 2 PhD positions in theoretical biology, systems biology & experimental evolution

At the Theoretical Research in Evolutionary Life Sciences group (TRÆS, formerly known as Theoretical Biology) at the University of Groningen in the Netherlands, we have the following 5 positions immediately available:

(1) Postdoc (2.5-3yr): Towards a quantitative evolutionary theory of caste-specific senescence in social insects.

The reproductive casts of eusocial insect species typically far outlive their genetically nearly identical worker casts. This makes them uniquely suitable for developing and testing evolutionary theories of ageing. In this project, quantitative evolutionary models will be developed to predict cast-specific senescence profiles and how they vary with species-specific social structure, ecology and life history characteristics of social insects. Both relatively simple analytical life history models and more complex systems biological simulation models will be developed. In close collaboration with several experimental social insect groups in Germany, models will be parameterized with life history data and experimental data from other projects in order to test predictions and

guide further experimental research. Contact: Ido Pen (i.r.pen@rug.nl)

(2) Postdoc (2yr): The evolution of self-organized division of labour in social insects.

Division of labour (DOL) is characterized by the coordinated interaction of individuals that collectively achieve a common goal with high efficiency by specializing on certain tasks. DOL plays a crucial role for life on this planet; yet its evolution is not well-understood. Natural selection on DOL is indirect, since DOL is not a heritable property in itself but the result of self-organisation. The challenge is to understand how selection acting on individual behaviour results in the evolution of well-organized collective behaviour. To meet this challenge, we will develop and analyse models for the evolution of self-organized division of labour in social insects. In the project we will study how evolved division of labour is shaped by the interplay of internal factors (such as genetic system, mating structure, behavioural architecture) and external conditions (such as the spatial and temporal distribution of resources or between-colony conflicts). Contact: Franjo Weissing (f.j.weissing@rug.nl)

(3) Postdoc (1yr): The evolution of dispersal syndromes.

The study of 'behavioural syndromes' or 'animal personalities' is currently a hot topic in the behavioural sciences. In organisms ranging from squids to chimpanzees it has been shown that individuals differ systematically in their behavioural tendencies, that these differences are stable in time, and that behavioural differences in quite different domains (like dispersal and parental behaviour) are correlated with each other. Over the years, our group has developed many models for explaining the evolutionary emergence and stability of such syndromes. In this project, we will develop evolutionary models for dispersal syndromes. In hundreds of species it has been shown that genetically similar individuals differ strongly in their dispersal and migration tendencies, and that these differences are correlated with other behavioural and physiological differences. A general explanation for the emergence and structure of these syndromes is, however, still lacking. This is a joint project with empirical behavioural ecologists (Prof. Dr. Jan Komdeur, Dr. Hannah Dugdale). It is an ideal stepping-stone for writing a grant proposal for a longer stay at the University of Groningen. Contact: Franjo Weissing (f.j.weissing@rug.nl)

(4) PhD (4yr): Molecular evolution of the bacterial chemotaxis network.

The molecular network underlying chemotaxis in bacteria has emerged as a prototype for studying the molec-

ular basis of behavior and evolutionary adaptation. This small signal-transduction network has been extensively studied in *Escherichia coli*, but has also been characterized in other bacteria, such as *Bacillus subtilis*. Surprisingly, many components of the chemotaxis network are shared across species, while striking interspecific differences exist in the topology and complexity of the network. In this project, we will combine systems-biology modelling, evolutionary analyses and bio-informatic approaches to explain these patterns, and also aim to develop broader insights into the evolution of molecular networks. Contact: Sander van Doorn (g.s.van.doorn@rug.nl)

(5) PhD (4yr): Genome architecture and adaptation

Evolutionary models typically assume that traits have a simple genetic basis, but in reality genes occur in a complex genomic context. In this project, we focus on the architecture of the genome, and how it affects mutation, recombination and, eventually, phenotypic adaptation. Also, we will investigate how selection and non-adaptive processes shape

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HarvardMedSchool Bioinformatics

36640BR Bioinformaticist/ Computer Software Engineer
Harvard Medical School, Boston, Massachusetts

The successful individual will provide bioinformatics support and development for an energetic research lab (the Reich laboratory), carrying out a wide variety of genetics research especially in the area of evolutionary biology and ancient DNA.

http://genetics.med.harvard.edu/reich/Reich_Lab/-Welcome.html Typical projects include: - preparing datasets for the analysis of population history - building, maintaining, and improving an easy-to-use database to support the ancient DNA laboratory. The database is a critical project, and will involve supporting and interacting with multiple sets of scientists simultaneously: - a team of molecular biologists who will input information on each sample and use the database to track experiments. - a team of other bioinformaticians who will collaborate on automating analyses on the

data using a variety of tools - a team of population geneticists who will require processed data for further analyses.

This will be a challenging position where the successful applicant will have the opportunity to work with some of the best next generation sequencing and ancient DNA data available and substantially extend their existing organizational and computational skills.

Qualifications:

Masters or Ph.D. degree in Computer Science or related field and 5 years of experience in bioinformatics. Advanced degree may count toward experience.

Must have fluency in C/C++, Perl/Python/Ruby, MySQL/PostgreSQL databases and a working knowledge of statistics.

This is a term appointment ending on June 30, 2017 with the possibility of renewal. Harvard Medical School unfortunately cannot sponsor visas for staff scientist positions so successful applicants will need to have a U.S. work visa.

Apply here https://jobs.brassring.com/1033/-asp/tg/cim_jobdetail.asp?partnerID=3D25240&=-siteID=3D5341&AReq=3D36640BR David Reich <reich@genetics.med.harvard.edu>

HarvardU DNASequanceTech

Harvard University Instrumentation Specialist (DNA Sequencing)

Auto req ID

36627BR

Business Title

Instrumentation Specialist

School/Unit

Faculty of Arts and Sciences

Location

USA - MA - Cambridge

Time Status

Full-time

Schedule

35 hours per week

Department

FAS Science Operations

Salary Grade

057

Union

00 - Non Union

Duties & Responsibilities

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

Basic Qualifications

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

Additional Qualifications

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

Additional Information

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

Pre-Employment Screening

Identity

EEO Statement

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

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

Institut Pasteur Bioinformatics 2

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

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

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

In this context, the Institut Pasteur is looking for several new senior and/or junior* group leaders in bioinformatics, biostatistics and integrative biology, with a strong methodological component. The main focus is on computational and statistical analysis of biological big data, typically produced by new generation sequencing and -omics technologies, but all modeling and computational approaches of biological questions closely connected with Institut Pasteur research areas are eligible. Highly attractive packages to match the experience of the can-

didate will be provided, including institutional salaries (principal investigator, permanent scientists, secretary and postdoctoral fellows), a substantial contribution to running costs and equipment, as well as support for relocation expenses and administrative issues.

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

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

Further information on the institute and C3BI can be found at <http://www.pasteur.fr> and <https://c3bi.pasteur.fr/>

Short-listed candidates will be invited for interview in October 2015, and results will be announced by mid-December. The new research groups will start by early 2016 (the precise date is negotiable).

Informal inquiries can be addressed to Olivier Gascuel (Head of C3BI C3BICall2015@pasteur.fr)

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

Olivier Gascuel <olivier.gascuel@pasteur.fr>

KAUST Evolutionary Bioinformatics Paid Internship

We are seeking an intern (graduate or postgraduate student) for a 3-6 months stay in our lab to work on the following project:

Bioinformatics on population genetics and adaptation to climate change in a coral reef fish We are seeking a highly motivated internship student to work on the computational analysis of a long-term experimental project on damselfish *(*Acanthochromis polyacanthus*)*. Our data has the main focus to understand adaptational processes to climate change on the molecular level. Adaptive transgenerational measurements were taken in different projects looking at temperature as well as ocean acidification. We are using High throughput Sequencing approaches (mostly Illumina based) and have collected integrated genome-wide sequencing datasets. The intern will be able to look at a variety of data, but will mostly be working on the computational analysis of comparative genomics and transcriptomics. This will be a great opportunity for a student to be able to work on a large dataset and be part of large project and can learn and improve his/her knowledge on population genomic analyses. The intern will need to have some experience in bioinformatics work and will be expected to work independently.

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

The internship conditions and requirements can be found on this webpage: <http://www.kaust.edu.sa/internship/> You can apply directly on this webpage by just following the instructions and sending the filled out form to david.yeh@kaust.edu.sa.

Here you can find out more about the lab: <http://systemsbiology.kaust.edu.sa> If you have any questions please write to timothy.ravasi@kaust.edu.sa or celiashunter@gmail.com

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

Celia Schunter <celiaschunter@gmail.com>

Memphis Tennessee Teaching Evolution

Position announcement:

Assistant/Associate Professor, Department of Biological Sciences, The University of Memphis, Memphis, TN 38152

Tenure-track Assistant/Associate Professor in Biological Sciences Education, beginning in August 2016.

The Department of Biological Sciences at the University of Memphis (www.memphis.edu/biology) invites applications for a tenure-track position in biological sciences education (research and teaching) 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 and scholarship.

The successful candidate's demonstrated focus must be in biological sciences education research and in developing innovative instructional approaches to teaching undergraduate biology courses, including knowledge of assessment strategies. Responsibilities of the position include teaching and assisting with curriculum development for introductory and core courses in biology and/or departmental service courses. We are also interested in expanding an existing graduate level teaching course to help our graduate students further develop their teaching skills. Candidates applying at the Assistant Professor level will be expected to pursue extramural funding in STEM education. Candidates at the Associate Professor level should have current funding or a history of funding in STEM education. Startup funds are available and salary will be commensurate with experience.

The University of Memphis is a leading metropolitan research institution with over 25 faculty 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, the interdepartmental Program in Bioinformatics, the Ecological Research Center, the Integrated Microscopy Center, and the Meeman Biological Field Station, are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Candidates should submit a letter of application, statements of STEM research interests and teach-

ing 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 September 15, 2015 and may continue until the position is filled. Inquiries should be directed to Dr. Omar Skalli, Chair, STEM Faculty Position, Department of Biological Sciences, University of Memphis, Memphis, TN 38152, USA (or email oskalli@memphis.edu). The University of Memphis, a Tennessee Board of Regents institution, is 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, sex, age, disability or veteran status.

“Zachary L Ramsey (zlr Ramsey)”
<zlr Ramsey@memphis.edu>

NIE Korea Biodiversity

Job Announcement Visiting Researcher

The National Institute of Ecology (NIE) is a newly-established government-funded research institution of ecology in Korea. The two main research themes that the NIE pursues are Biodiversity ecology and Climate change science. In addition to establish firm bases for both basic and applied ecological research, the NIE is running the Technical Support Unit (TSU) for the Knowledge & Data TF of IPBES. Thus we are now trying to recruit experienced researchers from abroad who could help us develop promising new research traditions. Successful candidates will carry out research with researchers in a collaborative environment. The researcher will be able to direct our ongoing projects and/or initiate new his/her own independent project. The position may begin as short-term appointment but can be extended for multiple years. We welcome any ecological researchers who are in transition, i.e., looking for more experience before settling down at a permanent position, seeking an exciting place for sabbatical, wanting to share his/her lifelong expertise after retirement, and so on. Let us know what you can contribute to this exciting new institution.

2015. 7. 26.

Jae C. Choe, President National Institute of Ecology Seocheon-gun Maseo-myon Geumgang-ro 1210

Chungcheongnam-do Republic of Korea

Carol Eunmi Lee, Ph.D. Professor Center of Rapid Evolution (CORE) 430 Lincoln Drive, Birge Hall University of Wisconsin Madison, WI 53706 carollee@wisc.edu

<http://carollee.labs.wisc.edu> Carol Lee
<carollee@wisc.edu>

Pioneer PlantBreeding

Research Scientist - Breeding Technologies
(RES00003099)

Johnston, IA

DuPont Pioneer, headquartered in Des Moines, Iowa, is the world's leading developer and supplier of advanced plant genetics, agronomic support, and services to farmers in more than 90 countries. Innovative and customer-focused, DuPont Pioneer seeks to increase farmer productivity and profitability, and to develop sustainable agricultural systems for people everywhere. Increasing populations, changing economies, and limited cultivatable land are significant factors driving Pioneer to use the broad application of plant science to improve the value generated from each field.

The Crop Genetics Research & Development (CGR&D) group at DuPont Pioneer integrates cutting-edge science and technology into innovative products that help feed and fuel the world. The Breeding Technologies (BT) group resides in CGR&D and is responsible for developing and deploying next-generation statistical and numerical methods that integrate, analyze and visualize complex genetic relationships for use in applied plant breeding programs. The advertised scientist position will work as a member of a multi-disciplinary team to develop, understand, and deploy the molecular diversity and its molecular breeding applications for several commercially important crops. The job position will be based in Johnston, Iowa (USA), however the successful candidate will be expected to coordinate and collaborate closely with scientists within specific crops. Intermittent international travel will be required.

Duties/Responsibilities and % of Time:

* 60% - Lead interactions between the Pioneer plant breeding community in order to evaluate and enhance novel germplasm characterization and its application within genetic signal detection and prediction of product

performance. The successful candidate will utilize next-generation sequencing information to develop molecular understanding of commercially important crops to facilitate germplasm utilization and performance prediction. Responsibilities will include: Development and utilization of high-density SNP information for germplasm characterization, analysis of large (phenotypic, marker and pedigree) data sets for method and tool development, organization and summarization of key molecular breeding information and results for use across/within crop research programs, and develop new or adapt existing methods for crop-specific molecular breeding activities. * 30% - Work with members of Breeding Technologies to use simulation, phenotypic, and genomic data to characterize germplasm diversity and its contribution to phenotypic variation. * 10% - Make recommendations and train scientists working with specific crops on best practices for the effective use of germplasm characterization and whole genome prediction.

Problem Solving:

* Collaborate with Breeding Technology and other scientists to integrate new germplasm diversity approaches into the molecular breeding pipelines developed for product development * Assist in the development and deployment of novel germplasm characterization and genetic evaluation and genetic detection methods within the BT group that address specific needs relevant to scientists supporting product development

Decision Making:

* Work with scientists within Pioneer to evaluate the impact and importance of new genomic technologies on molecular breeding processes within specific crops * Work with members of information management to integrate appropriate methods and software * Identify and help to use data analysis tools to meet project goals and timelines, communicate key issues and discoveries appropriately

Qualifications:

* PhD in statistics, quantitative genetics, population genetics, bioinformatics, plant or animal breeding, or a related field and a minimum of 2 to 4 years of post-doctoral and/or industry experience preferred. Master's degree in statistics, quantitative genetics, population genetics, bioinformatics, plant or animal breeding, or a related field and a minimum of 6 to 8 years of industry experience required. * Understanding and experience utilizing genomic data to categorize population diversity * Demonstrated proficiency using Python, R, or similar programming languages to manipulate large datasets for custom analysis. Experience with C or C# is an advantage but is not required * Strong background applying

and interpreting statistical analysis of large, unbalanced datasets for genetic signal detection * Understanding and experience using statistical software such as

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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>

Pioneer PlantGenetics

Post Doc Research Scientist (RES00003050)

Johnston, IA

The Crop Genetics Research & Development (CGR&D) group at DuPont Pioneer integrates cutting-edge science and technology into innovative products that help feed and fuel the world. The Breeding Technologies (BT) group resides in CGR&D and is responsible for developing and deploying next-generation computational, statistical and precision phenotyping methods that characterize, integrate, analyze and visualize complex biological, genetic and phenotypic relationships for use in applied plant breeding programs. The advertised post-doctoral position will work together with BT scientists, as well as scientists from the wider DuPont Pioneer research organization, on the development of, and integration within, novel computational predictive techniques that incorporate biological, physiological and environmental data for routine use in active Pioneer maize breeding programs. The position will be based at the DuPont Pioneer world-wide headquarters in Johnston, Iowa (USA). Duration of employment will be 12 months with a possibility of renewal for an additional 12 months depending on evaluated performance and business need.

Duties/Responsibilities:

Collaborate with key members of BT, Trait Characterization & Development (TCD), Crop Genetics Informatics (CGI) and Product Development (PD) to develop and implement computational and statistical analyses that utilize both estimated genetic effects and multi-trait interactions to predict field performance within applied breeding programs. Use both simulated and field data collected from active breeding programs to evaluate the performance of predictive statistical models that combine biological, genetic and/or multi-trait precision phenotyping information. Prepare internal

scientific reports as well as scientific manuscripts for external publication to document the findings of the methodology development and evaluation steps.

Problem Solving:

Assist in the development and evaluation of novel phenotypic and/or statistical genetics techniques and computational algorithms targeted towards improved genetic evaluation and gene detection within DuPont Pioneer product development. Interact with scientific teams of CGR&D researchers, manipulate and summarize large amounts of data, interpret scientific results and communicate scientific findings in a clear and concise manner.

Decision Making:

Make scientific evaluations, recommendations and routine communications to CGR&D scientists regarding the performance and utility of advanced computational and/or statistical genetics techniques that integrate biological, physiological, environment, phenotypic and genomic/genetic data. Identify, design, develop and help implement data analysis tools to meet project goals and timelines, communicate key issues and discoveries appropriately.

Qualifications:

- * PhD in statistics, quantitative or population genetics, plant breeding, animal breeding, or a related field.
- * Demonstrated ability to quantitatively evaluate and analyze complex scientific problems, interpret scientific results, and work easily with large volumes of data.
- * Good understanding of whole genome analysis (genomic selection and/or association mapping) techniques.
- * Good understanding of Bayesian statistics principles and mixed model BLUP methodology as applied to unbalanced data.
- * Demonstrated competency in statistical programming languages such as R and scripting languages such as Python is required; proficiency in scientific programming languages such as C is a plus.
- * Basic understanding of the principles of biological models such as growth models or gene regulatory network and/or of multi-trait analysis techniques is a plus.
- * Demonstrated ability to work in dynamic scientific teams, and demonstrated ability to contribute to complex research projects performed under tight deadlines.
- * Strong communication skills; ability to speak, read, and write in English

Apply online at: < <http://careers.dupont.com/-jobsearch/job-details/post-doc-research-scientist/-RES00003050/> >

Tracy Lillie <tracy@ecreativegroup.com>

RiceU EvolutionaryBiol

TENURE TRACK FACULTY POSITION IN ECOLOGY & EVOLUTIONARY BIOLOGY

Applications are invited for an anticipated open-rank faculty position in the BioSciences Department at Rice University in any area of ecology and evolutionary biology. We welcome applicants who employ theory, experiments, or some combination thereof and especially encourage candidates who complement existing strengths of current faculty in the Ecology & Evolutionary Biology graduate program to apply. Candidates must have a Ph.D. and outstanding potential in research and teaching. Successful candidates are expected to develop and maintain a vibrant research program supported by extramural funding and participate in education and mentorship of graduate and undergraduate students. We are especially interested in candidates who can contribute to the diversity and excellence of the academic community.

Our application and instructions can be found under the employment section on the left menu on the department website, <http://biosciences.rice.edu>. Review of applications will commence September 25, 2015 and continue until the position is filled. Rice is a private university with a strong commitment to the highest standards of research and undergraduate and graduate education.

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

Volker Rudolf <vr2@rice.edu>

StockholmU PopulationGenetics

*Assistant Professor in Population Genetics **Department or Zoology, Stockholm University, Sweden. *

*Closing date for application: October 5, 2015*****

We welcome applicants from population geneticists to a tenure-track position at the level of Assistant Professor.

The Department of Zoology has a long history of basic and applied research from the perspectives of its five divisions: Ecology, Ethology, Population Genetics, Functional Morphology, and Systematics and Evolution. The Department holds 16 permanent Lecturer/Professor positions and c. 100 staff including c. 40 PhD students and offers an international and stimulating work environment.

The advertised position will be affiliated to the Division of Population Genetics, which has a theoretical and empirical focus on conservation genetics issues with recent research also focused on developing and using genomic tools in non-model species to uncover the genetic basis of local adaptation and life history evolution.

The position is four years full-time with a strong research focus (some teaching possible also) and the possibility of promotion to Associate Professor.

Stockholm University is situated in the beautiful surroundings of a National City Park where you can stroll in ancient forests and swim off rocks or beaches just within short walks from campus. It is a modern university with a long history characterized by an open atmosphere and a multicultural environment. Stockholm University is one of the world's top 100 higher education institutes.

Read more and apply here: <http://www.su.se/english/about/vacancies/vacancies-new-list?rmpage=job&rmjob=375&rmlang=UK> Department of Zoology: www.zoologi.su.se/en/index.php Stockholm University: <http://www.su.se/english/> Do not hesitate to contact us if you have questions: Prof. Linda Laikre linda.laikre@popgen.su.se & Dr Chris Wheat chris.wheat@zoologi.su.se

We look forward to your application!

Linda Laikre <linda.laikre@popgen.su.se>

TexasAMU AssistantCurator InsectCollection

POSITION ANNOUNCEMENT

Assistant Curator, Texas A&M University Insect Collection (TAMUIC)

The Department of Entomology at Texas A&M University seeks an Assistant Curator (collection manager) for the Texas A&M University Insect Collection. This is a full-time, base-budgeted, staff-level, position with benefits located on the main campus of Texas A&M University in College Station, Texas. The position reports to the faculty Curator of the collection and is available 1 September 2015.

The TAMUIC is a land grant university-based collection of insects and related arthropods specializing in the fauna of the south-central and southwestern United States and the northern Neotropical region (especially Mexico). The primary mission of the collection is to build and maintain a comprehensive collection of insects and related arthropods from these regions for research, reference and educational purposes. Containing approximately 2.7 million curated specimens, the TAMUIC supports a diverse range of activities in the TAMU Department of Entomology, Texas AgriLife Research, and Texas AgriLife Extension; serves the worldwide entomological community as a source of high-quality specimens for systematics research; and provides a focal point for the activities of a dedicated group of entomologists in Texas and adjacent states.

The position's responsibilities include: management of the day-to-day operations of the TAMUIC; recruitment, training, and supervision of personnel to assist in carrying out collection operations; coordination with and general supervision of the curatorial activities of the departmental teaching collection manager; promotion of collection development through collection-based research in arthropod faunistics and systematics; and maintenance of the departmental arthropod identification and information service.

General inquiries about the position may be sent to: Mr. Robert Jensen Department of Entomology Texas A&M University College Station, TX 77843-2475 U.S.A. E-mail: r-jensen@tamu.edu

A complete description of the position and duties, and the portal through which all applications must be re-

ceived, can be found here: <https://greatjobs.tamu.edu> V search and apply for NOV 08731. Follow website directions for completing an on-line application, and uploading and attaching cover letter, resume, etc. Interested individuals are encouraged to submit their applications by 15 August 2015. Contact Robert (above) if you experience problems.

Please forward this announcement to qualified individuals you may know.

Hojun Song <hsong@tamu.edu>

TulaneU EvolutionaryBiology

Assistant/Associate Professor: Ecology and Evolutionary Biology

The Department of Ecology and Evolutionary Biology, Tulane University, is conducting a broad search for an Ecologist or Evolutionary Biologist. We are interested in applicants who will fit into our department's focal research areas of tropical biology and coastal wetlands. We are especially interested in applicants whose research is solutions-based and who would expand departmental expertise in areas of bioinformatics, genomics, biostatistics, urban ecology, or disease ecology. Applicants with a taxonomic focus on plants, invertebrates, or microbes are particularly encouraged to apply.

Submit letter of application, curriculum vitae, statements of research and teaching interests, three selected publications, and names and addresses of three references to: apply.interfolio.com/30088. This site will begin accepting applications on August 1. Review of applications will begin October 15, 2015, and the search will remain open until the position is filled. Tulane is an EOE/M/F/Vet/Disabled employer.

See <http://tulane.edu/sse/eebio/about/positions> for details about the position, department, and search.

Please contact any member of the search committee below if you have additional questions

Dr. Tom Sherry (tsherry@tulane.edu, committee chair)
 Dr. Caz Taylor (caz@tulane.edu) Dr. Sunshine Van Bael (svanbael@tulane.edu) Dr. Elizabeth Derryberry (ederrybe@tulane.edu)

– 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>

TunghaiU DivingFieldAssist CoralAdaptation

Although this job position is more ecology-oriented, it still has minimal evolutionary component.

Job: research assistant for the ecological resilience of coral reefs in the Pratas Island, Taiwan (focus on fish and macroalgae)

Our project investigates the influence of abiotic and biotic factors on the ecological resilience of coral reefs in the Pratas Island, Taiwan in South China Sea. The work of the field assistant will be to mainly SCUBA diving fieldwork involving fish and macroalgae survey around reefs. Data analysis, report writing and other daily administrative work. This work will give insight into integrative

experiments on coral ecosystem involving mesocosm, invertebrates, fishes, macroalgae, seagrass, and coral reefs.

Research Assistant in Department of Life Science, Tunghai University, Taiwan.

Full time position with health care benefits.

Salary: US\$1000 for Bachelor degree and US\$1100 for Master degree. (Salary according to national research council.). The minimum wage in Taiwan is US\$640. The living expense is around \$US500 in this city (Taichung). Annual bonus amounting to 1.5 months of salary.

Primary qualifications/training:

1. Bachelor degree or master degree from biology or related field preferred. Other fields will also be considered.
2. Minimum 50 logged dives is essential. Advanced diver or Divemaster qualifications preferred.
3. Knowledge of basic statistical analysis and computer work.

Language: Fluent in either Mandarin or English

Inquiries: Dr. Colin Wen (colinwen@gmail.com) or Dr. Shao-Lun (Allen) Liu (shaolunliu@gmail.com)

Applicant should submit 1) cover letter, 2) resume 3)

copy of degree/certificates.

All applications must be submitted by the closing date (31 Aug 2015). Sincerely yours, Shao-Lun (Allen) Liu Assistant Professor Department of Life Science, Tunghai University Taichung 40704, Taiwan Web: <http://algae.thu.edu.tw/lab> Shao-Lun Liu <shaolunliu@gmail.com>

UCalifornia Berkeley ProgramCoordinator ClimateAdaptation

Please distribute widely to your networks:

Academic Program Coordinator: Berkeley Initiative in Global Change Biology

The Berkeley Initiative in Global Change Biology (BiGCB) at the University of California, Berkeley is seeking applications for an Academic Program Coordinator. The expected start date of this 100% full-time, one-year position is August 31, 2015 and may be renewable annually up to 5 years.

This position is the nexus for the coordination and implementation of the BiGCB. A cornerstone of our education and research activities is a new National Science Foundation Research Traineeship (NRT) interdisciplinary graduate training program Environment and Society: Data Science for the 21st Century (DS421). It is anticipated that 50% of the Program Coordinator's time will be spent implementing the DS421 program.

For more information on the BiGCB and DS421 see: <http://globalchange.berkeley.edu> <http://ds421.berkeley.edu> Applications should be received by August 18, 2015. The detailed job description can be viewed at: <https://aprecruit.berkeley.edu/apply/-JPF00745> . Michelle Koo <mkoo@berkeley.edu>

UCalifornia Davis EvolutionaryBiol

Lecturer with Potential Security of Employment - UC Davis

The Department of Evolution and Ecology (EVE) invites applications for a full-time Lecturer with Potential

for Security of Employment (LPSOE). Faculty in LP-SOE positions are eligible for promotion to Lecturer with Security of Employment (LSOE), the equivalent of tenure for ladder rank faculty. LPSOE/LSOE faculty are Academic Senate faculty members whose expertise and responsibilities center on undergraduate education and on the scholarly analysis and improvement of teaching methods. We are interested in the following areas: Ecology, Evolution, Phylogenetics, Genetics, Genomics, and General Education courses on topics related to these areas.

The successful applicant will be responsible for teaching lower, and possibly upper division undergraduate biology classes, as well as biology-based General Education courses for non-biologists. S/he will be expected to play a leadership role in the scholarship of teaching and learning by having a research program in biological science education, assessment strategies, or an academic discipline, and by working with other faculty and LP-SOE's within the college to develop, implement, and assess course learning objectives and new pedagogical methods.

Qualified applicants must have a Ph.D. in biology or science education, experience conducting scientific research in ecology, evolution, genetics, genomics or phylogenetics, preferably with postdoctoral training in teaching, education, or scientific research. Other preferred qualifications include documented success in some or all of the following areas as related to life sciences education: teaching undergraduate classes, use of evidence-based teaching practices, use of modern instructional technology including virtual models, online media in instruction, the ability to identify and develop effective teaching strategies for diverse student populations, conducting life sciences education research, as consistent with a successful discipline-based education research program. Salary will be commensurate with education and experience.

Closing date: open until filled, but all application materials, including letters of recommendation, must be received by October 1, 2015 to be assured full consideration. We are hoping to interview in December. Applicants should submit materials online at: <https://recruit.ucdavis.edu/apply/JPF00682>. Please submit a cover letter, your curriculum vitae, a description of your research background (not to exceed two pages), statement of current and proposed teaching and research/leadership activities (not to exceed four pages); summaries of teaching evaluations from three courses in a relevant subject matter (optional); and a separate statement on strategies aimed at fostering diversity in the scientific workforce. Applicants should also arrange to have three referees

submit supporting letters online at the above website. The administrative contact is Korie Martinez, kmartinez@ucdavis.edu, and the faculty contact is Gail Patricelli, gpatricelli@ucdavis.edu. More information on the EVE department and the College of Biological Sciences is available online: (<http://www-eve.ucdavis.edu/>; <http://biosci.ucdavis.edu/index.js.html>)

The University of California is an affirmative action/equal opportunity employer committed to excellence through diversity and strongly encourages applications from all qualified applicants, including women and minorities. UC Davis is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of family-friendly policies, and is the recipient of an NSF ADVANCE Award for gender equity.

UCalifornia Davis MolecularAnthropology

University of California, Davis- Assistant Professor in Anthropology - Molecular Anthropology- Deadline: October 30, 2015

The Department of Anthropology at the University of California, Davis, invites applications for a tenure-track Assistant Professor position in Molecular Anthropology. Ph.D. must be completed by the first day of courses (September 2016). This recruitment is conducted at the assistant rank. The resulting hire will be at the assistant rank, regardless of the proposed appointee's qualifications.

We seek applicants with a strong commitment to original research and scientific publication on using genetic and genomic data to illuminate human or non-human primate evolution (phylogeny, demography, adaptation), with a background in bioinformatics, molecular biology, and/or population genetics. Applicants must demonstrate exceptional promise as scholars and teachers.

The position is a nine-month appointment within the Department of Anthropology. The proposed start date is July 1, 2016. Teaching duties will be four courses per academic year (quarter system) at the introductory, advanced undergraduate, and graduate level. Courses will include an introduction to Human Evolutionary Biology, an advanced undergraduate course in Anthropological Genetics, and a graduate seminar. The candidate will develop additional classes, perform undergraduate and graduate advising, and supervise graduate and under-

graduate student research. The University of California, Davis, and the Department of Anthropology are interested in candidates who are committed to the highest standards of scholarship and professional activities, and to the development of a campus environment that supports equality and diversity.

Applicants should submit: (1) a curriculum vitae; (2) a cover letter that outlines completed research, current research program, and teaching experience; (3) copies of up to three publications; and (4) the names and addresses of three referees. Applications must be submitted online to: <http://recruit.ucdavis.edu/apply/-JPF00659> . For full consideration, applications should be complete by October 30, 2015. The position is open until filled.

The University of California, Davis, is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty and staff.

UC Davis is a smoke and tobacco free campus. Smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e-cigarettes) is strictly prohibited on any UC Davis owned or leased property, indoors and outdoors, including parking lots and residential space.

Jennifer N. Willard Academic Personnel Specialist Division of Social Sciences Green Cluster Departments of Anthropology & Sociology Program in Middle East and South Asian Studies UC Davis 328B Young Hall One Shields Avenue Davis, CA 95616 Office: 530-754-4936 Fax: 530-752-8885

Email: jnwillard@ucdavis.edu

Office Hours: M-F 8:00am-4:30pm

Jennifer N Willard <jnwillard@ucdavis.edu>

UCalifornia Davis ResTech FishEvolution

EVOLUTION AND ECOLOGY JUNIOR SPECIALIST POSITION AVAILABLE

The Wainwright lab at the University of California, Davis, seeks a junior specialist to assist with research on the functional morphology and evolution of fishes. This person will organize and oversee the use of the laboratory by lab members, maintain live fishes in the laboratory, and conduct studies on their feeding and

locomotion functional morphology. Additional responsibilities are managing a research collection of preserved and cleared and stained fish specimens and assisting other lab members with research projects.

Requirements: Bachelor's degree in biological sciences or related field required. Some previous experience in the field is required. The applicant must possess excellent written and oral communication skills. The ideal applicant will have a strong interest in fishes, functional morphology and phylogenetics, or some combination of these topics, and will have ambitions to go on to graduate school in the next couple of years. This is a full time, 40 hour per week position. Starting date can be immediately but before mid-October, with a proposed duration of one year with possibility of extension.

Salary: \$36,984 annually plus health benefits

Application: please submit by email a letter of interest, CV, and contact information for 3 references to:

Peter Wainwright pcwainwright@ucdavis.edu

Peter Wainwright <pcwainwright@ucdavis.edu>

UCalifornia SanDiego EvolutionaryBiol

Assistant Professor: Evolutionary Biology

The Division of Biological Sciences (www.biology.ucsd.edu), Section of Ecology, Behavior and Evolution, invites applications for a faculty position at the tenure-track Assistant Professor level in Evolutionary Biology. We are broadly searching for an evolutionary biologist. Research topics could include, but are not limited to, vertebrate biology, evolutionary ecology, or comparative or population genomics.

All candidates must have earned a Ph.D. or equivalent degree, and be committed to teaching at the undergraduate and graduate levels. In addition to excellence and creativity in research and scholarship, successful candidates must also demonstrate a commitment to equity and inclusion in higher education. We are especially interested in candidates who have created or contributed to programs that aim to increase access and success of underrepresented students and/or faculty in the sciences, and/or have detailed plans to accomplish such goals.

The Division of Biological Sciences at UCSD is a vibrant center of scientific discovery, innovation, and collaboration. Our large research base spans many areas of

biology and has one of the most celebrated graduate programs in the country. We are committed to academic excellence and diversity within the faculty, staff, and student body. This is where discovery comes to life.

Salary is commensurate with qualifications and based on University of California pay scales.

Completed applications received by October 1, 2015 will be assured of consideration.

Interested applicants must submit a cover letter, curriculum vitae, 3-5 references, statement of research, statement of teaching, a statement describing their past experience and leadership in fostering equity and diversity and/or their potential to make future contributions, and 3-5 publications. For information on preparing diversity statements and divisional initiatives to promote diversity, see: <http://facultyequity.ucsd.edu/Faculty-Applciant-C2D-Info.asp> and <http://biology.ucsd.edu/-diversity/index.html>. Applications must be submitted through the University of California San Diego's Academic Personnel RECRUIT System at: <https://-apol-recruit.ucsd.edu/apply/JPF00871>. Further details about the required application material can be found at: <http://biology.ucsd.edu/jobs/apply-lrf-lsoe.html>. UCSD is an Affirmative Action/Equal Opportunity Employer with a strong institutional commitment to excellence through diversity. All qualified applicants will receive consideration for employment without regard to gender, race, color, religion, sex, sexual orientation, national origin, disability, age or protected veteran status.

"Ta, Laura" <lta@ucsd.edu>

UCalifornia SantaCruz LabTech Plankton

Laboratory Technician Position

Our lab at the University of California Santa Cruz is searching for a full-time lab technician with experience in biological research for a project investigating the interaction of marine phytoplankton and zooplankton and their respective microbiome. The position is supported until 2017 with renewal every year contingent of funding availability. Santa Cruz California is a beautiful place surrounded by redwoods and beautiful beaches and offers a lot of outdoor activities.

For more details on the position, please see the posting on UCSC HR site, <https://jobs.ucsc.edu/-applicants/Central?quickFind=3D68354> or email

msisonma@ucsc.edu.

Essential Functions and Responsibilities:

The laboratory technician will assist in the development of gnotobiotic systems on zooplankton and phytoplankton with a focus on studying the ecology, evolution and mechanisms of microbiome-phytoplankton/zooplankton interactions. The technician will be responsible for overseeing daily workings of the lab, conducting experiments and maintaining zooplankton and phytoplankton stocks. The applicant must be willing to work independently and communicate effectively with the principal investigator (PI). The technician will be working alongside undergraduate students, and will be expected to assist the PI in delegating tasks. Excellent skills in organization and communication, clear attention to details with accurate record keeping are therefore essential.

Qualifications:

Applicants should have a minimum of a bachelors degree in biology, microbiology, molecular biology or related subject with experience working in a research laboratory setting and is capable of going out on boats for ocean sampling. The technician will be trained on how to do microscopy for FISH bacterial probing and assist in preparation of samples for transcriptomics and metagenomics.

Proficiency with computers and Microsoft Excel is required. The technician will also be taught on how to analyze next-gen sequences using bioinformatics tools.

Preferred Qualifications:

- Experience with molecular biology and microbiology methods including PCR, qPCR, RNA and DNA extractions and sequence data analysis.
- Knowledge of marine biology, microbiology, evolution or ecology

Interested candidates should submit a letter of interest, resume and the names and contact information of three professional references to msisonma@ucsc.edu.

Marilou P. Sison-Mangus Assistant Professor, Ocean Sciences University of California Santa Cruz 1156 High Street, Santa Cruz, CA 95064

Phone: 831-459-5563 Fax Main Office: 831-459-4882

msisonma@gmail.com

UConnecticut BioinformaticsScientist

POSITION SUMMARY The University of Connecticut seeks a Bioinformatics Scientist to serve faculty, researchers, and graduate students on the main UConn campus and the UCHC within the Center for Genome Innovation housed in the cross-campus Institute for Systems Genomics (isg.uconn.edu). We are seeking applications from dynamic, motivated individuals interested in providing computational biology and statistical expertise to help develop and analyze a variety of projects. The Bioinformatics Scientist will work closely with members of the Center for Genome Innovation (sequencing core facility) to support investigators as they design their experiments, particularly those that involve next-generation sequencing data. The user base of the CGI is broad, and the successful candidate can expect to work on a diverse array of problems in a range of systems (both model and non-model organisms).

DUTIES AND RESPONSIBILITIES The successful candidate will provide consultation to faculty, researchers, and graduate students on the use of specific computing tools for solving a broad range of problems in biology, interface with biologists and computer scientists, and maintain web and tutorial resources. They will have an excellent command of verbal and written communication to facilitate the dissemination of results through presentations, reports, and scientific publications. They will stay informed on the latest software tools and test these for possible integration into existing analysis pipelines.

APPOINTMENT TERMS Candidates with commensurate experience will be considered at the more advanced Academic Assistant 3 classification. This is a non-tenure track, annual 11-month appointment. Salary will be commensurate with qualifications.

MINIMUM QUALIFICATIONS M.S. with two or more years post M.S. work experience or Ph.D. in bioinformatics or a related area; direct experience or equivalent skills to design experiments and analyze data from studies focused on: RNA-Seq, ChIP-Seq, RAD-Seq, metagenomics, genome assembly, variant detection, and/or phylogenetics. Proficiency in one or more scripting languages (Perl or Python) as well as fluency in Unix and comfort in high performance computing environments is expected. Excellent project management and organization skills required.

PREFERRED QUALIFICATIONS Solid foundation in statistics as well as software development is desired. Expertise in R/Bioconductor is desired.

How To Apply: Interested applicants must apply electronically using the University of Connecticut UConn Careers (<http://hr.uconn.edu/eoaa-employment-statement/>). Please submit a cover letter, curriculum vitae, and three letters from professional references. For questions regarding this position email jill.wegrzyn@uconn.edu. All applications must be received by close of business, September 21, 2015.

Jill Wegrzyn <jill.wegrzyn@uconn.edu>

UFlorida Gainesville ResTech EvolBiol

The genetics lab of Drs. James Austin and Samantha Wisely is looking for an energetic, well-organized person to join a growing team of biologists, graduate students and post-doctoral researchers at a at the Department of Wildlife Ecology and Conservation at the University of Florida, Gainesville. The biological scientist will contribute to a variety of projects involving a wide-variety of terrestrial and aquatic organisms. Examples include the study of disease in game (e.g. deer) and other non-model species (arctic shore birds), the genetic impacts of stocking practices in freshwater fisheries (e.g. largemouth bass), conservation genetics and genomics of rare and endangered species (e.g. beach mice, black-footed ferrets, bonneted bats, snail kites, among others).

The primary duties will involve generating molecular genetic data (DNA/RNA isolations, PCR, Real-time PCR, SNP and microsatellite genotyping, and Sanger and next-gen sequencing) and assisting the lead biological scientist in overseeing general lab operation (general equipment maintenance, ABI 3130 and ABI 3730 maintenance, organization of equipment use) in a highly active, diverse conservation genetics research laboratory. In addition, the candidate will assist with student training (basic laboratory training of undergraduate and new graduate students).

Minimum requirements are a BS or equivalent science degree, plus 1 years experience working or conducting research in a molecular genetics laboratory. Preference will be given to candidates with independent research experience (e.g. completed MS in biological sciences). Applicants having experience in generating molecular genetic data, with an emphasis on next-generation se-

quence data analysis, and SSR marker development, data collection, and basic analysis; demonstrated record keeping, data organization, data archiving skills as well as experience in the basic application of languages such as python and/or R, the ability to use Arc GIS, and an aptitude for learning these skills and experience conducting field ecology work will be preferred. Strong inter-personal skills are required, as the candidate will be interacting with a diverse group of lab users.

Preference will be given to applicants that clearly articulate their relevant experience in their cover letter, and who provide references that can speak to your ability to perform in a busy molecular laboratory and be a team player.

This is a three-year TEAMS position (see for new hire details: <http://hr.ufl.edu/wp-content/uploads/-publications/handbook.pdf>), thereafter renewable on an annual basis upon availability of funding. Starting salary is \$30,000 plus benefits (information about benefits can be found at the UF HR website, <http://hr.ufl.edu/benefits/new-employees/>).

Job posting ends Aug. 30, 2015. We will be screening applicants as they come in, and potentially conducting initial interviews before and up to the closing date (to allow for early consideration of promising candidates). Start date is expected to be in October (exact date to be negotiated). Inquiries should be made to Drs. Jim Austin, austinj@ufl.edu or Samantha Wisely wisely@ufl.edu.

Applicants will be required to formally apply through the University of Florida employment site: <http://jobs.ufl.edu/>. This position number is 493185. However, it is encouraged that you also contact one or both of the PIs above with your CV, cover letter, and contact information for 3 references.

“austinj@ufl.edu” <austinj@ufl.edu>

ULouisiana EvolutionaryBiology

The Department of Biology (<http://biology.louisiana.edu>) at the University of Louisiana, Lafayette seeks to fill a tenure-track position at the Assistant Professor level. We are searching for an outstanding scientist who utilizes genomics, bioinformatics, or molecular biology to address important questions in evolution, behavior, physiology, or environmental biology.

Minimum qualifications are a Ph.D. in a relevant field, a significant publication record, and postdoctoral experience. Successful applicants will be expected to establish a vigorous, externally-funded research program, provide instruction to undergraduates and graduate students and participate in our Ph.D. program in Environmental and Evolutionary Biology. Cover letter, curriculum vitae, statement of research interests, statement of teaching interests, and a list of three references (including postal and email addresses) should be emailed as a single pdf attachment to: genomics.search@louisiana.edu. Please refer to Integrative Genomics search in the subject line. To ensure full consideration, applications should be received by October 9, 2015.

The University of Louisiana at Lafayette is a public research university with High Research Activity with accreditation from the Southern Association of Colleges and Schools Commission on Colleges. With an enrollment of over 18,000 students and 575 full-time faculty members, UL Lafayette is the largest of nine universities in the University of Louisiana System. The University offers degree programs in 54 undergraduate disciplines, 20 post bachelor certificates, four graduate certificates, the masters degree in 27 disciplines, and the doctorate in 10 disciplines. Further information about the University is available on the University's webpage at <http://louisiana.edu>. With approximately 30 faculty members and 70 graduate students, the biology program is one of the largest of its kind on the Gulf Coast.

For information about safety at the University of Louisiana at Lafayette, and to review the Annual Security Report, which contains information about crime statistics and other safety and security matters, please go to <http://police.louisiana.edu/jeanne-clery-act>, where you will also find details on requesting a hard copy of the Annual Security Report.

UL Lafayette is an EEO/AA employer.

Paul Leberg <leberg@louisiana.edu>

UMaryland ResTech SpermCooperation

The newly established Fisher Lab at the University of Maryland, College Park is looking to hire 1-2 Research Technicians or Research Associates to carry out NIH funded research aimed at understanding the molecular and physical mechanisms underlying sperm cooperation in *Peromyscus* mice. This research is necessarily integrative and no one candidate is expected to have all skills needed, but a willingness to learn is essential. Experience with gamete handling and microscopy is highly preferred. Lab duties will depend on candidate interests, but assistance with day-to-day lab operations and training new students is essential.

Minimum requirements: - BS in biology, animal sciences or related fields - Laboratory experience with DNA/RNA extraction, PCR, buffer prep - Organized, detail-oriented, able to work independently - Able to learn and troubleshoot new protocols

Preferred experience: - MS or Ph.D. in biology, animal sciences or related fields - Optical microscopy and imaging - Reproductive techniques such as IVF, AI and gamete handling - Rodent handling and husbandry - Next gen sequencing library prep and data analysis

Compensation based on experience, skills and level of education, ranging from \$35,000-50,000 for full-time employment; part-time is negotiable. Benefits and tuition remission available for full-time. UMD is easily accessible by the Metro, connecting campus to the greater DC metro area - a hub of exciting biomedical research, diversity and culture.

To apply, please email Heidi Fisher (hsfisher@umd.edu) and include a copy of CV or resume and 3 references.

- Heidi S. Fisher Assistant Professor Department of Biology University of Maryland College Park, MD 20742
Office (BRB 2128): 301-405-2005 Lab (BRB 2119): 301-405-5613

"hsfisher@umd.edu" <hsfisher@umd.edu>

UMelbourne SystemsGenomics

Lectureship in Systems Genomics (continuing) - University of Melbourne

Deadline: Wednesday, August 12, 2015

The School of BioSciences is seeking to recruit an excellent researcher, with a commitment to teaching and other academic duties, in the area of systems genomics, defined broadly to include a range of computation/statistics-based research on any aspects of the processes leading from genotype to phenotype. The postholder can also be a member of the University's new Centre for Systems Genomics (<http://sysgenmelb.org/>)

Further details and to apply: <http://jobs.unimelb.edu.au/caw/en/job/886164/lecturer-in-systems-genomics> – David Balding Schools of BioSciences and Maths & Stats University of Melbourne
 ph +613 8344 3730 internal 43730 mob +614 6652 0579
 dbalding@unimelb.edu.au

<https://sites.google.com/site/baldingstatisticalgenetics/home>

UMemphis EvolutionaryBiol

Position announcement:

Assistant/Associate Professor, Department of Biological Sciences, The University of Memphis, Memphis, TN 38152

Tenure-track Assistant/Associate Professor in Biological Sciences Education, beginning in August 2016.

The Department of Biological Sciences at the University of Memphis (www.memphis.edu/biology) invites applications for a tenure-track position in biological sciences education (research and teaching) 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 and scholarship.

The successful candidates demonstrated focus must be in biological sciences education research and in devel-

oping innovative instructional approaches to teaching undergraduate biology courses, including knowledge of assessment strategies. Responsibilities of the position include teaching and assisting with curriculum development for introductory and core courses in biology and/or departmental service courses. We are also interested in expanding an existing graduate level teaching course to help our graduate students further develop their teaching skills. Candidates applying at the Assistant Professor level will be expected to pursue extramural funding in STEM education. Candidates at the Associate Professor level should have current funding or a history of funding in STEM education. Startup funds are available and salary will be commensurate with experience.

The University of Memphis is a leading metropolitan research institution with over 25 faculty 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, the interdepartmental Program in Bioinformatics, the Ecological Research Center, the Integrated Microscopy Center, and the Meeman Biological Field Station, are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Candidates should submit a letter of application, statements of STEM 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 September 15, 2015 and may continue until the position is filled. Inquiries should be directed to Dr. Omar Skalli, Chair, STEM Faculty Position, Department of Biological Sciences, University of Memphis, Memphis, TN 38152, USA (or email oskalli@memphis.edu). The University of Memphis, a Tennessee Board of Regents institution, is 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, sex, age, disability or veteran status.

“Duane McKenna (dmckenna)”
 <dmckenna@memphis.edu>

UMichigan EvolBiologyofFishesorBirds

The Department of Ecology and Evolutionary Biology and the Program in the Environment at the University of Michigan seek applicants for an assistant professor (tenure-track) position in the ecology or evolutionary biology of fishes or birds. While we expect to make a junior hire, outstanding senior applicants will also be considered. This is a university-year appointment with an expected start date of September 1, 2016. We seek outstanding individuals who use comparative fish or bird systems to study any area of ecology or evolutionary biology, and who would offer exceptional courses in the ecology or evolution of either taxon. Also strongly encouraged are research programs that could take advantage of the world-class biodiversity collections of the Museum of Zoology and/ or utilize the EEB Department's biological field stations. Museum curatorial activities may replace some teaching duties for appropriate candidates.

Applications should include a cover letter, CV, a statement describing your current and future plans for research, a statement of your teaching philosophy and experience, evidence of teaching excellence (if any), statement of curatorial philosophy and experience (if appropriate), and copies of publications (maximum of 4).

To apply, use this link: <http://www.resources-eeb.lsa.umich.edu/search15/> and arrange to have three letters of recommendation submitted through the same website. Review of applications will begin on October 1st 2015 and will continue until the position is filled. Women and minorities are strongly encouraged to apply. The University of Michigan is supportive of the needs of dual career couples and is an equal opportunity/affirmative action employer.

View the full ad at: <http://www.resources-eeb.lsa.umich.edu/search15/index.php> Meghan Duffy, Ph.D. Associate Professor Department of Ecology & Evolutionary Biology <http://duffylab.wordpress.com/>
Office: 1039 Ruthven Museums Building Phone: 734-763-3658

"duffymeg@umich.edu" <duffymeg@umich.edu>

UMichigan FishBirdEvolution

Ecology or Evolutionary Biology of Fishes or Birds

The Department of Ecology and Evolutionary Biology (<http://www.lsa.umich.edu/eeb/>) and the Program in the Environment (<http://www.lsa.umich.edu/pite>) at the University of Michigan seek applicants for an assistant professor (tenure-track) position in the ecology or evolutionary biology of fishes or birds. While we expect to make a junior hire, outstanding senior applicants will also be considered. This is a university-year appointment with an expected start date of September 1, 2016. We seek outstanding individuals who use comparative fish or bird systems to study any area of ecology or evolutionary biology, and who would offer exceptional courses in the ecology or evolution of either taxon. Also strongly encouraged are research programs that could take advantage of the world-class biodiversity collections of the Museum of Zoology and/ or utilize the EEB Department's biological field stations. Museum curatorial activities may replace some teaching duties for appropriate candidates.

Applications should include a cover letter, CV, a statement describing your current and future plans for research, a statement of your teaching philosophy and experience, evidence of teaching excellence (if any), statement of curatorial philosophy and experience (if appropriate), and copies of publications (maximum of 4).

To apply, go to <http://www.resources-eeb.lsa.umich.edu/search15/> and arrange to have three letters of recommendation submitted through the same website. Review of applications will begin on *October 1st 2015* and will continue until the position is filled. *Women and minorities are strongly encouraged to apply. The University of Michigan is supportive of the needs of dual career couples and is an equal opportunity/affirmative action employer.*

L. Lacey Knowles Professor and Curator Dept. of Ecology and Evolutionary Biology Museum of Zoology University of Michigan Ann Arbor MI 48109-1079

"knowlesl@umich.edu" <knowlesl@umich.edu>

UOklahoma AvianGenomics

ASSISTANT PROFESSOR/CURATOR - AVIAN GENETICS/GENOMICS

POSITION AVAILABLE: Tenure-track Assistant Curator of Ornithology and Assistant Professor of Biology, Sam Noble Museum and Department of Biology, University of Oklahoma, Norman, Oklahoma.

SALARY: Negotiable (9-month appointment). Tenure will be in the Department of Biology.

BEGINNING DATE: 16 August 2016

DESCRIPTION OF POSITION: We seek a creative, collaborative thinker with a collection-based research program involving molecular approaches to studying avian systems. We are especially interested in candidates who use genomic tools and datasets in combination with innovative computational, ecological, behavioral and/or comparative approaches to address important biological questions ranging from the origin and maintenance of organismal diversity, adaptation to changing environments, and human health and disease. Areas of research interests include, but are not limited to: comparative genomics, landscape/population genetics, geographical ecology, global change biology, evolutionary genetics, and mechanisms of evolution. Preference will be given to biologists with a documented record of collections-based research in natural history who also clearly demonstrate cross-disciplinary research programs. A Ph.D., teaching experience, and field and museum research experience in ornithology are required.

RESPONSIBILITIES: The successful candidate will be expected to: (1) develop and maintain an innovative, extramurally-funded research program in avian systems; (2) oversee care and obtain support for a collection of more than 26,000 specimens by maintaining records, identifying and cataloging specimens, supervising preparators and assistants, expanding and preserving the collections, and developing long-range plans for collection maintenance and development; (3) contribute to museum public exhibit development and support; (4) develop and contribute to museum-related outreach activities; and (5) contribute to undergraduate and graduate teaching, including instruction of one course per year (one-half the regular department teaching load) in ornithology, animal behavior, biogeography, genetics, evolution, ecological modeling, or bioinformatics. A full-

time collection manager is funded in this collection (50% collection, 50% Genetic Resources Core Facility), and a rotating graduate assistant appointment is assigned to the collection.

GENERAL INFORMATION: The Sam Noble Museum is an organized research unit of the University of Oklahoma and is one of the finest university museums in the world. The museum has an outstanding curatorial, collections, education, exhibits, and support staff that serves the museum's mission from research to preservation to education at all levels. The Department of Biology is a leading academic department with a tradition of excellence in organismal biology. It is home to 20 of the 44 faculty in the University's graduate program in Ecology and Evolutionary Biology, and it is currently in the process of hiring several new faculty in the next two to three years to expand on its strengths in geographical ecology and the biology of behavior.

APPLICATIONS: Send cover letter, curriculum vitae, summary of experience and goals (including teaching, research, and curation), and representative pdf reprint examples to Dr. Michael A. Mares, Director, mmares@ou.edu. Applicants should also arrange to have three signed letters of reference sent to mmares@ou.edu or to Genetic Ornithologist Search Committee, Sam Noble Museum, 2401 Chautauqua Ave., Norman, Oklahoma, 73072-7029. Visit us at <http://snomnh.ou.edu> and <http://biology.ou.edu>. **CLOSING DATE:** Screening of candidates will begin 1 October 2015 and continue until the position is 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.

"Wall, Salina E." <salinawall@ou.edu>

UOklahoma PlantSystematistCurator

PLANT SYSTEMATIST/CURATOR POSITION

Department of Microbiology and Plant Biology (MP-BIO) and The Oklahoma Biological Survey (OBS) at the University of Oklahoma, Norman, Oklahoma, invite applicants for a tenured or tenured-track Faculty Position in Plant Biology and Curator of the Bebb Herbarium.

The position will be at the rank of Assistant Prof., Associate Prof., or Professor. The position is a 12-month, joint appointment in MPBIO and the OBS(one-half time in each unit) with tenure awarded jointly beginning July 1, 2016. We are committed to achieving a diverse workforce.

We seek a plant biologist with strong curatorial skills and a research program focusing on the systematics and conservation of plants. Areas of research interests include: comparative genomics, population genetics, conservation biology, and mechanisms of diversification. The successful candidate will utilize collection-based systematic techniques, have experience in fieldwork and natural history collections, and will demonstrate cross-disciplinary research capability. Responsibilities will include: (1) oversight and curation of a vascular plant collection of 250000+ specimens (in conjunction with a collections manager); (2) contributing to undergraduate and graduate teaching, including courses such as plant taxonomy and specialized courses in areas of expertise; (3) developing and maintaining an extramurally funded research program, and (4) conducting public outreach. The OBS is a state agency and a research department at OU with a mission to gather, analyze and disseminate information regarding the biota and ecological communities within the state and associated geographical areas.

Candidates must have: (1) A Ph.D. in Plant Biology or related area, herbarium research experience with strong record of publication and external funding. (2) Demonstrate a solid, collection-based research program in the systematics, biogeography, conservation and biology of plants. (3) Evidence of and commitment to obtain extramural funding to support research and collections. (4) Commitment to excellence and innovation in the teaching and mentoring of graduate and undergraduate students. (5) Contribute to undergraduate and graduate teaching, including courses such as plant systematics and flowering plants, as well as specialized classes in areas of expertise. (6) Commitment to contributing to the service activities of the Oklahoma Biological Survey, Department of Microbiology and Plant Biology, College of Arts and Sciences, University, and to the profession.

The University of Oklahoma (OU) is a Carnegie-R1 comprehensive public research university known for excellence in teaching, research, and community engagement, serving the educational, cultural, economic and health-care needs of the state, region, and nation from three campuses: Norman, Health Sciences Center in Oklahoma City and the Schusterman Center in Tulsa. OU enrolls over 30,000 students and has more than 2700 full-time faculty members in 21 colleges. In 2014, OU became the first public institution ever to rank #1 nationally in the recruitment of National Merit Scholars,

with 311 scholars. The 277-acre Research Campus in Norman was named the No.1 research campus in the nation by the Association of Research Parks in 2013. Norman is a culturally rich and vibrant town located just outside Oklahoma City. A with outstanding schools, amenities, and a low cost of living, Norman is a perennial contender on 'best place to live' rankings. Visit <http://ou.edu/provost/flipbookand> [www.*_ou_.edu/-publicaffairs/*_oufacts_.html](http://www.ou.edu/publicaffairs/_oufacts_.html) < <http://www.ou.edu/publicaffairs/oufacts.html> > for more information.

Application Process. Confidential review of applications will begin October 1, 2015 and continue until both positions are filled. Interested individuals are invited to submit a letter of application, current curriculum vitae, up to five representative publications, a statement of research plans, as well as a statement of teaching interests and philosophy. Three to five letters of reference should be sent directly to mpbiofacultysearch@ou.edu. To apply, please visit the University's Human Resources web site at <https://jobs.ou.edu> and search listings for requisition number *23222*. *ALL APPLICANTS MUST APPLY ONLINE.*

For information on the Plant Systematist/Curator Position: Dr. Bruce Hoagland, Professor, bhoagland@ou.edu. Attn. Plant Systematist/Curator Search Committee. 770 Van Vleet Oval, Norman, Oklahoma, 73072-7029. Visit us at mpbio.ou.edu and biosurvey.ou.edu < <http://www.biosurvey.ou.edu> >.

/The University of Oklahoma is an Affirmative Action/Equal Opportunity

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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>

UPennsylvania ResTech ProteinEvolution

Assistant Professor of Biology

University of Pennsylvania

Research Technician Position Available

The newly minted Levine Lab (www.levinelab.io) in the Department of Biology and the University of Pennsylvania is seeking to hire a research technician and/or lab manager. The lab group investigates the causes

and functional consequences of rapid evolution at proteins that package DNA. Using primarily *Drosophila melanogaster* as a model system, we integrate evolutionary genetics, genomics, and cell biology to learn about chromatin biology and epigenetics. The successful applicant will help set up this new lab while working closely with the PI on several exciting projects. The position will start late August 2015.

Responsibilities

Drosophila maintenance, dissection, crossing, and screening

Molecular biology including DNA/RNA preparation, PCR, cloning, Western Blotting, immunofluorescence, cell transfection and staining

Lab organization, maintenance, and purchasing

Participation in group meetings and planning sessions

Essential Qualifications/Skills

Bachelors degree in biology or related field

At least two years experience in a research laboratory executing molecular biology protocols, including PCR, cloning, Western blotting

Capacity to work both independently and collaboratively

Meticulous lab notebook keeping

Excellent communication skills

Enthusiasm for evolutionary biology and/or genetics

Preferred Qualifications/Skills

§Previous experience rearing *Drosophila*

Exposure to confocal microscopy

Comfort at the command line

To Apply:

Please apply online at <http://jobs.hr.upenn.edu/postings/11498> and send to m.levine AT sas.upenn.edu as a single pdf the following:

Cover letter stating interest in the position and describing qualifications (please address list of essential qualifications listed above)

CV

E-mail addresses of three references

Mia Levine <mial@sas.upenn.edu>

UPittsburgh 3 Evolution

Dear Colleagues,

The Department of Biological Sciences at the University of Pittsburgh invites applications for a cluster hire of three tenure-track faculty positions in the broad areas of ecology, evolution, and/or behavior. Two positions are anticipated at the ASSISTANT PROFESSOR level and one at the ASSOCIATE PROFESSOR level, pending budgetary approval. We seek outstanding scientists who will enhance and complement existing strengths in ecology and evolution in our broad-based interactive biology department. We invite applications from all candidates working on cutting edge questions incorporating the topics of ecology, evolution, or behavior and using animal, plant or microbial systems. Candidates working in the following areas are especially encouraged to apply:

- Species (plant, animal, microbe) interactions
- Microbial ecology or ecology/evolution of the microbiome
- Population, functional or evolutionary genomics
- Physiological, biophysical or functional ecology

Successful candidates will have a Ph.D. and postdoctoral experience and will be expected to establish an extramurally funded research program, train graduate students, and actively participate in undergraduate science education. To ensure full consideration, applications and reference letters should be received by September 30, 2015. Applicants can apply online at: <https://facultysearch.as.pitt.edu/apply/index/MTA2>. Candidates should submit a letter of application, CV, a 2-3-page statement of research accomplishments and future plans, a brief description of teaching interests and at least three letters of reference. For each reference, you will have the opportunity to input a personal email address or an email address generated through Interfolio's Online Application Delivery. In both cases, an email notification will be sent to the designated address with instructions about uploading the letters to our system. The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity and diversity. Women and members of minority groups under-represented in academia are especially encouraged to apply. Further information about the Department of Biological Sciences is available at: <http://www.biology.pitt.edu>. Sincerely,
Nathan Morehouse

Assistant Professor Department of Biological Sciences
University of Pittsburgh 165 Crawford Hall Fifth
and Ruskin Avenues Pittsburgh, PA 15260 <http://www.morehouselab.pitt.edu/> “Il y a un autre monde
mais il est dans celui-ci.” - Paul Åluard

“nim@pitt.edu” <nim@pitt.edu> X-MS-Has-Attach:

Uppsala Tech Bioinformatician

Bioinformatician

We seek a dedicated and talented person to join Hans Ellegren’s research group at the Evolutionary Biology Centre, Uppsala University, Sweden (<http://www.ieg.uu.se/evolutionsbiologi/ellegren-se/?languageId=1>) as bioinformatician.

We work with large-scale genomic approaches to general evolutionary questions such as speciation, DNA sequence evolution and sex chromosome evolution. Our main study system is birds and we have sequenced and assembled the flycatcher genome in house (Ellegren et al 2012 Nature 491:756-760), and were part of the large avian phylogenomics consortium (Jarvis et al 2014 Science 346:1320-1331). By whole-genome re-sequencing of large population samples of different flycatcher species we gather extensive amounts of SNP data and use these for population genomic analyses. The bioinformatician, who will be fully integrated with the research group, will work with genome assembly and detection of structural variation using data from NGS-technologies that provide long (>10 kb) reads. She/he will also be responsible for curation of flycatcher genome sequence data and participate in research projects.

The position is initially for one year but can be extended. It can also be combined with PhD studies.

Suitable background is a BSc or MSc in, for example, bioinformatics or computer science. Experience from working with NGS-data in UNIX environment is of merit, as is familiarity with relevant programming languages (e.g. Perl, Python).

To apply for the position, please visit the Uppsala University web site for Open Positions and log in and register your application at <http://uu.se/en/about-uu/-join-us/details/?positionId=73431> Closing date for the application is Sep 20.

Please feel free to contact me at Hans.Ellegren@ebc.uu.se with any questions.

Our research group consists of some 15 scientists, including PhD students, post-docs and bioinformaticians. The research is funded by the European Research Council (ERC), Knut and Alice Wallenbergs Foundation and the Swedish Research Council.

The venue for the position, the Evolutionary Biology Centre, is situated in central Uppsala. The working atmosphere is international with the great majority of PhD students and post-docs recruited from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations. Local platforms for high-performance computational analyses (<https://www.uppmx.uu.se/uppnex>), NGS, SNP genotyping and proteomic analyses (<http://www.scilifelab.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

The Ellegren group is part of the Department of Evolutionary Biology (<http://www.ieg.uu.se/evolutionary-biology/>), which is a branch of the larger Department of Ecology and Genetics (<http://www.ieg.uu.se/?languageId=1>). The Department of Evolutionary Biology houses 8 independent research groups and about 25 PhD students, 25 postdocs, and several bioinformaticians. A common theme is that we address key questions in evolutionary biology, like speciation, local adaptation, life history evolution, genome and molecular evolution, using genomic approaches. We have tight connections with several other research groups in the Department of Ecology and Genetics within the Evolutionary Biology Centre.

Professor Hans Ellegren Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvägen 18D SE-752 36 Uppsala Sweden

Email: Hans.Ellegren@ebc.uu.se

LAB WEB PAGE: <http://www.ieg.uu.se/evolutionsbiologi/ellegren-se/?languageId=1> Hans Ellegren <hans.ellegren@ebc.uu.se>

UUtah 4 Biodiversity

University of Utah

Multiple Tenure-Track or Tenured Faculty Positions in Sustaining Biodiversity

Biodiversity, the richness of life on Earth, past and present, is declining at unprecedented rates, accelerated by human activity. The need for outstanding research and broad-reaching public education related to biodiversity and its preservation is urgent.

The University of Utah is establishing a faculty cluster where biodiversity research is combined with learning research for a novel interdisciplinary emphasis that strongly supports the University's commitment to sustainability. Each faculty position will be jointly hired between the Natural History Museum of Utah and any of the following departments/institutes participating in the cluster: Anthropology, Biology, Computer Science, Educational Psychology, Geography, Geology & Geophysics, and the Scientific Computing & Imaging Institute. Research is expected to be based, in part, on the Museum's unique resources of scientific collections (plants, vertebrates, entomology, paleontology, and archaeology) and access to the public. Although research experience in the Western US is not required, it is expected that successful candidates will conduct some portion of their research in the Intermountain West.

We are seeking applicants for one or two tenure-track or tenured faculty positions at the Assistant or Associate rank to begin in July 2016. An additional two or three hires are planned for 2017 to complete a total of four faculty in the cluster. Candidates should have an excellent and sustained record of research (both field and laboratory), a demonstrated ability to generate extramural funding, demonstrated understanding of working in a Museum environment, and experience in working with diverse researchers from across the disciplinary spectrum. We will hire one faculty member in learning sciences, and three in some combination of the other fields described below:

Informal Learning Science

Research emphasis on STEM learning in informal contexts (particularly regarding museum collections, environments, and research foci), potentially including learning at every life stage, bridging formal and informal learning environments, citizen science, leveraging

digital technologies to enhance learning opportunities in multiple contexts, and/or analyzing/assessing cognitive learning processes as well as outcomes.

Conservation Biology

Areas of research emphasis could include ecological and evolutionary responses to habitat loss and climate change, ecological and evolutionary responses to invasive species, identifying and ameliorating threats to endangered species, strategies and methods of restoring habitat and ecosystem functionality, and/or citizen science.

Paleoecology

Research emphasis on fundamental questions of process and response in ecosystems to past and present global change, and/or applying quantitative tools to understand geospheric and biospheric interactions over ecological and geological timescales.

Biodiversity Genomics

Areas of research emphasis could include documenting changes in the genetic make-up of species over time (including the use of ancient DNA), phylogenetic systematics, biogeography, coevolution, species domestication, evolutionary responses to changing environments, population genetics, symbiosis, conservation genetics, and/or community phylogenetics. Applicants should have experience in current genomic techniques and analysis.

Visualization

Research emphasis on information visualization, scientific visualization, visual analytics, human-computer interaction, or image cognition for knowledge discovery and interpretation. Competitive applicants will have a research focus relevant to biodiversity, conservation, and/or the fields of Geography and Geovisualization, as well as interest in use of visualization for public engagement.

Responsibilities include: (1) meaningful collaboration with faculty in the Sustaining Biodiversity cluster as well as faculty at NHMU and in the relevant academic department; (2) development and maintenance of an ongoing program of scholarly research; (3) design, teaching, and coordination of core courses in the relevant academic department; (4) teaching of graduate level courses in area of specialization; (5) advisement and supervision of graduate students; (6) development of research funding proposals to appropriate national agencies and foundations; (7) participation in Museum public programming; (8) engagement with the public and with Museum collections, and (9) participation in faculty governance at the department, college, and university levels.

Appointments will be split equally between the Museum and one pertinent academic department, with the exception of the visualization position, which will be appointed in combination with the Museum, SCI Institute, Geography, and/or other academic department. Retention, promotion and tenure decisions will be made according to the academic department's

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UWyoming 2 Bioinformatics

RESEARCH SCIENTISTS IN BIOINFORMATICS
#4939 and #4351 Department: Molecular Biology College of Agriculture

The Wyoming INBRE Bioinformatics Core is seeking to hire two Research Scientists. These positions will support the bioinformatics research and education activities of the Core, and will include service (50%), teaching (40%), and research (10%) components. The Core serves a state-wide network that includes the University of Wyoming (Laramie and Casper), as well as several community colleges, so some travel within the state is associated with the positions. The successful applicants will collaborate with biological researchers on bioinformatics problems, and these activities will constitute the service component of the positions. The research component is anticipated to mostly consist of co-authored publications arising from these collaborative projects. However, as long as the service goals of the positions are achieved, maintenance of an independent research program will be encouraged. The teaching component will mostly consist of organizing and conducting formal training activities (short courses, workshops), as well as one-on-one training sessions with researchers. Minimum requirements for these positions include an undergraduate degree in a discipline related to computational biology or bioinformatics, and evidence of productive research experience. Candidates with a PhD in a relevant discipline, experience with successful interdisciplinary collaboration, and experience in formal or informal teaching or training will be preferred. A salary commensurate with experience will be offered. To apply, send your CV and a statement of professional interests (research and teaching accomplishments, future research and teaching interests,

and interdisciplinary background) collated into a single pdf file, by email to nlward@uwyo.edu. Three letters of recommendation will be requested separately at a later date, for those candidates that progress in the search. Review of applications will begin on September 15, 2015 and continue until the position is filled. Inquiries about details of the position may be directed to Dr. Naomi Ward (nlward@uwyo.edu). The anticipated start date of the positions will be November 15, 2015, although alternative start dates may be negotiated.

The University of Wyoming is an Equal Employment Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability or protected veteran status or any other characteristic protected by law and University policy. Please see www.uwyo.edu/diversity/fairness. We conduct background investigations for all final candidates being considered for employment. Offers of employment are contingent upon the completion of the background check.

Naomi Louise Ward <nlward@uwyo.edu>

WashingtonU Computational Genomics

ASSISTANT PROFESSOR IN COMPUTATIONAL BIOLOGY/GENOMICS

The Department of Biology at Washington University in St. Louis (<http://www.wubio.wustl.edu> <<http://www.wubio.wustl.edu/>>) invites applications for a tenure-track faculty position at the Assistant Professor level from candidates whose research employs computational and/or genomics-scale approaches to answer important biological and/or evolutionary questions. We seek an innovative and accomplished scientist whose research program will complement and diversify existing departmental areas including epigenetics in plant/animal/microbial systems, developmental biology.

The successful candidate will have an appointment at the rank of Assistant Professor in the Department of Biology and is expected to establish an externally funded research program. Contributions to both undergraduate and graduate teaching and research mentoring are required. Duties will also include writing research publications, serving as a formal advisor to undergraduate students, and participating in departmental committees

and university service. Qualifications include a PhD degree and strong research, mentoring and teaching credentials. Competitive start-up funding, laboratory development resources and ancillary support commensurate with the candidate's qualifications and needs are available with this position.

Consideration of applicants will begin on October 1, 2015 and will continue until the position is filled. Applicants should submit the following materials in a single pdf file format: cover letter; current curriculum vitae; separate statements of research and teaching interests; and the names and contact information of three

individuals who can serve as references upon request. Application materials must be submitted electronically to: computationalsearch@wustl.edu Questions regarding the search process should be directed to Douglas Chalker (dchalker@wustl.edu), Chair of the Search Committee.

Washington University is committed to excellence through diversity, and we particularly encourage applications from persons from underrepresented groups. Washington University is an Affirmative Action Employer

“Musick, Judy” <jmusick@wustl.edu>

Other

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Evolution conservation survey

Seeking participants for survey on evolution and conservation I am recruiting people who think about the intersection of evolutionary processes (speciation, hybridization, divergence with gene flow) with taxonomic and conservation practices (naming units and determining legal protection). The data will be used to describe current conservation practices and suggest alternative actions for a manuscript on incorporating evolution into restoration.

Please use the following link to access the survey and invite others you think may be interested in

the topic: https://cuboulder.qualtrics.com/SE/?SID=-3DSV_erFwO9SDZ5IU94p Thank you in advance and please contact me with any questions.

Sierra Love Stowell, M.A. Ph.D. Candidate, Martin Lab
Department of Ecology & Evolutionary Biology University of Colorado at Boulder lovestowell@gmail.com

Sierra Love Stowell <lovestowell@gmail.com>

InMemoriam BillGelbart

= Dr. William Gelbart It is with great sadness that we report the passing of Dr. William (Bill) Gelbart. Bill was professor of molecular and cellular biology at

Harvard University. His laboratory focused on understanding the molecular basis of pattern formation in higher animals, focusing on cell-cell signaling related to the decapentaplegic pathway.

Beyond his many research contributions, Bill is well respected for his leadership in the *Drosophila* community. He has served as Principal Investigator for FlyBase < <http://www.flybase.org/> > since the project was initiated in 1991. He was also a trusted advisor to many other community efforts including WormBase, Zebrafish Information Network, The Arabidopsis Information Resource, and many others and served on the National Advisory Council for the National Human Genome Research Institute.

Bill earned his BS in biology from Brooklyn College in 1966 and his PhD in genetics from the University of Wisconsin in 1971. He did postdoctoral work with Ed Lewis at Caltech and Art Chovnick at the University of Connecticut before moving to Harvard in 1976. In addition to his research and teaching during his tenure at Harvard, Bill served as the Head Tutor for the undergraduate concentration in biology and as program director for an interdepartmental predoctoral training program in genetics and genomics.

Bill is survived by his devoted wife, Susan; his loving daughters Marnie, Courtney, and Jennifer; his adoring grandchildren Delilah, Theodore, and Amelia; a brother and sister-in-law; many nieces, nephews and dear friends. A memorial service honoring Bill will take place at a later date.

The family has requested that in lieu of flowers, contributions can be made to the The Greater Boston Food Bank < <http://www.gbfb.org/> > or WGBH < <http://www.wgbh.org/> > (Boston's PBS station).

Regards, FlyBase News by FlyBase <http://tinyletter.com/FlyBase> 1001 E Third St Bloomington, IN 47405 USA

FlyBase <flybase@indiana.edu>

Parasitism Evolution reviews

Dear friends,

I am teaching evolution for Biology students and some of them are interested in to read about parasitism evolution but I cannot find good reviews. There are many study cases and articles about one specific group of parasites!

I was planning to use some chapters of this book <https://muse.jhu.edu/books/9781400840809?auth=0>, but I don't have access!

If you have some good PDF articles or book chapters about parasites evolution, please send me some of them!

Thanks for any help!

Prof. Dr. J. C. VOLTOLINI

Grupo de Pesquisa e Ensino em Biologia da Conservação - ECOTROP

Universidade de Taubaté, Departamento de Biologia Taubaté, SP. 12030-010.

E-Mail: jcvoltol@uol.com.br

* Grupo de pesquisa ECOTROP CNPq: <http://dgp.cnpq.br/dgp/espelhogrupo/6541980798150818>

* Currículo Lattes: <http://lattes.cnpq.br/8137155809735635>

* Assessoria Estatística: <http://assessoria-estatistica.blogspot.com.br/> * Fotos de Cursos e Projetos: <http://www.facebook.com/ecotrop> VOLTOLINI <jcvoltol@uol.com.br>

QueensU Interns Evolutionary Biol

Dear Colleagues,

I would greatly appreciate your assistance with advertising a few research opportunities in Evolutionary Ecology and Ecological Genetics/Genomics with the Colautti Lab (bit.ly/colautti) at Queen's University in Canada (www.queensu.ca).

These internships are for 12 weeks in the spring/summer and are targeted at undergraduates who wish to gain research experience and explore the possi-

bility of doing a MSc or PhD degree in Canada. Three positions are available in our lab for senior undergraduate students in the following countries: Australia, Brazil, China, France, India, Mexico, Saudi Arabia, Tunisia, and Vietnam

Interested students should apply by September 24, 4pm PDT, directly through the Mitacs website: <https://www.mitacs.ca/en/programs/globalink/-globalink-research-internship> Many Thanks,

Rob

Dr. Robert I. Colautti Biology Department Queen's University Biosciences Complex 116 Barrie St. Kingston, ON Canada K7L 3N6 robert.colautti@queensu.ca Phone: 613-533-2353 Fax: 613-533-6617 <http://bit.ly/colautti> robert.colautti@queensu.ca

SouthAfrica VolResAssist EvolutionCooperation

Volunteer Research Assistant position Cooperative behaviour of the Damaraland Mole-Rat

Rute Mendonça (PhD student, University of Pretoria) and Jack Thorley (PhD student, University of Cambridge) are looking for a volunteer research assistant to help with their exciting experiments involving captive Damaraland mole-rats, *Fukomys damarensis*. The study site is at the Kuruman River Reserve, in the South African Kalahari Desert.

Our research questions relate to individual variation in the display of helping behaviour and its underlying physiological consequences in the cooperatively breeding Damaraland mole-rat.

We are looking for applicants that are available for a 12 month period to start at the beginning of September 2015. Shorter availabilities can also be considered.

The position mainly involves data collection (behavioural observations and collection of blood, sperm and urine samples), but other general tasks related to animal husbandry will also be expected. Working weeks will typically be 6 working days and 1 flexible day-off. Working days are usually long, starting at 7 am and often not finishing before 7 pm.

Applicants should be hardworking, enthusiastic, physically fit, and prepared for long hours of observations. A degree in biological sciences is preferable but not required. Driving license desirable.

Costs of food and accommodation while at the project will be covered. The successful applicant will be part of a larger community of volunteers and researchers on site working on a variety of social taxa.

If you are interested in this position send your CV and cover letter to Rute Mendonça (rutemendonca@gmail.com) and state in your email what is your availability and when you'd be ready to start. Shortlisted applicants will be invited for a Skype interview.

Deadline: 7th August 2015 (the position will remain open until filled)

Rute Mendonça <rutemendonca@gmail.com>

SugarBeet pathogens samples

Dear Members,

Do you take nice walks along the coast? If so, we are after powdery mildew samples from Sea beet (*Beta maritima*) from around the world. If not, do you take nice walks in the countryside? If so, we are after powdery mildew samples from Sugar beet (*Beta vulgaris*) from around the world.

Our focus for the project is primarily the UK and if you can send us a leaf we would be most grateful.

If you are outside the UK we must ask that you do a DNA extraction (sample the leaf and please get in touch).

If you are out and about and you identify a whitish dusty coating on the leaf of a *Beta* species (coastal species look like dock (*Rumex*)) if you can snip the leaf record your location and get in touch that would be great!

Please contact mark.mcmullan@tgac.ac.uk Lawrence.Percival-Alwyn@tgac.ac.uk for more information: if you have snipped a leaf, if you would like to know how to identify beets or if you just want to know more about the project. Best, Mark

Dr Mark McMullan Postdoctoral Research Associate The Genome Analysis Centre Norwich Research Park Twitter: mcmullan0 Skype: mark.mcmullan <http://www.tgac.ac.uk/genomics/plant-and-microbial-genomics/mark-mcmullan/> "Mark McMullan (TGAC)" <Mark.McMullan@tgac.ac.uk>

Turtle ant samples

Turtle ant (Cephalotes) samples requested for molecular work in the Moreau Lab (<http://www.moreaulab.org/>).

As part of a collaborative NSF Dimensions of Biodiversity (DoB) project between the labs of Corrie Moreau (Field Museum of Natural History, Chicago), Jacob Russell (Drexel University, Philadelphia), Scott Powell (George Washington University, D.C.) and John Wertz (Calvin College) we are requesting samples of turtle ants (genus Cephalotes).

As part of this project we are interesting in inferring the evolutionary history of the genus using phylogenomic data and also testing the potential co-evolution of their gut-associated bacterial communities.

To answer these questions samples of as many Cephalotes species as possible from various parts of their distribution range from South America to the southern United States are necessary. We are particularly interested in samples from Central and South America.

As these are medium-sized ants only a few worker ants of each Cephalotes collection are necessary and will be helpful for this study.

If you have any turtle ant specimens, and you would be willing to donate some for this project, please email me or send them to the address below. Any and all samples, regardless of the preservation method, would be greatly appreciated, although specimens preserved in high-grade ethanol are preferred. However, if you will go collecting in the future and have a chance to collect turtle ants that you would be willing to contribute, preservation in >95% ethanol would be the best.

Please forward this to anyone you know that may have turtle ant specimens and feel free to contact me with questions.

Thank you in advance, Corrie

Corrie Saux Moreau, Ph.D. | MacArthur Associate Curator - Insects | Integrative Research Center | Department of Science and Education | Field Museum of Natural History | 1400 South Lake Shore Drive | Chicago, IL 60605 USA | Office: (312) 665-7743 | Fax: (312) 665-7754 | Email: cmoreau@fieldmuseum.org | Moreau Lab website: <http://www.moreaulab.org/> | FMNH website: <http://fieldmuseum.org/users/corrie-moreau> | Field Museum Women in Science: <http://fieldmuseum.org/-womeninscience> cmoreau@fieldmuseum.org

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BielefeldU Uppsala PinnipedPopGenomics

Post-doctoral position: Pinniped population genomic-
sWith Dr Joe Hoffman (Bielefeld University, Germany),
Prof Oliver Kruger (Bielefeld University, Germany), and
Dr Jochen Wolf (Evolutionary Biology Centre, Uppsala,
Sweden)

A two-year postdoctoral researcher position is available
to work in the groups of Joe Hoffman at Bielefeld Uni-
versity in Germany and Jochen Wolf at the Evolutionary
Biology Centre in Uppsala, Sweden.

This postdoc position is broadly embedded in a research
project on Galapagos sea lions (*Zalophus wollebaeki*)
that Prof Fritz Trillmich and Dr Jochen Wolf started
12 years ago ([http://www.uni-bielefeld.de/biologie/-
animalbehaviour/trillmich/sealions.html](http://www.uni-bielefeld.de/biologie/-animalbehaviour/trillmich/sealions.html)). Using whole
genome re-sequencing data from more than 100 individ-
uals across the entire species range, the postdoc will
explore key evolutionary processes such as the genetic
basis of speciation, adaptation and fitness. An impor-
tant feature of this system is the presence of different
ecotypes in an essentially sympatric setup (Wolf et al.
2008, Shafer & Wolf 2013). There will also be the op-
portunity to work on Antarctic fur seals (*Arctocephalus*
gazella), opening a comparative axis to the project.

Funding: This postdoc is funded by the German Science
Foundation (DFG) for up to two years and includes
health insurance. The pay scale is TVL E13 (100%).

The postdoc will be based in Bielefeld, but will have
considerable flexibility over how much time they spend
in Bielefeld and in Uppsala. A joint postdoc will pro-
vide you with an excellent opportunity for international
travel and collaboration, and experience of working in
diverse environments.

The environment: The postdoc will join the Department
of Animal Behaviour at Bielefeld University, Germany
(www.uni-bielefeld.de/biologie/vhf/index.html) and the
Evolutionary Biology Centre, Uppsala University, Swe-
den (<http://www.ebc.uu.se>). The department of Animal
Behaviour in Bielefeld is the oldest of its kind in Ger-
many and currently hosts six principal investigators,
seven postdocs and twenty PhD students. It offers a
stimulating international environment and an excellent
research infrastructure. The working language of the
Department is English. Bielefeld is a small city with
an attractive historical centre and easy access to the
Teutoburger Wald for hiking and other outdoor pur-
suits. It offers a very high standard of living and is well
connected to most major European cities.

The Evolutionary Biology Centre is one of the world's
leading research institutions in evolutionary biology. It
is part of Uppsala University which has been ranked first
place among all European Universities in the subject of
biology (CHE European ranking) and bridges a broad
variety of disciplines. The scientific environment with
numerous seminars, journal clubs and social activities of-
fers excellent possibilities for contacts and collaborations.
Dr Wolf's lab is part of the Department of Evolutionary
Biology (<http://www.ebc.uu.se/Research/IEG/evbiol>)
and addresses fundamental evolutionary questions using
a wide range of different approaches. As a member of the

Science for Life Laboratory (<http://www.scilifelab.se>) we have access to high performance computing resources (<https://www.uppmax.uu.se/uppnex>), excellent lab facilities and extended bioinformatic infrastructure (<http://www.scilifelab.se/platforms>). The lab is situated in the student town of Uppsala, which offers rich opportunities for cultural and outdoor activities. Sweden's capital Stockholm is less than an hour's train ride away.

Qualifications: The successful applicant will hold a PhD degree, have a thorough background in population genetics and/or comparative genomics and be experienced in handling large genome-wide data sets. Population geneticists with a more theoretical background are also encouraged to apply. A high standard of spoken and written English is required.

How to apply: Please provide: (i) a letter of motivation including a maximum 2-page statement of your research interests, relevant skills and experience; (ii) a CV including publication list; and (iii) names and contact details of three referees willing to write confidential letters of recommendation. All materials should be emailed as a single PDF file to: joseph.hoffman@uni-bielefeld.de with 'Postdoc application' in the subject line.

The application deadline is October 5th 2015 and interviews will take place in the following few weeks. The start date is flexible and will depend on the timeframe of the most qualified applicant, but would ideally

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CharlesU Prague NightingaleSpeciation

POST-DOC POSITION AT CHARLES UNIVERSITY IN PRAGUE AVAILABLE FROM JANUARY 2016!

Genomics of speciation in nightingales

Understanding the mechanisms of species origin is a major goal of evolutionary biology. Until recently, studies of genetic basis of species formation has been restricted to model organisms amenable to laboratory crosses. Development of next-generation sequencing methods along with the emergence of novel population genomic ap-

proaches brings a great opportunity to study genetic underpinnings of speciation even in wild populations. This can broaden our knowledge of mechanisms of speciation and allow us to make more general conclusions about selective forces driving the origins of biodiversity.

The aim of this project is to elucidate the genetic architecture of reproductive isolation between two closely related and still hybridizing song bird species, the Common Nightingale (*Luscinia megarhynchos*) and the Thrush Nightingale (*L. luscinia*). Using novel genotyping approaches based on next generation sequencing we will genotype several hundreds of DNA samples from naturally occurring hybrid populations, already collected during our previous research. The obtained data will allow us to use two complementary approaches for studying genetic basis of reproductive isolation. First, we will use genomic cline analysis to identify candidate reproductive isolation loci with low levels of introgression relative to most of the genome. Second, we will use admixture mapping to examine genetic basis of traits that contribute to reproductive isolation. Combination of both approaches will enable us to infer the importance of different reproductive barriers in nightingale speciation, identify candidate speciation genes and elucidate the mechanisms responsible for the large effect of the Z chromosome in reproductive isolation, a hallmark of avian speciation.

Eligibility: We are looking for a post-doc trained in bioinformatics and/or population genetics. The applicant must have received a PhD degree no more than 10 years prior to the application deadline. The post-doc research fellow is recruited to work on the research project for a period of two years.

Supervisor: Radka Reifová, Ph.D. Department of Zoology, Faculty of Science, Charles University in Prague
Email: radka.reifova@natur.cuni.cz Web page: <http://web.natur.cuni.cz/~radkas/> Salary: The candidate's net monthly income will be 50,000 CZK (ca 2,000 EUR) (Note that living expenses in the Czech Republic are generally lower than in Western European countries.)

How to apply: If interested, please, send (1) a CV including a list of publications, (2) motivation letter and (3) a letter of reference of your PhD supervisor or research advisor to Radka Reifová (radka.reifova@natur.cuni.cz) by 21th August 2015.

– RNDr. Radka Reifová, Ph.D. Phone: +420 221 95 1872 E-mail: radka.reifova@natur.cuni.cz, radkas@natur.cuni.cz Web page: www.natur.cuni.cz/~radkas/ Department of Zoology Charles University in Prague Faculty of Science Viničná 7, 128 43 Praha 2

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Pokud je tento e-mail součástí obchodního jednání, PÁirodovÁá fakulta Univerzity Karlovy v Praze: a) si vyhrazuje právo jednání kdykoliv ukonèit a to i bez uvedení dÁ¹vodu, b) stanovuje, Á³/₄e smlouva musí mít písemnou formu, c) vyluèuje pÁijetí nabídky s dodatkem èi odchylkou, d) stanovuje, Á³/₄e smlouva je uzavÁena teprve vÁ¹/₂slovnÁ¹/₂m dosaÁ³/₄ením shody na vÁ¹ech náleÁ³/₄itostech smlouvy.

“RNDr. Radka Reifová, Ph.D.”
<radka.reifova@natur.cuni.cz>

(mnv6@cornell.edu<mailto:mnv6@cornell.edu>).

Diversity and inclusion are a part of Cornell University’s heritage. Cornell is a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

– Maren N. Vitousek, Ph.D. Cornell University W253 Seeley G. Mudd Hall Ithaca, NY 14853 (607) 254-4529 vitousek.weebly.com

Maren N Vitousek <mnv6@cornell.edu>

CornellU EvolutionaryPhysiology

Postdoc: Evolutionary Physiology at Cornell

A postdoctoral position is available in the Vitousek Lab at Cornell University (vitousek.weebly.com) to investigate variation in the capacity to cope with stressors. This NSF-funded project will conduct experimental studies within and across tree swallow populations to test hypotheses about the traits that confer stress resistance.

The project will involve leading a field research team from April-August of each year. Some of the field work takes place in remote locations, including the interior of Alaska. Applicants must therefore be willing to be in the field and away from Ithaca, NY for 3-4 months per year, and to camp for up to several months at a time. During the non-field season, activities will include laboratory sample analysis, analyzing data, mentoring students, and writing publications.

The successful applicant will have a Ph.D. in an appropriate field with a demonstrated ability to publish in peer-reviewed journals, have experience leading field research, ideally in remote locations, experience handling and collecting blood samples from birds, and an interest in stress physiology, behavior, and evolution. Other desired skills include experience with hormone assays and/or measures of oxidative stress, genetic and genomic techniques, and wilderness camping.

The anticipated start date is between January and March of 2016. The initial appointment will be for one year with the possibility of renewal for up to three years.

To apply please submit a cover letter describing your relevant experience and interest, a CV, the contact information for three references, and 1-2 relevant publications to Dr. Maren Vitousek

Dresden DrosophilaGenomics

A postdoctoral research position is available in the Applied Zoology lab at TU Dresden, Germany to look into genomic and epigenomic comparison of experimental Drosophila lines. The application deadline is 9 Sept (the job ad says 8 Sept - don’t worry) - please find more details here (download):

https://tudaz.files.wordpress.com/2015/08/-evol_gen_bioinf_tudaz.pdf The group (<http://tudaz.net>) has just started and the applicant will join evolutionary and molecular biologists. The starting date is soon, somewhat flexible but the position is restricted till October 2017.

We are seeking a team-oriented individual with experience in genome sequencing and its analysis as well as the analysis of epigenetic information to examine a number of Drosophila melanogaster lines that have evolved for >150 generations under hypoxia, hypercapnia and other conditions. These analyses augment current surveys into genetic and phenotypic plastic changes in these lines. Applicants are also welcome to pursue an own research field within evolutionary or genetics, or bioinformatics, such as metagenomics of microbiomes, image analysis, phylogenetics, or others.

Despite Pegida, Dresden is a beautiful while affordable city with gorgeous surroundings. There is an amazing expertise in biotechnology, biophysics and related topics (for a start see here: <http://www.dresden-concept.de/-en/alliance/projects.html>).

Please contact me for more info, preferably after 31 August (<klaus.reinhardt@tu-dresden.de>). To apply, please send a single .pdf with the usual documents but without photograph and date of birth to <anja.jahn@tu-dresden.de> or via regular mail. Thank you, Klaus

Klaus Reinhardt, Dr. rer.nat. Professor for Applied

Zoology <http://tudaz.net> Dept Biology, TU Dresden
D-01062 Dresden

Royal Ent Soc Meeting on Arthropod Cuticle
8/9 Sept <http://tudaz.net/sig/> Klaus Reinhardt
<klaus.reinhardt@tu-dresden.de>

ERI England BacterialGeneGainLoss

A post-doctoral fellowship is available in the research groups of Nick Goldman (EBI) and John Welch (Genetics Department, Cambridge University) under the EMBL-EBI / Cambridge Computational Biomedical Postdoctoral Fellowship scheme.

The project is on bacterial gene gain and loss and emerging pathogenicity, and is described in full here: <https://www.ebi.ac.uk/research/postdocs/-ebpods/projects/goldman-welch-2015> The EMBL-EBI / Cambridge Computational Biomedical Postdoctoral (“EBPOD”) Fellowship scheme is described here: <https://www.ebi.ac.uk/research/postdocs/ebpods> The closing date for applications is 3 September 2015.

Nick Goldman EMBL-European Bioinformatics Institute

Nick Goldman <goldman@ebi.ac.uk>

EroFellowship Canada Conservation

Liber Ero Fellowship Program - call for post-doctoral applications

We are delighted to announce the fourth call for post-doctoral applications for the Liber Ero Fellowship Program. The Liber Ero Fellowship Program supports exceptional post-doctoral fellows who address pressing conservation challenges of relevance to Canada. The Program aims to develop the next generation of conservation scientists, trained in the latest methods and in the skills necessary to affect policy and improve conservation of Canada’s wild places and natural resources.

The Liber Ero Fellowship is open to candidates from any country whose research furthers conservation goals within Canada. Fellows must be hosted at a Canadian

institution, with mentorship teams drawing from expertise in non-governmental organizations, government, and universities. Applications are now being accepted, with a deadline of November 1, 2015. See <http://liberero.ca/> for more details.

Please see <http://liberero.ca/meet-the-fellows/> to read about the current cohort of fellows and their projects.

Contact information: info@liberero.ca

“info@liberero.ca” <info@liberero.ca>

EwhaWomansU Korea TheoreticalPopGenetics

Post-doc position at Ewha Womans University, Seoul, Korea to study theoretical and statistical problems in population genomics.

The Laboratory of Adaptive Evolution in Ewha Womans University is seeking a postdoctoral researcher to develop new theoretical models and/or statistical tools for analyzing population genomic data. The position is open to both Korean and non-Korean nationals with primary language for research being English.

Applicants must have or are scheduled to obtain doctoral degree in population/evolutionary genetics or related fields with strong quantitative skills. The candidate will primarily collaborate with Yuseob Kim (<http://home.ewha.ac.kr/ykim/>) to investigate theoretical problems in inferring adaptive evolution from within- and between-species DNA sequence variation. We are particularly interested in the following research areas:

1. Advancing the method of detecting incomplete selective sweeps (Vy and Kim 2015, *Genetics* 200:633)
2. Modes of positive selection inferred from the spatial patterns of incomplete and complete selective sweeps
3. Patterns of neutral polymorphism under temporally fluctuating environment (Gulisija and Kim 2015, *Evolution* 69:979)
4. Inferring the rate and mode of adaptive evolution in influenza viruses (Kim and Kim 2015, *MBE* 32:704).

There are other theoretical and evolutionary-bioinformatic problems to be explored and applicants may also propose his/her own project.

Appointment for this position will initially be for 12 months, with renewal for up to four years.

Applications should include a cover letter with a short description of research interests and accomplishments (~1 page), a CV, and names and email addresses of two references. Please email these materials or informal inquiry to yuseob@ewha.ac.kr with POSTDOC APPLICATION in the subject line. Screening begins immediately and continues until a suitable candidate is found.

Yuseob Kim

Associate Professor Dept. of Life Science and Division of EcoScience Ewha Womans University 52 Ewhayeodae-gil, Seodaemun-gu Seoul, Korea 120-750

yuseob@ewha.ac.kr

Yuseob Kim <yuseob@ewha.ac.kr>

Finland Salmonid Thermal Adaptation

Post-doc position: The molecular mechanisms of rapid thermal adaptation in a grayling metapopulation (2016-2019)

A 3.5 year post-doctoral position, including a 25% teaching component, is available at the University of Turku, Finland to work in Prof. Craig Primmer's research group (<http://users.utu.fi/primmer>). The research component of the position is a part of a recently funded project that will build on earlier research (see below) aimed at understanding the processes by which European grayling have adapted to different thermal conditions in 20-25 generations.

The post-doc will be responsible for conducting and co-supervising research applying genomic, transcriptomic, proteomic and epigenetic approaches to identify the genes and molecular pathways involved in rapid thermal adaptation. Teaching will involve giving lectures and computer classes on topics related to the position.

Suitable candidates will have a strong background in evolutionary genetics/genomics and/or bioinformatics (in any species). Experience with proteomic and epigenetic methodologies and/or data analysis and R coding skills is also an advantage, as is undergraduate teaching experience.

Informal inquiries should be directed to Prof. Craig Primmer (craig.primmer@utu.fi). Formal applications should include a CV (with names and contact details of at least two referees), a publication list, an academic portfolio and a max. 2

page letter of motivation and can be submitted via <http://www.utu.fi/en/university/university-as-an-employer/open-vacancies/Pages/home.aspx>. The deadline for applications is Wed. September 30, with the preferred starting date being January 2016. The position is available until August 31 2019. The starting salary is 3140 - 3500 EUR per month, depending on the previous relevant research and teaching experience of the candidate.

Turku, Finland's 5th largest city (183 000 people), is located in southwestern Finland. It has a rich academic and cultural history and is the gateway to a beautiful archipelago. The University of Turku is one of the major multidisciplinary universities in Finland and is ranked in the top 1.6% of universities in the world.

Previous related research Barson NJ, Haugen TO, VÅllestad LA & Primmer CR (2009) Contemporary isolation-by-distance, but not isolation-by-time, among demes of European grayling (*Thymallus thymallus*, Linnaeus) with recent common ancestors. *Evolution* 63: 549-556

Junge C, VÅllestad L A, Barson NJ et al. (2011) Strong gene flow and lack of stable population structure in the face of rapid adaptation to local temperature in a spring-spawning salmonid, the European grayling (*Thymallus thymallus*). *Heredity*, 106, 460-71.

Koskinen MT, Haugen TO, Primmer CR (2002) Contemporary fisherian life-history evolution in small salmonid populations. *Nature*, 419, 826-830.

Mäkinen H, Papakostas S, Vollestad A, Leder E, Primmer CR (2015) Plastic and Evolutionary Gene Expression Responses Are Correlated in European Grayling (*Thymallus thymallus*) Subpopulations Adapted to Different Thermal Environments. *Journal of Heredity* (online early).

Papakostas S, VÅllestad LA, Bruneaux M et al. (2014) Gene pleiotropy constrains gene expression changes in fish adapted to different thermal conditions. *Nature Communications*, 5, 4071.

Craig Primmer, Academy Professor Division of Genetics and Physiology Department of Biology, University of Turku, FINLAND

Room 7004, 7th floor, Pharmacity Itäinen pitkäkätö 4, 20520 Turku

Office +358 2 333 5571 Mobile +358 40 1560 365 craig.primmer@utu.fi <http://users.utu.fi/primmer> Twitter: @FishConGen

"craig.primmer@utu.fi" <craig.primmer@utu.fi>

HobartWilliamSmithCollege
MilkweedPhylogenomics

POSTDOCTORAL POSITION IN MILKWEED PHYLOGENOMICS

An NSF-funded postdoctoral position investigating milkweed (*Asclepias*) phylogenomics is available in the Straub Lab at Hobart and William Smith Colleges in Geneva, New York. The diversity of *Asclepias* in North America is the product of a recent, rapid evolutionary radiation. Because milkweed species diversified over a short evolutionary time span, reconstructing their evolutionary relationships requires genome-scale data. Targeted sequencing of the nuclear genome of *Asclepias* combined with sampling of many individuals per species will allow us to distinguish common causes of gene tree discordance: incomplete lineage sorting and introgression. The postdoc on this project will be responsible for 1) planning and conducting field work, 2) performing targeted sequencing of the *Asclepias* nuclear genome, 3) phylogenomic analyses, 4) manuscript preparation, and 5) public outreach. This research will be conducted in collaboration with Dr. Mark Fishbein at Oklahoma State University.

Required Qualifications: Ph.D. in plant systematics, evolution, genomics, bioinformatics or related discipline. Desire and ability to plan and conduct field work, travel extensively in North America. Strong record of publication. Strong organizational, oral, and written communication skills.

Desired Qualifications: Background in phylogenetics. Strong computational skills, including knowledge of one or more programming languages (Python, Perl, R/BioConductor etc.) Laboratory skills for preparation of Illumina libraries. Experience with analysis of NGS data.

The initial appointment will be for one year with the possibility of renewal for a second year contingent on satisfactory performance. The start date for this position is flexible with a target date of January 4, 2016. Salary is commensurate with experience and the position is benefits eligible.

Applications should be submitted through Interfolio <https://apply.interfolio.com/30948> and consist of 1) a cover letter describing the candidate's research interests and experience, 2) a CV, and 3) the names and con-

tact information for three references. Questions about the position should be directed to Shannon Straub at straub@hws.edu. Review of applications will begin on October 12, 2015 and continue until the position is filled.

EOE

“Straub, Shannon” <STRAUB@hws.edu>

IsraelInstTech PhDPDF
BacterialEvolution

Interrogating bacterial interactions in droplets: an experiment-theory collaboration

Within a collaborative project funded by the Human Frontiers in Science Program, a position is available for a PhD student or postdoc in the Theoretical Biophysics Group at Technion, Israel. The student/postdoc will develop theoretical and computational models to describe the evolution and stability of bacterial cooperative and competitive interactions in millifluidic droplets. The droplet setting highlights intermediate timescales and finite populations, which are highly relevant from a population-dynamics and evolutionary perspective but usually neglected in models (Y. Elhanati and N. Brenner 2012, PLoS One 7, e52105). The project thus raises general theoretic questions in microbial evolution; at the same time, two specific systems will be studied: the antibiotic-degrading enzyme TEM-1 β -lactamase and the iron-scavenging siderophore pyoverdinin. The student/postdoc will be involved in experiment design for probing the evolutionary causes and consequences of interaction mediated by extracellular products. He/she will be part of an international consortium including three other experimental groups (biologists Paul Rainey at Massey University, New Zealand and Arjan de Visser at Wageningen University, The Netherlands; and chemist Jérôme Bibette at ESPCI, Paris).

Profile: We seek a highly motivated person with a strong theoretical background (Physics/mathematics/engineering) and a keen interest in biology in general and in evolution in particular. Previous knowledge and experience in the Life Sciences is a benefit. Initial appointment will be for 1 year with possible extension to a total of 4 years (PhD student) or 3 years (postdoc). Salary will be according to the Israeli salary scales for PhD students and postdocs taking experience into account. The project can start immediately, but not later than 1

December 2015.

Applications: Please send CV, letter explaining motivation and suitability for the position, and names and contact info of two references to Naama Brenner (nbrenner@technion.ac.il).

Prof. Naama Brenner Dept. of Chemical Engineering & Network Biology Research Lab Technion - Israel Institute of Technology Haifa, 32000 Tel: +972 4 8293578 Fax: +972 4 8295672 ISRAEL nbrenner@technion.ac.il <http://biophysics.net.technion.ac.il> Naama Brenner <nbrenner@technion.ac.il>

Lyon EvoDevo

*Postdoctoral position at the Institute of Functional Genomics, Lyon, France: *

*Hydrophobic bristles and the ability to walk on water.
*

**

We invite applications for a two-year postdoctoral position in the group of Abderrahman Khila at the IGFLENS de Lyon, France. Our lab provides a vibrant international environment and collaborative research community of experimental and computational groups interested in Development, Physiology, and Evolutionary Biology. The postdoctoral project is part of a broader ERC-funded grant, and aims to understand the developmental, genetic, and adaptive basis of the hydrophobic bristles — a key trait associated with the ability of water striders to maintain their body weight on the water surface by exploiting surface tension. The position involves experimental evo-devo work as well as a bioinformatics component. The main responsibility will be to generate RNAseq data of the legs of three species (we have the genomes of two and the full transcriptome of the third one) to conduct a comparative transcriptomics analysis. This involves handling deep sequencing datasets and the identification of differentially expressed transcripts. This part will be followed by gene expression and functional analyses of a set of candidates emerging from the transcriptomics approach as in the following examples: Khila et al. 2012; Refki et al. 2014; Santos et al. 2015; Armisen et al. in press. The successful candidate will benefit from existing technical support within the lab.

The successful candidate should have a PhD and experience within the fields of evolutionary genetics/genomics or evolutionary biology and some knowledge in the use of

large genetic datasets to address important questions in evolutionary developmental biology. Excellent written and verbal communication skills in English as well as the ability to work as part of a team are required. Any additional experience such as statistics or population genetics is a plus.

The position is available immediately and the net salary will be within a min-max bracket of 2037EUR and 2836EUR per month based on the number of years of experience. Applicants should send a pdf file with CV, contact details of three references, and a letter of motivation detailing past experience and why the application is consistent with this project. Please send your application or enquiry to Abderrahman Khila (abderrahman.khila@ens-lyon.fr) by September 15, 2015.

References:

<http://www.ncbi.nlm.nih.gov/pubmed/25750411>

<http://www.ncbi.nlm.nih.gov/pubmed/24886828>

<http://www.ncbi.nlm.nih.gov/pubmed/22556252>

Abderrahman Khila <abderrahman.khila@ens-lyon.fr>

MichiganStateU BEACON Teaching

Michigan State University BEACON Center for the Study of Evolution in Action

Post-doctoral Fellowship in Evolution Outreach and Education

Salary: \$ 40,000 to 42,000

The BEACON Center for the Study of Evolution in Action (BEACON) at Michigan State University (MSU) invites applications for a postdoctoral fellow in Evolution Outreach and Education.

This is a full-time, benefits-eligible, two-year appointment. Renewal for a third year is possible, contingent on satisfactory performance, availability of resources, and the needs of the program. This post-doctoral fellowship is ideal for early career scientist-teachers who are interested in an academic pathway involving science outreach and education serving the K-12 and undergraduate communities and the general public, with a particular emphasis on communities under-represented in STEM.

The successful candidate will have either: Ph.D. in evolutionary biology, with K-12 teaching/outreach experience, OR Ph.D./Ed.D. in science education with

extensive training in evolutionary biology

Candidates with experience in the following are preferred: developing, implementing and assessing science outreach activities and education resources; working with programs intended to increase diversity in STEM disciplines; and conducting educational research.

Up to 25% of the postdoc's time can be dedicated to pursuing independent research in evolutionary science and/or evolution education/outreach.

The successful candidate will have a commitment to science education and diversifying STEM disciplines, outstanding writing and organizational skills, demonstrated capacity for independence and innovation, and the ability to work as part of a team.

The BEACON Center for the Study of Evolution in Action approaches evolution in an innovative way, bringing together biologists, computer scientists, and engineers to study evolution as it happens and apply this knowledge to solve real-world problems. BEACON is an NSF Science and Technology Center, headquartered at Michigan State University with partners at North Carolina A&T State University, University of Idaho, University of Texas at Austin, and University of Washington.

To apply, please email a single pdf document containing a letter of application that states your interest in and qualifications for the position, a curriculum vitae, names of three references, and an item of choice that represents your approach to teaching in an undergraduate science classroom to Dr. Louise Mead, BEACON Education Director, at lsmead@msu.edu.

Applications will be accepted and reviewed immediately and until the position is filled, with a start date as early as September 1st, 2015.

– Louise S. Mead, PhD Education Director BEACON Center for the Study of Evolution in Action 567 Wilson Ave, BPS 1441 East Lansing, MI 517-884-2560

Louise Mead <lsmead@msu.edu>

MichiganStateU EcologicalGenomicsPlantMicrobe

Postdoc in Plant Transcriptomics and Microbiome Analysis

The Friesen Lab in the Department of Plant Biology at Michigan State University is seeking a highly motivated individual to contribute to data analysis and manuscript preparation for two funded projects investigating the transcriptomic connections linking plant-plant competition and plant-microbiome interactions in legumes (collaborative with Sharon Strauss at UC Davis) and grasses (collaborative with Sarah Evans, Lisa Tiemann, and Jim Cole at MSU).

Key qualifications include a strong statistical and computational background with the ability to ask creative questions. Familiarity with Illumina data and bioinformatics is desired but not essential. Excellent communication and organizational skills are required along with a track record of timely publications.

Funding is initially available for one year with renewal based upon performance. The successful applicant would be encouraged to develop independent lines of research in accordance with an individualized mentoring plan. The Friesen lab is located in the Molecular Plant Sciences building which is designed to foster collaboration.

Please send a ~1 page statement of interest, CV, and contact info for 3 references to mfriesen@msu.edu I will be attending the ESA meeting in Baltimore next week—drop me a line if you'd like to meet in person.

Maren L. Friesen Assistant Professor, Dept. Plant Biology Michigan State University 612 Wilson Rd, East Lansing, MI USA 48824-6481 <http://friesen.plantbiology.msu.edu/>
maren.l.friesen@gmail.com

<https://brandvainlab.wordpress.com/>
ybrandvain@gmail.com

ybrandvain@gmail.com

Minnesota EvolutionSpeciation

TL/DR version If you are an evolutionary biologist excited to combine evolutionary theory, population genomics and/or comparative analyses looking for a post-doc opportunity with substantial independence [but much care and guidance] and an awesome set of colleagues contact yaniv brandvain [ybrandva AT umn d0t edu] about joining him in the twin cities.

The Brandvain lab at the University of Minnesota St Paul is looking to hire a postdoc. Our research focuses on speciation/diversification and the roles of mating system evolution, genetic conflicts, geographic isolation, hybridization, adaptation, and competition in generating and maintaining diversity.

The applicant is expected to work with Yaniv and other members of the lab group to develop one or more projects that complement ongoing work and interests. Ideal projects will integrate novel theory with the analysis of population genomic and comparative data.

Strong candidates would have an interest and background in >1 of the following topics - population genomics, evolutionary theory, macroevolution, or quantitative genetics. Additionally, the candidate should be prepared to extend his/her research to integrate their background with another one or two of these topics.

The most competitive applicants will have competency with computing and mathematics, a strong publication record, and creative ideas for independent research that fit the directions of the Brandvain Lab. Collaborative projects with allied labs [e.g. Goldberg, McGaugh, Moeller, Tiffin, and others in UMN's pbio and eeb departments] are also possible.

Start date is flexible, but in envision a rough start date of 1/1/16. The position is initially available for two years with additional renewals contingent on both performance and funding. Interested applicants should send a preliminary inquiry with CV, references, and a statement describing interests, and why you are interested to ybrandva AT umn d0t edu. I hope to maintain a diverse, enthusiastic, rigorous and supportive lab group, and competitive candidates will reflect these goals.

The successful candidate will also find financial support for related sequencing and/or experimental projects, and for travel to meetings etc.

NIH Bethesda InfluenzaEvolution

Post-doc position at the NIH to study phylodynamics of influenza viruses in swine

The Fogarty International Center's Division of International Epidemiology and Population Studies (DIEPS) at the National Institutes of Health in Bethesda, MD is seeking a postdoctoral researcher to study influenza A virus evolution in swine. The position is for one year, renewable. We are seeking candidates with a strong background in mathematical and computational evolutionary biology.

Specifically, we are interested in a researcher who can use a range of phylogenetic methods (including Bayesian) to study how animal movements, farm production practices, inter-species transmission, and genomic reassortment drive the emergence of novel influenza viruses with pandemic potential in swine on a global scale.

The position is funded by NIAID's Centers of Excellence in Influenza Research (CEIRS) program, a global research network that performs influenza surveillance, integrated with research on host immune response, viral pathogenesis, and factors that drive the emergence and transmission of influenza viruses. The project will be conducted in partnership with members of this network who are collecting influenza viruses in swine globally and performing experimental studies in pigs. The work will also be conducted as part of Fogarty's MISMS project, initiated in 2001 to study the interaction between the epidemiology, ecology, and evolutionary dynamics of influenza on a global scale.

For further information, please contact Dr Martha Nelson at nelsonma@mail.nih.gov.

<http://www.niaidceirs.org/> <http://www.fic.nih.gov/>-
<http://www.origem.info/misms/> Martha I. Nelson Research Fellow Division of International Epidemiology and Population Studies Fogarty International Center National Institutes of Health nelsonma@mail.nih.gov

"Nelson, Martha (NIH/FIC) [V]"
<nelsonma@mail.nih.gov>

**NorthCarolinaStateU
AppliedEvolBiol**

Postdoc: Applied Evolutionary Biology

PROJECT DESCRIPTION:

Selfish genetic elements have been studied for over a century, and as far back as the 1960's researchers became interested in using the power of selfish genetic elements to drive genes into pest species to suppress their impacts (Gould et al. 2006). Until recently, the focus of applied work was on naturally occurring elements. In the past decade some progress was made on developing synthetic elements that mimicked natural meiotic drive and selective embryo-killing, but de-novo creation of a gene-drive system in a pest species was elusive. With the harnessing of the bacterial CRISPR-Cas9 system in the past few years there has been a revolution brewing in this field (Esvelt et al. 2014, Oye et al. 2014). In March 2015 a pivotal article by Gantz and Bier (2015) came out in Science on-line demonstrating a CRISPR-Cas9 construct in *Drosophila* with strong gene drive. This proof of principle has gained much attention.

Prospects are good that very soon a single student could engineer a system for driving deleterious or behavior modifying genes into pest populations. Not everyone is comfortable with these developments and there has even been a call for a moratorium on certain experiments. There are also concerns about nefarious use of the technology.

The bottom-line is that progress in molecular biology is ahead of the population genetic work needed to build systems that are less risky but accomplish changes in the public interest.

We have been funded by the NIH and the W. M. Keck Foundation to conduct this kind of population genetic research. Our focus has been on mosquitoes that transmit dengue and malaria, but we are also interested in other biological systems (There is hope that these selfish genetic elements can save endangered species like Hawaiian honeycreepers and specific seabirds (Gould 2008, Esvelt et al. 2014).

The postdoc in this position will build a set of simple to complex models to examine the expected dynamics of gene drive systems in mosquitoes and other taxa.

The most detailed model that we have developed simu-

lates the population dynamics and population genetics of *Aedes aegypti*, the vector of dengue, in a city on the Amazon river, Iquitos, for which there are rich data sets on both mosquito dynamics and dengue epidemiology (e.g. Magori et al. 2009, Okamoto et al 2014). An accompanying epidemiological model is currently under development. The goals of two other postdocs in our group are to expand the mosquito model and the human epidemiology model to encompass the entire city of about 400,000 people. The postdoc in this new position will collaborate with the other postdocs to use these detailed models to test gene drive systems, but will also develop more generic models (e.g. Huang et al. 2010).

In addition to working on model development and analysis, the person in this position will have the opportunity to collaborate in an interdisciplinary research group composed of mosquito ecologists, disease epidemiologists, molecular biologists, biomathematicians, ethicists, and scientists from disease-endemic countries. We are dedicated to taking seriously the ethical and political issues surrounding this technology.

DESIREABLE SKILLS: A background in population genetics and the ability to program in C++ (or knowledge of a related programming language), and training in evaluation of mechanistic models.

TO APPLY: email a cover letter and CV to Fred.Gould@ncsu.edu

References:

Esvelt, K. M., A. L. Smidler, F. Catteruccia, G. M. Church. 2014. Concerning RNA-guided gene drives for the alteration of wild populations. *eLife*. 10.7554/eLife.03401.

Gantz, V. M. and Bier, E. 2015. The mutagenic chain reaction: A method for converting heterozygous to homozygous mutations. *Science* 24 April 2015: 442-444. Published online 19 March 2015 [DOI:10.1126/science.aaa5945]

Gould, F. 2008. Broadening the application of evolutionarily based genetic pest management. *Evolution* 62: 500-510.

Gould, F., K. Magori, Y. X. Huang 2006 Genetic strategies for controlling mosquito-borne diseases. *American Scientist*. 94 (3): 238- 246.

Huang, Y., Lloyd, A.L., Legros, M., Gould, F. 2010. Gene-drive into insect populations with age and spatial structure: a theoretical assessment. *Evol. Appl.* ISSN 1752-4571.

Magori, K., M. Legros, M. Puente, D. A. Focks, T. W. Scott, A. Lloyd, F. Gould. 2009. Skeeter Buster: a stochastic, spatially-explicit modeling tool for studying

Aedes aegypti population replacement and population suppression strategies. *PLoS Negl Trop Dis* 3(9): e508. doi:10.1371/journal.pntd.0000508

Okamoto, K. W., Robert M. A., Gould, F., Lloyd, A. L. 2014) Feasible Introgression of an Anti-pathogen Transgene into an Urban Mosquito Population without Using Gene-Drive. *PLoS Negl Trop Dis* 8(7): e2827. doi:10.1371/journal.pntd.0002827.

Oye, K. A. et al. 2014. Regulating gene drives. *Science*. 345:626-628

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NortheasternU Massachusetts EvolutionaryGenomics

Postdoctoral fellow in Ecological and Evolutionary Genomics

A postdoctoral position is available in the Lotterhos Lab (<https://sites.google.com/site/katielotterhos/home>) at Northeastern University Marine Science Center (NUMSC), in Nahant, Massachusetts. A central goal of the lab's research is to understand how populations will respond both ecologically and evolutionarily to an ever-changing world. Projects currently underway in the laboratory span the population genetics of marine fish, the evaluation of genome-scan methods under more realistic scenarios, epigenetics in marine invertebrates, and adaptation to climate in conifers. In our research we use a combination of field surveys, experiments, mathematical modeling, genomics, and bioinformatics.

Responsibilities and Qualifications Applicants will be expected to develop and lead projects. Candidates are required to have a Ph.D. in Genomics, Evolutionary Genetics, Computational Biology (bioinformatics, systems biology), or related disciplines. Experience in the preparation of libraries (RAD-seq, RNA-seq, MBD-BSseq) for high throughput sequencing data is highly necessary. A computing background is required, especially experience with Unix, and knowledge in one or several programming languages (Perl, Python, C/C++, R/BioConductor, etc). Knowledge and experience working in marine systems (especially with marine larvae or

manipulation of carbonate chemistry) would be highly desirable but not necessary. Candidates should demonstrate a strong track record of publication; have strong organizational, written, and oral communication skills; and be able to work both independently and as part of a collaborative team.

The appointment is for 18 months. Start time is flexible, with a desired start in Fall 2015. NUMSC a strong research presence in evolution and ecology research and there are many opportunities for interaction and collaboration both there and in the greater Boston area. We welcome applications from candidates with diverse educational backgrounds.

Apply at <https://neu.peopleadmin.com/postings/37107>. Position is open until filled.

Please contact Dr. Lotterhos with any questions at k.lotterhos@neu.edu

"klott@zoology.ubc.ca" <klott@zoology.ubc.ca>

NorthernArizoanU PathogenDetection

NorthernArizonaUniversity.molecular_biology.Informatics

Postdoctoral Scholar Informatics and Computing Program Northern Arizona University Location: Flagstaff, AZ Closes: September 14th, 2015 Posting: 601178 Apply at: https://hr.peoplesoft.nau.edu/-psp/ph92prta/EMPLOYEE/HRMS/c/-HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-HRS_APP_JBPST&Action=U&FOCUS=-Applicant&SiteId=1&JobOpeningId=-601178&PostingSeq=1 The Fofanov Bioinformatics Lab within the Informatics and Computing Program at Northern Arizona University is seeking a post-doctoral scholar to join its research team. This highly applied, research-heavy group is focused on designing High Throughput Sequence data computational and data mining tools for immediate and practical applications in areas of pathogen detection, environmental/clinical metagenomics, and rare variant (quasi-species) determination. Additional details on the people and projects of the lab can be found at www.fofanovlab.us. Our research is highly interdisciplinary, and the prospective post-doctoral scholar can anticipate involvement in all aspects of the work, from experimental design and sample collection, to molecular diagnostic tool design, to sequence data analysis and modeling. Individuals

from fields ranging from Statistics to Molecular Biology are encouraged to apply, provided they meet the programming experience requirements.

Job responsibilities include but are not limited to:

- §Design and implementation of research projects
- §Training of graduate and undergraduate research students.
- §High Throughput Sequence data analysis
- §Software development, testing, and execution Eligibility:

An earned PhD in Computer Science, Statistics, Bioinformatics, Genomics, Computational Biology or a related field by the time of the appointment

Preferred Qualifications:

- * Demonstrated experience with at least one programming/scripting language
- * Demonstrated experience with High Throughput Sequencing data analysis
- * Experience with statistical/modelling packages (R, Matlab, SAS, or equivalent)
- * Proficiency with common Bioinformatics databases and tools
- * Experience with high performance and/or parallel computing environments
- * Experience with scripting languages (C-Shell, Python, Perl, or equivalent)
- * Experience with object oriented programming languages (C++, Java, or equivalent)
- * Working knowledge of basic data structures (trees, hashes, arrays, etc)
- * Strong publication record
- * Experience and/or commitment to work effectively with NAU's diverse faculty, staff, and student populations.

Knowledge, Skills and Abilities:

- * Demonstrated understanding of Molecular Biology concepts
- * Proficiency in UNIX operating system environment
- * Excellent written and verbal communication skills
- * Experience programming in UNIX environment
- * At least basic or intermediate understanding of database access and design
- * Ability to work effectively in diverse, interdisciplinary research environments

How to Apply:

A curriculum vitae, cover letter, three references and a letter of recommendation is required. Please send the letter of recommendation to Gretchen Povlsen at gretchen.povlsen@nau.edu. To apply for this position, please click https://hr.peoplesoft.nau.edu/-psp/ph92prta/EMPLOYEE/HRMS/c/-HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-HRS_APP_JBPST&Action=U&FOCUS=-Applicant&SiteId=1&JobOpeningId=601178&PostingSeq=1 You must submit your application by clicking on the "Submit" button by midnight of the application deadline. If you need assistance

completing your application there are instructions available on line at <http://nau.edu/human-resources/> or in person in the Human Resources Department located in Building 91 on the NAU Campus - on the corner of Beaver and DuPont Streets.

If you are an individual with a disability and need reasonable accommodation to participate in the hiring process please contact the Affirmative Action Office at 928-523-3312/TDD - 928-523-1006 or PO Box 4083, Flagstaff AZ 86011.

Gretchen Rowe Povlsen <Gretchen.Povlsen@nau.edu>

OpenU Israel EvolutionaryGenomics

Our group at the Open University, Raanana, Israel, invites applications for a postdoc position in Evolutionary Genomics.

Our group research interests are focused on Endosymbiotic Gene Transfer. In our research we use computational approach the study the abundance and significant of naturally occurring organelle-to-nucleus gene transfers.

Candidate qualifications: (1) Highly motivated person with a PhD degree in Molecular Evolution, Bioinformatics or related fields (2) Proficiency in computer programming (preferable - PERL/Python). (3) Any of following expertise is an advantage: phylogenomics, genomics, biostatistics. (3) Good oral and written communication skills (English is required). (4) Skills and motivation to communicate and interact with other scientists.

This position is funded by the German-Israeli grant (awarded to Dr. Hazkani-Covo and Prof. Dr. William Martin, Heinrich Heine University Duesseldorf, Germany). Applicant will have the opportunity to travel to the German partner lab. Initial appointment will be for 1 year with a possible extension to a total of 3 years. Salary will be according to the Israeli salary scale approx. 18,300- 25,800 Euro yearly.

Applicants should send curriculum vitae with a list of publications, a motivation statement and contact addresses of at least two referees to Dr. Einat Hazkani-Covo (einatco@openu.ac.il). For enquiries regarding the position please contact Dr. Einat Hazkani-Covo (einatco@openu.ac.il).

Review of applications will begin August 30 2015 and will continue until the position is filled. The planned

starting date for the position is January 2016 or earlier.

Dr. Einat Hazkani-Covo, Department of Natural and Life Sciences The Open University of Israel 1 University Road P.O Box 808 Ra'anana 43537 ISRAEL

Tel: 972-9-7780981 http://www.openu.ac.il/-Personal_sites/einat-hazkani-covo/ Einat Hazkani-Covo <einatco@openu.ac.il>

PennStateU EvolutionaryGenetics EvoDevoMimicry

A postdoc position is available in the lab of Heather Hines (hineslab.org, hmh19@psu.edu) in the Department of Biology at The Pennsylvania State University, University Park, PA. The postdoc will work on an NSF-funded project developing a new system for evolutionary genetics through investigating the genetic basis of mimetic color pattern diversity in bumble bees. This project includes targeting the genes that underlie color variation in two commimicking species and studying the role of these genes across the bumble bee radiation. The postdoc will also be involved in functionally validating the role of these genes using gene and protein expression assays and new genetic technologies. This project will be performed in collaboration with Jeff Lozier from the University of Alabama (<http://bama.ua.edu/~jlozier>) and training will further be facilitated through interactions with faculty that are part of several reputable programs at Penn State (e.g., Bioinformatics and Genomics, Entomology, Molecular and Cellular Integrative Biosciences, Ecology, Biology).

Applicants must have a PhD in the biological sciences, should be creative and independent, have good writing skills and a strong publication record, and have a demonstrated passion for evolutionary research. The ideal candidate would have experience in entomology and with performing research in several of the following fields: evolutionary genetics, evo-devo, genomics, bioinformatics, population genomics, systematics, and developmental biology. Experience with next generation sequencing and laboratory genetics, population-level genomic analysis (e.g., GWAS), and developmental functional validation techniques are especially desired. Postdoc development of their own related research projects is encouraged.

The Pennsylvania State University requires all applicants to register and complete the application form at the Penn State employment website at <https://psu.jobs/>

[job/59284](#). A complete application will include a cover letter detailing relevant experience and research interests, a current CV, and contact information for three professional references. This is a fixed-term appointment funded for one year from date of hire with excellent possibility of re-funding. Anticipated start date is between October 2015 and February 2016. Review of applications will begin in early-September and continue until the position is filled.

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 all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

"hmh19@psu.edu" <hmh19@psu.edu>

PennsylvaniaStateU PlantVillage

The Hughes Lab is seeking a Postdoctoral Scholar to work on PlantVillage. This position is in collaboration with the lab of Dr Marcel Salathe at EPFL, Switzerland who together with Hughes is the co-founder of PlantVillage. The position is available in the Centre for Infectious Disease Dynamics (www.cid.dpsu.edu), The Pennsylvania State University, University Park Campus. PlantVillage (www.plantvillage.com) wants to impact global food production by making the knowledge needed to increase crop yields immediately available to all growers around the world. Agriculture was humanity's first and arguably most important knowledge society. It was knowledge that led to crop domestication and the many improvements in the subsequent 10,000 years, providing the foundation for modern civilization. But the knowledge is not available everywhere. The move towards universal access to broadband via mobile devices offers the promise of democratizing access. The smartphone platform PlantVillage is already doing that. PlantVillage makes available thousands of pages and images of high quality, science-based knowledge on plant health. This is free to anyone with a smartphone or Internet

connection. We provide any grower, anywhere, the essential knowledge they need. In addition, we provide the world's largest social network within a community platform of global experts. Post a question and the global community answers it. Using our platform, growers are not limited by their lack of access to knowledge and so can get the latest advice on nutrient delivery, pest management and cultivation, as well as where to source seeds and sell produce. The Postdoctoral Scholar position at Penn State involves the development of approaches that facilitate the automatic identification of plant diseases via smartphones. This involves codifying both the diseases and the decisions plant pathologists make. This is important for the development of eventual algorithms that automate disease diagnosis. The ideal candidate will have a range of applicable skills including plant pathology, image recognition of diseases, biostatistics and modeling disease in plants. The position also requires contributing to the PlantVillage database by collecting images of healthy and diseased plants as well as adding content to the PlantVillage library. The candidate should also engage in the community Q&A portion of PlantVillage as well as liaising with a diverse group of stakeholders interested in disease detection in crops. This position will involve travel to field sites both nationally and internationally to source images. Candidates should demonstrate a track record of publication; have extremely strong organizational, written, and oral communication skills; and be able to work both independently and as part of a collaborative team. This position is initially funded for one year, with the possibility of a second year. For further information, please feel free to contact Dr Hughes (dph14@psu.edu; +1 814- 863-6073). Interested applicants should upload a curriculum vitae, a 1-2 page statement of research interests that explicitly describes professional qualifications for this position, and contact information for three referees. Review of applicants is ongoing and the position will begin when a suitable candidate is selected. The Pennsylvania State University requires all applicants to register and complete the application form at the Penn State employment website at <https://psu.jobs/job/59930> David Hughes: Hughes, is a behavioral ecologist who has studied social insects and their diseases in 11 countries on 5 continents. He has worked with diverse diseases as well as the behavior of healthy and infected ants under field (rain- and temperate forests) and laboratory conditions. In recent years he has become interested in plant diseases. www.hugheslab.com Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

David Hughes CIDD, Dept Entomology & Biology, Penn State www.hugheslab.com www.plantvillage.com dhughes@psu.edu twitter: @zombieantguy, @plantvillage 814 863 6073 (Office) 814 777 7366 (Cell)

David Hughes <dph14@psu.edu>

SantaFeInst EvolutionaryBiology

We will be accepting applications online for the 2016 Cohort beginning 10 August and ending 1 November 2015. Candidate interviews will be conducted in late January 2016 in Santa Fe, NM.

The Omidyar Fellowship at the Santa Fe Institute offers you:

- transdisciplinary collaboration with leading researchers worldwide - up to three years in residence in Santa Fe, New Mexico - discretionary research and collaboration funds - competitive salary and generous benefits - a structured leadership training program - unparalleled intellectual freedom

Apply online www.santafe.edu/ofellowship

The Omidyar Fellowship at the Santa Fe Institute is unique among postdoctoral appointments. The Institute has no formal programs or departments. Research is collaborative and spans the physical, natural, and social sciences. Most research is theoretical and/or computational in nature, although some research includes an empirical component. SFI averages 10 resident faculty, 100 external faculty, and 250 visitors per year. SFI's research themes and interests of its faculty and current fellows can be found at <http://www.santafe.edu/-research>. As thought leaders who shape the future of science, Omidyar Fellows participate in a provocative training program structured to develop leadership skills throughout their three-year residencies and beyond. The program focuses on sustained mentoring relationships with SFI resident and external faculty, skill development workshops, off-campus research and teaching experiences, and the variety of scholarly leadership and science management opportunities at SFI.

Requirements: - a Ph.D. in any discipline (or expected Ph.D. by September 2016) - strong computational and quantitative skills - an exemplary academic record - a proven ability to work both independently and collaboratively - a demonstrated interest in multidisciplinary research - evidence of the ability to think outside traditional paradigms

Applications are welcome from: - candidates from any country - candidates from any discipline - women and members of underrepresented groups are encouraged to apply SFI is an Equal Opportunity Employer.

Application Materials: Interested candidates must submit the following:

Curriculum vitae (including publications list). Statement of research interests (max. 2 pages) including a short description of the research you would like to pursue and why. Description of interest in SFI (max. 1 page) that describes your potential contribution to the SFI community and also explains the potential impact of SFI on your research. Consider addressing one or more of the following: What kind of input from other fields would most improve your future research? What type of multidisciplinary workshop might you want to organize during your Fellowship? What aspects of your present or future research are difficult to pursue in a traditional academic environment? Three letters of recommendation from scholars who know your work. (The letters should be sent independent of the application. When you complete the online application, please be prepared to provide e-mail addresses of the three individuals who will recommend you. SFI will contact them directly with instructions for submitting letters.) (Optional) A copy of one paper you have written in English, either published or unpublished.

Inquiries: email to ofellowshipinfo@santafe.edu

Hilary Skolnik <hilary@santafe.edu>

StowersInst Missouri CaveFishAdaptation

Postdoctoral Research Associate

The Stowers Institute for Medical Research has two openings for postdoctoral researchers to work on projects using the cave fish system (*Astyanax mexicanus*) to address questions about the genetic basis of adaptation to new and extreme environments, with a particular focus on metabolic evolution.

Candidates will use RNA-sequencing, whole genome sequencing, transgenics, and metabolomics to uncover the genetic basis and underlying mechanism of the impressive metabolic adaptations cavefish have acquired to survive in nutrient poor environments.

Qualified candidates should have a background in evo-

lutionary genetics and bioinformatics or a background in ecological genetics. Research may be field-based, lab-based, or both. Researchers who integrate genome level data with studies of ecology and evolution are encouraged to apply

One of the positions will involve substantial field work (in the caves in Mexico) to link the ecological settings in the caves with the observed and studied phenotypes.

Another position will direct the bioinformatics of the genomics of non-model organisms, and will analyze and interpret data accordingly. Experience in handling large-scale sequence data is essential.

The ideal candidate has a doctorate degree in bioinformatics, genomics, or a related field; strong command of UNIX and other programming languages; hands-on experience with genomic data; and an interest in pursuing research on emerging model organisms. In addition, the successful candidate will have a strong background in analysis of genetic and genomic data (e.g., whole-genome resequencing, RAD genotyping, QTL mapping) and/or experimental developmental biology (e.g., manipulation of gene expression, transgenesis, genome editing), and an ability and willingness to work both independently and collaboratively in a team-oriented environment. No previous experience working with fish is required.

To apply, please submit a cover letter that includes a short summary of interests, a CV, and the contact information of 2-3 professional references to nro@stowers.org

Deadline for applications is September 15, 2015. The positions are available October 1, 2015 (start date is flexible).

About the Stowers Institute for Medical Research

The Stowers Institute for Medical Research in Kansas City, Missouri* is a non-profit, basic biomedical research organization dedicated to improving human health by studying the fundamental processes of life. Jim Stowers, founder of American Century Investments, and his wife, Virginia, opened the Institute in 2000. Since then, the Institute has spent over 900 million dollars in pursuit of its mission.

Currently, the Institute is home to almost 550 researchers and support personnel; over 20 independent research programs; and more than a dozen technology-development and core facilities. Kansas City is an emerging metropolitan city in the Midwest with a high quality of living and affordability.

*Visit <https://www.visitkc.com> for information about living and working in Kansas City.

Andrew Daniels

Staffing Specialist

Stowers Institute for Medical Research

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“Daniels, Andrew” <ajd@stowers.org>

TrentU ConservationGenomics

Post-Doctoral Fellow (PDF) in Conservation Genomics

A collaborative research program on caribou conservation is seeking a researcher with strong quantitative skills to complement a research team assessing the conservation of Canadian boreal caribou. This project is a partnership between academic, federal and provincial government agencies and the private sector and builds on a national multi-year dataset. Researchers with experience in conservation genetics, molecular ecology, landscape genetics, molecular biology and/or bioinformatics will be considered. Specific projects the PDF will be involved in range from assessing the relationships among sub-species and ecotypes in the reconstruction of caribou population histories across Canada to characterizing the spatial genetic structure and landscape/environmental variables influencing caribou populations, ecotypes and associated subspecies. Projects will build on neutral genetic markers and expand into genome-wide surveys to identify single nucleotide polymorphisms (SNP) anal-

yses, functional genes and mitogenomics for larger-scale population genomic profiling. The PDF will be expected to take a leadership role in coordinating a team of graduate and undergraduate students and liaise with project partners. The salary is \$40,000/year and the position will be filled as soon as a suitable candidate is found. Applicants should submit a CV, a statement of research interests, and the names and contact information for three references.

Please submit applications to:

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

“jillianlolor@trentu.ca” <jillianlolor@trentu.ca>

UCalifornia SanFrancisco MechanismsVariation

We are seeking applications for a Post-Doctoral scholar to join the Oral and Craniofacial Science Program at the University of California San Francisco. The applicants should be recent Ph. D. awardees who are highly motivated and energetic. The successful candidate will join Dr. Ralph Marcucios laboratory at UCSF to work in collaboration with Dr. Benedikt Hallgrímsson at the University of Calgary. The goal of the research is to assess genetic, biochemical, cellular and morphogenetic mechanisms that underlie variation in facial shape in a variety of animal models of evolutionary change and disease. The candidate will be strongly encouraged and mentored to develop a research project that will lead to independent funding. Applicants should have strong molecular biology skills and strong interest in evolutionary developmental biology. Please submit C.V. and names of at least 2 references to:

Ralph Marcucio, Ph.D. Professor, Department of Orthopaedic Surgery University of California, San Francisco San Francisco, CA

Ralph.Marcucio@ucsf.edu

“Marcucio, Ralph” <Ralph.Marcucio@ucsf.edu>

UCalifornia SanFrancisco PopGenetics

Postdoctoral Fellow in Population Genetics / Epidemiological Modeling of Malaria at University of California, San Francisco (USA)

A postdoctoral position is available starting immediately in the laboratory of Bryan Greenhouse, MD, MA in the Division of Infectious Diseases at U.C. San Francisco. The current position will focus on analysis of parasite genetics and epidemiologic data to characterize transmission and evolution of malaria parasites. The successful candidate will have the opportunity to work closely with a diverse team of scientists at UCSF and international collaborators on a number of exciting projects. This research includes work in malaria elimination regions, where densely sampled genetic data will be used to construct transmission networks, to studies in areas with higher malaria burden leveraging broader scale spatial variation in genetic diversity. The fellow will be expected to develop and extend computational methods for deriving epidemiologically relevant information on malaria transmission from genetic, spatial, and epidemiologic data, and will be encouraged to develop an independent line of work under the mentorship of Bryan Greenhouse and co-mentorship of Rasmus Nielsen (U.C. Berkeley). Our work is directly connected to on-the-ground malaria control and elimination efforts, and the scientific output from this position is expected to directly affect interventions in the field in addition to leading to academic publications. Competitive salary including full benefits will be provided commensurate with experience and qualifications.

Essential Skills

- PhD in a relevant field (e.g. population genetics, computational biology, infectious disease dynamics)
- Strong background in population genetics
- Strong statistical and computational skills
- Demonstrated ability to produce independent, creative work
- Ability to work well as member of a team
- Strong written and oral communication skills

Helpful Skills

- Experience with geostatistical data analysis

- Experience in analysis/modelling of pathogen dynamics
- Familiarity with performance and development laboratory genetic/genomic assays and data

To Apply: Please send a CV including publications, brief statement of research/career interests, and contact information for 3 references to Bryan Greenhouse, MD, MA at bryan.greenhouse@ucsf.edu

“Greenhouse, Bryan” <bryan.greenhouse@ucsf.edu>

UEdinburgh BacterialEvolutionaryGenomics

Post-Doctoral Fellowship in Bacterial Pathogen Evolutionary Genomics

A post-doctoral researcher position is available in the Laboratory for Bacterial Evolution and Pathogenesis at The Roslin Institute, University of Edinburgh with Professor J. Ross Fitzgerald, in collaboration with colleagues at National Health Service (NHS) Scotland and Dr Nick Loman at the University of Birmingham. The 2 year Scottish executive-funded project will investigate the evolutionary genomics of the human pathogen *Legionella pneumophila*, responsible for major outbreaks of Legionnaires disease in human populations, using a comparative next generation sequencing approach. Building on recent and ongoing work from the group, the post-doc will investigate the evolutionary origin, dissemination, and pathogenicity of the common strains of *Legionella* associated with outbreaks in Scotland, and the rest of the world. In addition, high throughput sequencing including Illumina and Nanopore sequencing technologies will be applied to develop a culture-free approach for identifying *Legionella* strain variation in environmental and clinical samples, in order to enhance outbreak investigations. The candidate will have a PhD in bacterial genomics/computational biology and have broad experience of handling large numbers of bacterial genome sequences for comparative and evolutionary analyses. The Roslin Institute is a world-class centre for biomedical research of relevance to both animal and human health with a strong focus on infectious diseases. The Institute has access to state of the art research facilities for imaging, proteomics, and genomics, including high-throughput sequencing. The project will involve close collaboration with clinical and public health colleagues in the NHS, Scotland and other research groups within Edinburgh Infectious Diseases in the University

of Edinburgh.

Informal enquiries: Ross.Fitzgerald@ed.ac.uk

Relevant selected references:

McAdam PR, Vander Broek CW, Lindsay DS, Ward MJ, Hanson MF, Gillies M, Watson M, Stevens JM, Edwards GF, Fitzgerald JR. Gene flow in environmental *Legionella pneumophila* leads to genetic and pathogenic heterogeneity within a Legionnaires' disease outbreak. *Genome Biol.* 2014 Nov 3;15(11):504.

McAdam PR, Richardson EJ, Fitzgerald JR. High-throughput sequencing for the study of bacterial pathogen biology. *Curr Opin Microbiol.* 2014 Jun;19:106-13.

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

FITZGERALD Ross <ross.fitzgerald@roslin.ed.ac.uk>

UHelsinki EpigeneticsOfPhenology

The Department of Biosciences, University of Helsinki invites applications for a

TWO-YEAR POST DOCTORAL RESEARCHER POSITION

in the research group of Assistant Professor Arild Husby. The successful applicant will be part of the Centre of Excellence in Metapopulation Research at the Department of Biosciences, University of Helsinki (<http://www.helsinki.fi/science/metapop/>).

The main goal of the post doc project is to examine the epigenetic basis of avian timing of breeding using the great tit (*Parus major*) as a model species. The successful candidate will examine DNA methylation patterns using targeted bisulphite sequencing of previously identified candidate genes. DNA methylation levels will be compared among two groups of extreme phenotypes using blood samples already collected. In addition, the candidate will be involved in some field work to collect additional data to examine trans-generational DNA methylation patterns. The work will be performed in close collaboration with Prof. Marcel Visser and Dr Kees van Oers at the Netherlands Institute of Ecology (<https://nioo.knaw.nl/en/department-animal-ecology>). Fieldwork will be carried out in the Hoge Veluwe national park near Wageningen, The Netherlands and close to Viikki campus, Helsinki, Finland.

The successful candidate should have PhD / postdoctoral experience within the fields of evolutionary genetics/genomics with previous experience in sequence based analysis of DNA methylation data. Previous experience working on birds is not necessary. Excellent written and verbal communication skills in English are required and you must also demonstrate ability to work as part of a team.

The position will have a probationary period of four months. The starting date is flexible but at latest 1st January 2016.

The salary will be based on level 5 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointee will be paid a salary component based on personal work performance. The total minimum salary at the beginning of the employment is 3311,17 €/month.

To apply, please send, in a single pdf file, your CV with publications included and a letter (max 2 pages) with a description of your research interests and, in particular, why you would be a suitable candidate for the project. The application letter should also contain possible starting dates and contact details of three references. The applications are to be addressed to Dr Arild Husby and submitted to biotiede-mrg@helsinki.fi by 1st October 2015 at 15.45 local Helsinki time.

For more information about this position, please contact Dr Arild Husby (arild.husby@helsinki.fi), see also our lab website: blogs.helsinki.fi/husby

Arild Husby, Assistant Professor Department of Biosciences (Biocenter 3, office 5415), University of Helsinki PO box 65, FI-00014 Helsinki, Finland

web: <http://blogs.helsinki.fi/husby/> mail: arild.husby@helsinki.fi office phone: +358294157691

"arild.husby@helsinki.fi" <arild.husby@helsinki.fi>

UKansas EvolutionRNASilencing

Postdoctoral Researcher in Evolution and Epigenetics of RNA Silencing

An NSF-funded postdoctoral research position is available in the laboratory of Dr. Justin Blumenstiel at the University of Kansas. The major aim of research in the Blumenstiel lab is to determine how genetic conflict in the germ line shapes the evolution of genetic and epigenetic systems, with a dual focus on the epigenetics

of RNA silencing and the machinery of meiosis. We integrate genomics, genetics, molecular evolution and population genetics to address these questions. The specific focus of the research position is to determine how tension between transposon control by piRNAs and off-target gene silencing shapes the evolution of the RNA silencing machinery. This will be achieved by examining modes of transposon and gene silencing by piRNA in different populations and species of *Drosophila*. With a foundation in empirical studies, we will explore various hypotheses using theoretical approaches. Significant opportunity will be provided to allow the researcher to develop an independent research program.

Applicants should have a Ph.D. in a subject area related to evolutionary genetics, developmental genetics, genomics or computational biology. As work in the lab is interdisciplinary, this position is well suited for a researcher with a background in genetics or genomics seeking to apply evolutionary approaches. Candidates with a background in evolutionary biology with interests in genomics and epigenetics are also encouraged to apply.

For additional details, please contact Justin Blumenstiel at jblumens@ku.edu.

To apply, please see <http://employment.ku.edu/staff/-1768BR>. Please submit a CV, a cover letter describing research interests and two to three references. Please indicate that you are applying to work with Justin Blumenstiel and contact him to notify that an application has been submitted.

Justin Blumenstiel Associate Professor

Department of Ecology and Evolutionary Biology University of Kansas 1200 Sunnyside Avenue Haworth Room 7026 Lawrence, KS 66045

jblumens@ku.edu 785-864-3915 <http://www2.ku.edu/~eeb/faculty/blumenstiel.shtml> “No *Drosophila* female could conceivably lay two billion eggs in her lifetime.” - R.C. Lewontin and J.L. Hubby

“Blumenstiel, Justin P” <jblumens@ku.edu>

UManchester ExperimentalEvolution

We are looking to recruit a highly motivated Research Associate to work as part of a BBSRC-funded project ad-

ressing ‘survival-of-the-flattest’ (where fitter individuals may be lost in favour of those with greater mutational robustness) in the evolution of antimicrobial resistance. The post is part of a collaboration between the Universities of Manchester (evolutionary biologist, Chris Knight, tinyurl.com/knightFLS), Keele (computer scientist, Alastair Channon, http://www.scm.keele.ac.uk/~staff/a_channon/) and Middlesex (mathematician Roman Belavkin, www.eis.mdx.ac.uk/staffpages/rvb/) and will test and develop novel ideas about how small population sizes affect organisms’ exploration of fitness landscapes.

You will be based in Manchester, UK and be responsible for developing and testing model microbial systems in the laboratory. You will work with the wider team to create a clear understanding, in theory and practice, of the relationship between the shape of antibiotic resistance landscapes, population size and survival-of-the-flattest.

Candidates must have a PhD in evolutionary genetics or a related discipline. The position is available to start as soon as possible for three years.

For further details and to apply see: <https://www.jobs.manchester.ac.uk/displayjob.aspx?jobid=-10171> Dr Christopher Knight Michael Smith Building Lecturer Faculty of Life Sciences Tel: +44 (0)161 2755378 The University of Manchester room B.2012 Oxford Road tinyurl.com/knightFLS/ Manchester M13 9PT UK

“Chris.Knight@manchester.ac.uk”
<Chris.Knight@manchester.ac.uk>

UMemphis BeetlePhylogenomics

A USDA-funded postdoctoral research fellowship in longhorned beetle phylogenomics and evolution is available in the McKenna laboratory at the University of Memphis. The successful applicant will help generate a phylogenomic data set for longhorned beetles, and will contribute to studies of the evolution of host plant associations in longhorned beetles and their near relatives. The initial appointment is for one year, renewable for one additional year dependent on continued funding and satisfactory progress. The position offers a competitive salary plus benefits. The desired start date is Sept. 30, 2015 or shortly thereafter. Review of applications will begin on August 21, 2015; however, applications will be considered until the position is filled. Apply at: <https://workforum.memphis.edu/postings/10686> De-

sired Qualifications: (Ideal applicant; applicants without these skills will be considered)

- Proficiency in computer programming - Background in insect (especially beetle) systematics - Interest in plant systematics and evolution - Experience with the analysis of traditional molecular phylogenetic data and standard molecular laboratory techniques

Required Qualifications: - Ph.D. in systematics, molecular phylogenetics and evolution, evolutionary genetics/genomics, bioinformatics, computational biology, or a related field. Advanced ABD's may be considered if degree completion is imminent - Experience analyzing large (NGS) DNA sequence data sets - A strong publication record - Strong communication and interpersonal skills, including a proven ability to work both independently and as part of a team

The University of Memphis, a Tennessee Board of Regents institution, is 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, sex, age, disability or veteran status.

dmckenna@memphis.edu

UMichigan EvolGeneticImprinting

Postdoctoral Position Genetic Imprinting in Humans

A postdoctoral research fellowship is available on a project that explores the role of genetic imprinting in the epigenetic transmission of stunting from parents to offspring. Stunting refers to pathologically short stature and is one of the foremost causes of the global burden of disease in low-income countries. This position provides a unique opportunity to tap both field and molecular data from a three-generation prospective cohort study of the Dogon people of Mali, West Africa. The data set provides deep pedigrees, longitudinal growth data recorded annually from infancy to adulthood, and data on genetic imprinting from placental tissue. The project is grounded in evolutionary theory and the "Conflict Hypothesis" while having practical utility in shedding light on the developmental origins of disease. The successful applicant should have high competency in such areas as Bio-Statistics, Bio-Informatics, Human Genetics, and Evolutionary Biology.

The successful applicant is expected to take the lead in

statistically analyzing the molecular data in conjunction with growth and life history data, including new quantitative approaches for the analysis of this novel longitudinal data set. He or she will program in R, help to maintain and mine a six to twelve generation pedigree data-base on the study population, and be active in drafting manuscripts for publication. He or she will coordinate with senior project members, the laboratory staff, and Michigan's Bio-Informatics Core Facility. Direct participation in field or wet laboratory work is not anticipated. The position is based at the Institute for Social Research and the Department of Anthropology at the University of Michigan in Ann Arbor, Michigan, USA.

The postdoctoral research fellow should have a PhD in Evolutionary Biology, Genetics, BioStatistics, Bioinformatics, Anthropology, Epidemiology, or a related field. Demonstrated expertise in biostatistics, strong analytical skills, enthusiasm for writing manuscripts, and demonstrated ability to write clearly in English is required.

To apply, visit the University of Michigan site: umjobs.org and put the position number of 114586 in the keyword search field. You will need a motivation letter including current research directions, an up-to-date CV, and the contact information for three references. Informal enquiries about this position may be directed to Dr. Beverly Strassmann by email: bis@umich.edu.

Beverly I. Strassmann, Professor Department of Anthropology and RCGD, Institute for Social Research University of Michigan Ann Arbor, MI 48109

Beverly Strassmann <bis@umich.edu>

UMichigan EvolutionaryGenomics

Postdoctoral Position in Computational Evolutionary Genomics at University of Michigan

A postdoctoral position is available in the lab of Jianzhi "George" Zhang in a collaborative project with Dr. Joong-Ki Park on marine genomics that is funded by the Korean government. The postdoctoral fellow will analyze newly generated animal genomic and transcriptomic data to address various evolutionary questions. The position requires a motivated individual with an interest in evolution and experience in analyzing next-generation sequence data. Applicants should email CV and contact information of three references to

jianzhi@umich.edu. The initial appointment will be for one year, but the appointment is renewable contingent on satisfactory performance and availability of funding. For further information about the Zhang lab, see <http://www.umich.edu/~zhanglab/>. “jianzhi@umich.edu” <jianzhi@umich.edu>

UNC Chapel Hill Genomics of Fitness Landscapes Pupfish Cichlids

Postdoctoral position in Speciation Genomics: Genetic basis of fitness landscapes driving adaptive radiation in Caribbean pupfishes and Cameroon crater lake cichlids

The Martin Fish Speciation Lab at the University of North Carolina at Chapel Hill seeks a postdoc for population genomic and/or quantitative genetics projects investigating the genetic architecture of adaptive phenotypes and fitness in the wild. We are developing two study systems, Caribbean pupfishes and Cameroon crater lake cichlids, using a broad suite of evolutionary, ecological, and behavioral approaches. Pupfishes present a rare opportunity to investigate the recent origins of spectacular adaptive radiation and the evolution of novel niches (e.g. scale-eating) localized to a single Bahamian island despite thousands of similar Caribbean environments. Cameroon crater lake cichlids are (in)famous as one of the best examples of sympatric speciation in nature, but more work is needed to determine what mechanisms are driving this process and reexamine existing theoretical predictions.

A 2.5 year position is available (initial 12 month appointment with the possibility of renewal). Start date is flexible, but ideally after January 2016. Salary is \$38,000 with benefits. The cost of living in the Triangle is affordable compared to other regions with such a high concentration of universities.

The postdoc will have the opportunity to choose among a number of ongoing projects in the lab:

- 1) Estimate the genetic architectures of novel adaptive traits within Caribbean pupfishes and/or Cameroon cichlids using a combination of controlled laboratory crosses, divergence mapping from whole-genome resequencing, or association mapping. F2 hybrid laboratory crosses are genotyped and phenotyped awaiting analysis.
- 2) Measure the relationship between genotype, phenotype, and fitness across a complex fitness landscape estimated from the growth and survival of nearly 4000

F2 hybrid pupfish placed in field enclosures (see previous experiment: Martin and Wainwright. 2013. Science). This experiment is completed and awaits analysis.

- 3) Demographic/coalescent analyses of local population histories within introgressed genomic regions for pupfishes and/or cichlids using whole-genome resequencing of an existing tissue collection.

The postdoc will also have the option to participate in fieldwork in the Bahamas and/or Cameroon, but previous field experience is not necessary and participation is not required.

Required qualifications:

Ph.D. or equivalent degree in biology, evolution, genetics, bioinformatics, or related field. Publication of work based on dissertation. Working knowledge of bioinformatics pipelines, in particular genomic resequencing workflows and standard population genomic analyses. Proficiency in scripting language (e.g. Python or Perl) and depth in some area of population genomics or quantitative genetics is preferred. No pipetting experience necessary as this position is for downstream data analysis.

UNC Chapel Hill is a leading global research institution for biological sciences with a vibrant community of evolutionary biologists interested in speciation, both within the department and the greater Triangle area. The postdoc will be integrated into departmental activities (seminars, outreach events, happy hours) and will receive professional mentoring on job applications, interviews, and teaching. The quality of life in this area is consistently rated among the highest in the nation. UNC was also rated as one of the top 20 “best places to postdoc” by The Scientist magazine.

The University of North Carolina at Chapel Hill is an equal opportunity employer with a strong institutional commitment to inclusiveness and diversity. Applicants from under-represented backgrounds are especially encouraged to apply.

Interested candidates should submit a cover letter detailing their interest in the position, relevant experience, and research accomplishments along with contact information for three references to Chris Martin at chmartin@unc.edu

Please feel free to contact me at the above email address with any questions.

Christopher Martin

Assistant Professor

Biology Department

University of North Carolina at Chapel Hill

Chapel Hill, NC 27599

bio.unc.edu/people/faculty/martin-christopher/

“chmartin@unc.edu:

UNewBrunswick StJohn CodPopulationGenomics

Postdoctoral Fellowship Position in Ecological Genomics at University of New Brunswick Saint John: Atlantic Cod Population Genomics (Winter 2016)

A position is available for a Postdoctoral Fellow to participate in an integrated genomics research program. The postdoc will use cutting edge genomics techniques to assess population structure, adaptive genetic variability, and genotype-phenotype associations in Striped Bass, Atlantic Cod, Atlantic Salmon, and other species. The postdoc will be part of a new Canada Research Chair lab in Aquatic Molecular Ecology and Ecological Genomics at the University of New Brunswick in Saint John.

The postdoc will use state-of-the-art laboratory equipment, including robotics, to streamline repetitive tasks and will have priority access to a high-powered computer with 1.5 TB of RAM for bioinformatics. The lab is located at the Canadian Rivers Institute (www.canadianriversinstitute.ca).

Strong candidates will have experience creating RAD-tag and GBS libraries, conducting bioinformatics, and have a strong publication record. Candidates must have a positive attitude and willingness to work with a team. Experience in programming Python, Bash or Perl computer languages is required.

The position will begin in Jan. of 2016. Submit a Cover Letter, CV, contact information for three references to Dr. Scott Pavey (scott.pavey@unb.ca). Application packages will be accepted until the position is filled.

Scott Pavey <scottapavey@gmail.com>

UNewHampshire BeeComparativeGenomics

We are seeking a postdoctoral researcher for a collaborative project (between the labs of Sandra Rehan at the University of New Hampshire and Amy Toth at Iowa State University) investigating evolutionary genomics of sociality in bees. The project will investigate the types of genomic changes that are associated with the earliest origins of very simple sociality and then its subsequent elaboration into advanced eusociality. It utilizes a unique clade of bees, the Xylocopinae (carpenter bees), where social behavior ranges enormously, from solitary through to highly complex, but with many intermediate and very weakly social species. For an outline of the conceptual foundation of this project, see Rehan and Toth 2015 “Climbing the social ladder: the molecular evolution of sociality” in *Trends in Ecology and Evolution*.

[http://www.cell.com/trends/ecology-evolution/abstract/S0169-5347\(15\)00126-3](http://www.cell.com/trends/ecology-evolution/abstract/S0169-5347(15)00126-3)

A Postdoctoral Fellowship position is available for three years. This highly interdisciplinary project will involve field work with bees in different areas of the US and Australia, high throughput DNA- and RNA- sequencing, and extensive bioinformatic and statistical analyses. Importantly, the postdoc will have the opportunity to work with a large data set and the latest advances in genomics, bioinformatics and computational biology as part of this project.

The successful candidate will have a PhD in a relevant area, and a strong background in social evolution and genomics. They will demonstrate computational and bioinformatics skills (experience in handling and analysing next-generation sequencing data; competence in programming e.g. Perl, R, Python would be an advantage).

The University of New Hampshire is an Equal Opportunity Employer and encourages applications from women and underrepresented groups. If interested, please send a CV, names of three references, and a short statement of interests to Sandra Rehan sandra.rehan@unh.edu by September 8, 2015.

– Sandra Rehan, Assistant Professor Department of Biological Sciences University of New Hampshire 191 Rudman Hall, 46 College Road Durham, NH, USA 03824 mo-

bile phone: (267) 650-2528 office phone: (603) 862-5310
 office fax: (603) 862-3784 email: sandra.rehan@unh.edu
 website: www.unhbeelab.com sandra.rehan@gmail.com

with a disability and need accommodation with the application process, please contact us for assistance.

– INSTITUTE OF ECOLOGY AND EVOLUTION 5289
 University of Oregon, Eugene OR 97403-5289 F (541)
 346-2364 <http://IE2.uoregon.edu> “ie2jobs@uoregon.edu”
 <ie2jobs@uoregon.edu>

UOregon MolecularEvol

Postdoctoral Research Scholar Institute of Ecology and Evolution Posting: 150610 Location: Eugene Closes: 2016-06-30

The Institute of Ecology and Evolution at the University of Oregon seeks to create a pool of applicants for potential funding contingent postdoctoral research positions. Positions are limited duration appointments potentially renewable for up to a total of three years. In limited circumstances, there is the possibility of renewal beyond three years based on programmatic need, funding and performance. Postdoctoral scholars will be conducting research under the direction of a principal investigator for the purpose of acquiring research training. Ph.D. in biology or related field is required. Topics of particular interest in IE2 are molecular evolution; evolutionary genetics; evolution, development, and genomics; microbial ecology; functional ecological genetics; biological oceanography; and conservation biology and global change. Please see our website (<http://ie2.uoregon.edu>) for more information about the type of research being done. Salary dependent upon experience, hires from this pool may require a criminal background check.

To apply, please send a cover letter stating your areas of interest, three references and current CV as a single attachment to : ie2jobs@uoregon.edu with subject: Pool 150610

Applications will be accepted on a continuous basis and remain active through June 30, 2016. Screening of applications will take place as positions become available and continue until positions are 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.

Office of Affirmative Action & Equal Opportunity §677 East 12th Ave., Suite 452 §5221 University of Oregon, Eugene, OR 97403-5221 Office (541) 346-3123, Fax (541) 346-4168 §This announcement is available in alternate formats upon request. If you are a qualified applicant

Uppsala 2 PopulationGenomics

Two post-doctoral positions in population genomics Three two-year post-doctoral positions are available in the Ellegren lab at the Evolutionary Biology Centre, Uppsala University, Sweden (<http://www.ieg.uu.se/-evolutionsbiologi/ellegren-se/?languageId=3D1>). Two positions are broadly defined as population genomics (presented below) and one as molecular evolution, although there is some extent of overlap both in terms of concepts and data used among the positions.

1. Population genomics

We use flycatchers of the genus *Ficedula* to study evolutionary processes related to the evolution of heterogeneous genomic landscapes of species differentiation (e.g. Ellegren et al 2012 *Nature* 491:756-760). There is increasing evidence that genomic regions with elevated differentiation (‘differentiation islands’) can evolve by processes unrelated to speciation. For example, the concept of linked selection, which is particularly pronounced in low-recombining regions, will locally reduce the effective population size and thereby enhance genetic drift of segregating variants. Pursuing these studies using haplotype-based statistics and NGS-data from sequencing platforms generating long reads is one possible direction of research for the post-doc. Other directions include, for example, demographic analyses and studies of the recombination landscape. The specific questions to be addressed will be decided in dialogue with the successful candidate and will depend on her/his interests and background. Recent publications from the group relating to the project include Nadachowska-Brzyska et al 2015 *Current Biology* 25:1375-1380; Nater et al 2015 *Systematic Biology*, in press; Smeds et al. 2015 *Nature Communications* 6:7330; Suh et al 2015 *PLoS Biology* 13:1002224.

2. Population genomics

The wolf was once widespread in Scandinavia, as well as in other parts of Europe, but long-term persecution led to its extinction by the 1960s. Two animals founded a new population in Sweden in the 1970s and a limited number of immigrants have sub-

sequently become integrated with the population and it has grown to several hundreds of individuals. The population is highly inbred (inbreeding coefficient of newborns is currently 0.25 on average) and there are signs of inbreeding depression. We are now conducting whole-genome re-sequencing of 100 animals sampled from throughout the time period since the new population was founded. The post-doc will be responsible for analysing these data with the aims of investigating the rate of allelic loss, the extent and distribution of genomic regions identical-by-descent, the genomic contribution of each founder to the extant population, and to compare genetic relationships derived from the pedigree and genome sequence data. Several other research questions can apply as well. The project is a collaboration with Grimso Wildlife Research Station of the Swedish University of Agricultural Sciences.

Suitable background to these position is a PhD geared toward evolutionary biology, population genetics, or bioinformatics. Experience from bioinformatic analyses of next-generation sequencing data is of merit. Depending on the direction of research to be taken, experience of demographic modeling, molecular evolutionary analyses or conservation biology could also be of merit.

Start date is flexible, ideally before January 1, 2016. The positions can be extended for up to two more years. For full consideration, please send application materials by September 18, 2015. Interested candidates should submit the following to Hans.Ellegren@ebc.uu.se - a cover letter stating research interests, - CV, including publication record - a short (1-2 page) description of research accomplishments, - email addresses and phone numbers of three references Please feel free to contact me at the above email address with questions.

The venue for the positions, the Evolutionary Biology Centre, is situated in central Uppsala. The working atmosphere is international with the great majority of PhD students and post-docs recruited from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations. Local platforms for high-performance computational analyses (<https://www.uppmax.uu.se/uppnex>), NGS, SNP genotyping and proteomic analyses (<http://www.scilifelab.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

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Uppsala 3 MolecularEvolution

Post-doctoral position in molecular evolution

Three two-year post-doctoral positions are available in the Ellegren lab at the Evolutionary Biology Centre, Uppsala University, Sweden (<http://www.ieg.uu.se/evolutionsbiologi/ellegren-se/?languageId=3D1>). Two positions are broadly defined as population genomics and one as molecular evolution (presented below), although there is some extent of overlap both in terms of concepts and data used among the positions.

We are interested in how sequence evolution and evolution of base-composition are related to factors such as epigenetic modifications, life history and recombination. Avian genomes are in focus for our research (allowing analyses of highly heterogeneous recombination landscapes) and we perform whole-genome re-sequencing of population samples to obtain detailed estimates of the site-frequency spectrum. Examples of on-going work are studies of methylation in avian genomes based on whole-genome bisulfite sequencing and how methylation affects substitution patterns and gene expression, how GC-biased gene conversion give genomic signals mimicking those of selection (and how signals of gBGC and selection can be separated), and the link between life history and rates of diversity/divergence. The specific questions to be addressed will be decided in dialogue with the successful candidate and will depend on her/his interests and background.

Recent publications from the group relating to the project include Weber et al 2014 *Genome Biology* 15:542 and 15:549; Mugal et al 2015 *G3* 5:441-447; Smeds et al 2015 *Nature Communications* 6:7330; Uebbing et al 2015 *Mol Biol Evol*, in press.

Suitable background to this position is a PhD geared toward molecular evolution, population genetics, or bioinformatics. Experience from bioinformatic analyses of next-generation sequencing data is of merit.

Start date is flexible, ideally before January 1, 2016. The position can be extended for up to two more years.

For full consideration, please send application materials by September 18, 2015. Interested candidates should submit the following to Hans.Ellegren@ebc.uu.se - a cover letter stating research interests, - CV, including publication record - a short (1-2 page) description of research accomplishments, - email addresses and phone numbers of three references Please feel free to contact me at the above email address with questions.

The venue for the position, the Evolutionary Biology Centre, is situated in central Uppsala. The working atmosphere is international with the great majority of PhD students and post-docs recruited from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations. Local platforms for high-performance computational analyses (<https://www.uppmax.uu.se/uppnex>), NGS, SNP genotyping and proteomic analyses (<http://www.scilifelab.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

The Ellegren group is part of the Department of Evolutionary Biology (<http://www.ieg.uu.se/evolutionary-biology/>), which is a branch of the larger Department of Ecology and Genetics (<http://www.ieg.uu.se/?languageId=3D1>). The Department of Evolutionary Biology houses 8 independent research groups and about 25 PhD students, 25 postdocs, and several bioinformaticians. A common theme is that we address key questions in evolutionary biology, like speciation, local adaptation, life history evolution, genome and molecular evolution, using genomic approaches. We have tight connections with several other research groups in the Department of Ecology and Genetics within the Evolutionary Biology Centre.

Professor Hans Ellegren Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvägen 18D SE-752 36 Uppsala Sweden Email: Hans.Ellegren@ebc.uu.se LAB WEB PAGE: <http://www.ieg.uu.se/evolutionsbiologi/-ellegren-se/?languageId=3D1> Hans Ellegren <hans.ellegren@ebc.uu.se>

Uppsala WolfPopulationGenomics

Post-doctoral position in population/conservation genomics of wolves

A two-year fully funded post-doctoral position is available in the Ellegren lab at the Evolutionary Biology Centre, Uppsala University

The Scandinavian wolf population is very well monitored population that has been focus for extensive genetic studies of, for example, genetic rescue effects, inbreeding depression, origin and immigration (Hedrick et al *Evolution* 55:1256-1260; Sundqvist et al *Mol Ecol* 10:1959-1966; Vila et al *Proc R Soc Lond B* 270:91-97; Flagstad et al *Mol Ecol* 12:869-880; Seddon et al *Proc R Soc Lond B* 271:2283-2291; Liberg et al. *Biol Lett* 1:17-20; Seddon et al *Mol Ecol* 14:503-511; Bensch et al *PLoS One* 1:e72; Seddon et al *Conserv Genet* 7:225-230; Vali et al *Mol Ecol* 17:3808-3817; Hagenblad et al *Mol Ecol* 18:1341-1351). The wolf was once widespread in Scandinavia, as well as in other parts of Europe, but long-term persecution led to its extinction by the 1960s. Two animals founded a new population in Sweden in the 1970s and a limited number of immigrants have subsequently become integrated with the population and it has grown to several hundreds of individuals. The population is highly inbred (inbreeding coefficient of newborns is currently 0.25 on average) and there are signs of inbreeding depression. We are now conducting whole-genome re-sequencing of 100 animals sampled from throughout the time period since the new population was founded. The post-doc will be responsible for analysing these data with the aims of investigating the rate of allelic loss, the extent and distribution of genomic regions identical-by-descent, the genomic contribution of each founder to the extant population, and to compare genetic relationships derived from the pedigree and genome sequence data. Several other research questions can apply as well. The project is a collaboration with Grimso Wildlife Research Station of the Swedish University of Agricultural Sciences.

Start date is flexible, ideally before January 1, 2016. The position can be extended for up to two more years.

For full consideration, please send application materials by September 6, 2015. Interested candidates should submit the following to Hans.Ellegren@ebc.uu.se - a cover letter stating research interests, - CV, including publication record - a short (1-2 page) description of

research accomplishments, - email addresses and phone numbers of three references

Please feel free to contact me at the above email address with questions.

The venue for this position, the Evolutionary Biology Centre, is situated in central Uppsala. The working atmosphere is international with the great majority of PhD students and post-docs recruited from abroad. The Centre constitutes an exciting arena for multidisciplinary research in evolutionary biology in a broad sense, housing some 300 scientists and graduate students. The scientific environment with numerous seminars, journal clubs and social activities offer excellent possibilities for contacts and collaborations. Local platforms for high-performance computational analyses (<https://www.uppmax.uu.se/uppnex>), NGS, SNP genotyping and proteomic analyses (<http://www.scilifelab.se>) ensure immediate access to state-of-the-art technology. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful and easy accessible surroundings conveniently situated close to Stockholm.

The Ellegren group is part of the Department of Evolutionary Biology (<http://www.ieg.uu.se/evolutionary-biology/>), which is a branch of the larger Department of Ecology and Genetics (<http://www.ieg.uu.se/?languageId=3D1>). The Department of Evolutionary Biology houses 8 independent research groups and about 25 PhD students, 25 postdocs, and several bioinformaticians. A common theme is that we address key questions in evolutionary biology, like speciation, local adaptation, life history evolution, genome and molecular evolution, using genomic approaches. We have tight connections with several other research groups in the Department of Ecology and Genetics within the Evolutionary Biology Centre. The project is a collaboration with Grimso Wildlife Research Station of the Swedish University of Agricultural Sciences.

Suitable background to the position is a PhD geared toward evolutionary biology, population genetics, conservation biology or bioinformatics. Experience from bioinformatic analyses of next-generation sequencing data is of merit.

Professor Hans Ellegren Department of Evolutionary Biology Evolutionary Biology Centre Uppsala University Norbyvägen 18D SE-752 36 Uppsala Sweden Email: Hans.Ellegren@ebc.uu.se

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USFDA Maryland EvolutionFoodPathogens

We definitely want someone with an evolutionary biology background but this position would be more applied. Thanks!

“FOOD SAFETY POSTDOCTORAL FELLOWSHIP

The Method Development Branch of the Division of Analytical Chemistry, Office of Regulatory Science of the U.S. Food and Drug Administration’s Center for Food Safety and Applied Nutrition (CFSAN) seeks a postdoctoral fellow to participate in our food safety/food defense research program. The FDA faces significant challenges in the area of food safety. These challenges involve the detection and quantification of unintentional or natural contaminants, and intentional adulterants, in foods and dietary supplements. The FDA must also develop analysis methods that are sensitive and specific, and that also work in complex food matrices. New DNA based molecular species identification tools have and will compliment established chemical methods, especially with regards to processed plant products. Previous work with plants showed that whole chloroplast genomes were critical to developing a species-specific real time-PCR method to detect plant species in mixed products.

To increase the FDA’s capability to develop plant identification methods, the Agency is constructing a chloroplast genome library for targeted plant species and their close relatives. Once developed, the library will be used to develop specific DNA- identification methods for species of current FDA concern. A wide range of instrumental analytical methods will be employed, including sanger sequencing, next generation sequencing such as the Illumina miseq/hiseq, as well as assays developed from these genomes including PCR, RT-PCR and QPCR.

Algorithms to analyze data from these experiments are also necessary, including pipelines to automatically process and extract information from sequence data. The candidate should be comfortable in the linux environment and have expertise in one scripting language such as Perl or Python.

Scope of Work: The Postdoc will assist in the following tasks, including but not limited to:

1. Assist in the development of sample preparation meth-

ods for the analysis of complex mixtures for the presence of industrial chemical contaminants, toxins and allergens, or in the development of sample preparation for DNA-based identification of plant species 2. Determine the best way to amplify chloroplast DNA from plant cells a) PCR-based approach, b) physical extraction of the chloroplasts or c) Sequence all genomic data and isolate the chloroplast DNA post-sequencing. 3. Generate chloroplast genome sequence data for plants deemed to be of interest. Sequencing will be carried out, using the Illumina Miseq as well as other next generation sequencing platforms. Vouchered and taxonomically-identified source materials will be obtained from in-house and external collections and collaborators. 4. Assist in the development of data analysis software or pipelines for next generation sequencing data and software-based approaches for the identification of plant, or the identification and of contaminants and adulterants in foods and dietary supplements.

Candidates should have a Ph.D. degree (within the last five years) in Botany, Plant Science, Evolutionary Biology, Bioinformatics or a related field and should have a strong background with next generation sequencing and the use of bioinformatics tools. A U.S. citizenship, permanent resident status or a valid J1 Visa is required (F1 with OPT is acceptable until a J1 is obtained). The start date is as soon as possible. Salary: up to \$77,000. Duration: 1 year with possibility of renewal. Please email your CV to: Dr. Sara Handy, US FDA/Center for Food Safety and Applied Nutrition, HFS-717, College Park, MD 20740. Sara.Handy@fda.hhs.gov”

“Handy, Sara” <Sara.Handy@fda.hhs.gov>

USheffield Evolutionary Computation Population Genetics

The Department of Computer Science at the University of Sheffield is offering a Postdoc position on Theory of Evolutionary Computation and Population Genetics

A Research Assistant or Research Fellow position is available to work on analysing the efficiency of evolutionary processes in evolutionary algorithms and models of natural evolution. The position is part of SAGE (Speed of Adaptation in Population Genetics and Evolutionary Algorithms, <http://www.project-sage.eu/>), an interdisciplinary European project in the Future and Emerging Technologies scheme. This is a fixed term

post, starting Sep 1st 2015 (negotiable) and ending on Dec 31st 2016. It is based in the Department of Computer Science, University of Sheffield, and reports to Dr Dirk Sudholt.

SAGE is a joint effort between four European research institutions—University of Nottingham, University of Sheffield, Hasso Plattner Institute Potsdam, and IST Austria—to develop world-leading research at the interface between Population Genetics and Computer Science. Specifically, SAGE aims at bringing together these two research fields to develop a unified quantitative theory that describes how quickly populations adapt to evolve high-fitness individuals in both natural and artificial evolution. Our goal is to reveal how this efficiency is fundamentally determined by evolutionary and environmental parameters, and how these parameters can be tuned to use evolution most effectively in applications ranging from evolutionary algorithms to experimental evolution and synthetic biology. The successful candidate will join a growing team of young and ambitious researchers that has already made excellent progress towards achieving these goals.

Applications are invited from highly skilled researchers in Computer Science, Mathematics, Physics, Theoretical Biology or related areas (at the interface between computer science and biology). A good understanding of evolutionary computation and/or population genetics will be an advantage. In addition, strong mathematical and analytical skills are essential. The applicants must have (or be very close to completing) a PhD in Computer Science, Biology, Mathematics, Physics or related disciplines.

The post is available at Grade 7 (Research Associate, 29,552-37,394 per annum) or Grade 8 (Research Fellow, 38,511-40,847 per annum), depending on experience.

Further details and an online application form are available from <https://t.co/1DL71Fo2Ia> Applicants need to apply through the above online system before August 26, 2015.

Please send informal enquiries to Dirk Sudholt, d.sudholt@sheffield.ac.uk.

Tiago Paixao <paixao@ist.ac.at>

UTuebingen Paleogenetics

A postdoc position in bioinformatics is available in the Archaeo- and Paleogenetics group at the University of

Tuebingen. The research group focusses on ancient DNA analyses with a specific interest in ancient pathogen evolution and bacterial genomics.

The successful candidate will be involved in ongoing pathogen genome projects. In addition he/she will have the possibility to develop own projects and initiate collaborations.

Applicants should have a PhD in bioinformatics, informatics or a related field. The ideal candidate will have experience in the analysis of NGS data, evolutionary genetics and in at least one of the major scripting languages (Perl, Python or R). A strong interest or already existing expertise with ancient DNA and pathogen genomics is highly advantageous. Complementary expertise in molecular evolution and statistics is a plus. A strong publication record as well as excellent communication skills are required.

The initial contract is for two years with the possibility of a tenure position and a salary according to E13 TV-L. Teaching obligations cover Bsc and Msc programs of Archeological Sciences for a total of currently 4 hours per week.

Applications containing a cover letter including research interests, a CV, a publication list and three references should be sent to sonia.varandas@uni-tuebingen.de until the 30th September. The intended start date is fall 2015, we are however flexible.

For informal inquiries please contact johannes.krause@uni-tuebingen.de or

verena.schuenemann@uni-tuebingen.de.

The University of Tuebingen is committed to strengthening the proportion of women in research and teaching, and strongly encourages applications of qualified female scientists. Applicants with disabilities who possess equivalent qualifications will be given preferential treatment.

Dr. Dr. Verena Schuenemann Group leader Archaeo- und Paleogenetics Institute for Archaeological Sciences

University of Tuebingen Ruemelinstr. 23 72076 Tuebingen

Sonia Varandas <sonia.varandas@uni-tuebingen.de>

UWashington ComparativeFunctionalMorphology

A postdoctoral position is available at the Santana lab at the University of Washington in Seattle (<http://faculty.washington.edu/ssantana/wordpress/>). The postdoc will be part of current research on comparative functional morphology of the mammalian feeding apparatus, with a particular emphasis on bats. The research will integrate tools from comparative anatomy, biomechanics and evolutionary biology to elucidate the links between morphological evolution and ecological diversification in bats.

The postdoc will be involved in: (a) planning, conducting and/or supervising the collection of morphological data, (b) designing and conducting modeling studies, and (c) conducting phylogenetic and other statistical analyses. Additionally, there will be opportunities for participation in fieldwork to document feeding behavior and performance from live animals. The ideal candidate will have a strong background in relevant laboratory methods, including CT-scanning, dissections, and biomechanical modeling (e.g., finite element analyses). Proficiency with R, phylogenetic comparative methods and multivariate statistics will be highly regarded. We seek a highly motivated candidate who is able to work both collaboratively and independently.

Applicants must have a Ph.D. Exceptional candidates completing their Ph.D. within the next few months will also be considered. Applicants should submit:

1. A cover letter describing research experience, interests and goals, and their relevance to the project.
2. A full CV, including publications, and
3. The names and contact information for three individuals willing to serve as references.

Please submit all application materials as a single PDF file to ssantana@uw.edu with "Postdoctoral application" as the subject line. Funding is available for two years contingent upon a successful one-year review. Review of applications will begin September 1st and continue until the position is filled.

The postdoc will join a center of excellence in ecology, evolutionary and organismal biology at UW (<http://www.biology.washington.edu>), s/he will have constant interaction with other faculty and lab collaborators, and

will have ample opportunities for further development in research, teaching and outreach at the Department of Biology and the Burke Museum of Natural History and Culture.

VanderbiltU UPittsburgh ComputationalEpigenetics

Postdoctoral Positions in Computational Epigenomics

Two postdoctoral positions in Computational Epigenomics are available in the labs of Tony Capra at Vanderbilt University in Nashville, TN and Dennis Kostka at the University of Pittsburgh in Pittsburgh, PA. The positions could be based at either location.

The successful candidates will lead several projects focused on the modeling and interpretation of how epigenomic changes contribute to the gene regulatory programs that drive cellular differentiation. One goal is the development and implementation of statistical methods for modeling the dynamics of epigenetic modifications, gene expression, and transcription factor binding across differentiation and disease. Another focus is the application of these new methods to genome-wide epigenetic data sets generated by our experimental collaborators, which include blood cell differentiation, pancreatic cancer, heart differentiation, and maintenance of pluripotency. There is also substantial room for the initiation of new projects.

A record of successful publications and a PhD in bioinformatics, computer science, statistics, or a similar discipline is required. Programming and analytical skills are essential for this position. Experience in epigenetics, statistics, and bioinformatics is preferred, but not strictly necessary.

The general focus of the Capra Lab is comparative and evolutionary genomics. We have active projects investigating gene regulatory changes in recent human evolution, modeling effects of genetic variation on protein structures, and evaluating the effects of admixture with archaic groups on modern humans. For more information about the group and our work, visit <http://www.capralab.org/>. The Kostka Lab focuses on the design and application of statistical methods and algorithms in the area of functional and comparative genomics. Current projects include investigating the role of enhancer sequences in vertebrate left-right patterning, transcriptional characterization of single cells of the heart, and modeling of epigenomic changes dur-

ing development and differentiation. More information is available at <http://www.kostkalab.net/>. Interested applicants should send a CV and a cover letter outlining qualifications and research interests to both Dennis Kostka <LASTNAME@pitt.edu> and Tony Capra <tony.LASTNAME@vanderbilt.edu> with the phrase “postdoc application” in the subject line. Please provide contact information for three references.

“tony.capra@vanderbilt.edu”
<tony.capra@vanderbilt.edu>

WayneStateU 2 DiseaseEvolution

POST-DOCTORAL POSITIONS

Two post-doctoral positions are available in the research groups led by Francesca Luca and Roger Pique-Regi, at the Center for Molecular Medicine and Genetics, Wayne State University, Detroit, MI. The research focus of the groups is on the genetic and molecular characterization of gene regulation from an evolutionary and functional perspective. Examples of collaborative projects include: characterizing variation in the response to hormonal and environmental stimuli at the individual and population level; identifying tissue-specific cis-regulatory modules with ATAC-seq and footprinting analysis; detecting signals of selection and adaptation in gene regulatory regions. The ultimate aim is to learn about the genetic and evolutionary basis of disease susceptibility and response to treatment.

We have a strong record in using both functional and evolutionary genomics approaches. We use a combination of high throughput experimental platforms and computational/statistical tools. We seek applicants who are very creative, energetic, and can work independently. We operate relatively small but well-funded and intense laboratories. The goal is that everyone should have the resources, support and mentorship needed to be successful and become an independent investigator.

The two positions are intended for applicants with complementary expertise. Specifically we are looking for talented individuals with either a strong experimental and/or computational background that will contribute to create a team jointly supervised by Dr. Luca and Dr. Pique-Regi.

The experimentalist position would be under the direct supervision of Dr. Luca, and requires experience in collecting genome-scale data, in mammalian cell and

tissue culture techniques and in functional genomics techniques. Familiarity with the quantitative skills required for the analysis of genomic data (e.g., Python, R, scripts for setting up an analysis pipeline) is also required.

For the computational position (under the direct supervision of Dr. Pique-Regi), applicants should have a strong background in quantitative/statistical skills, and a very strong interest in biological applications. A

background in genomics, gene regulation or statistical genetics is an advantage, although we will consider outstanding candidates with quantitative degrees (e.g. in Statistics, CS, or Engineering)

For more information please contact: Francesca Luca, PhD e-mail: fluca@wayne.edu website: www.lucalab.wayne.edu Roger Pique-Regi, PhD e-mail: rpique@wayne.edu

Francesca Luca <fluca@wayne.edu>

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Barcelona MacroevolutionPhytools Mar14-17

Dear colleagues,

Registration is open for the course “Using Phytools (and other R packages) to Study Macroevolution on Phylogenies”, taught by Dr. Liam Revell (University of Massachusetts Boston, USA), developer of Phytools.

Dates: March 14th-17th, 2016.

PLACE: Facilities of the Centre de Restauraci i Interpretaci Paleontologica, Els Hostalets de Pierola, Barcelona (Spain). Registration and more info: <http://www.transmittingscience.org/courses/evol/phytools/>
PROGRAM: 1. Introduction to phylogenies & the comparative method. 2. Introduction the basics of the R

statistical computing environment. 3. Introduction to reading, writing, manipulating, & visualizing phylogenies and comparative data in R. 4. Models of phenotypic trait evolution on trees: Brownian motion. 5. Simulating Brownian motion on trees using R. 6. Introduction to the phylogenetic comparative method: Phylogenetic independent contrasts. 7. Phylogenetic independent contrasts & exploring the properties of contrasts regression using simulation in R. 8. Phylogenetic generalized least squares regression & phylogenetic generalized ANOVA. 9. Multivariate statistical methods with phylogenies: Phylogenetic principal components analysis, canonical correlation analysis, & other approaches. 10. Phylogenetic PCA & phylogenetic CCA in R. 11. Continuous character models of trait evolution on phylogenies. 12. Fitting continuous character models to univariate trait data in R. 13. Ancestral state reconstruction I: Continuous characters. 14. Reconstructing ancestral states for continuous traits on phylogenies using R. 15. An-

cestral state reconstruction II: Discrete characters. 16. Reconstructing ancestral states for discrete traits on phylogenies using R. 17. Exploring the limitations of ancestral state reconstruction for continuous & discrete characters on phylogenies using R. 18. Testing for the influence of one discrete character on a second using Pagels (1994) method. 19. Exploring the promise & limitations of the Pagel (1994) method using R. 20. Analyzing discrete character coevolution, and the evolution of discrete & continuous characters using the threshold model. 21. Fitting models of discrete & continuous character evolution on trees using the threshold model. 22. Multi-rate, multi-regime, & multivariate models of character evolution on phylogenies. 23. Fitting multi-regime & multivariate models for continuous character evolution in R. 24. Visualizing trees & phylogenetic comparative data. 25. Plotting phylogenies & comparative data using R. 26. Wrap-up & optional additional exercise or lecture. Knowledge of R is required.

This course is organized by Transmitting Science, the Institut Catal de Paleontologia and the Centre de Restauraci i Interpretaci Paleontologica.

Please feel free to distribute this information between your colleagues if you consider it appropriate.

With best regards Soledad De Esteban-Trivigno, Ph.D.
Course Coordinator courses@transmittingscience.org
Transmitting Science www.transmittingscience.org
soledad.esteban@transmittingscience.org

Chillan Chile Conservation Genetics Nov30-Dec11

The Conservation Genetics Network (ReGeneC) announces the X Latin American Conservation Genetics Course.

The Conservation Genetics Network (ReGeneC) gathers together scientists with experience in different areas of conservation genetics who work in the region. The X Latin American Conservation Genetics Workshop will be held between November 30 to December 11 (2015) in Chillan, Chile. This postgraduate course is given in Spanish and seeks to train and integrate human resources, facilitating the conservation and the appropriate use of the regional biological richness.

The course combines discussion sessions, hands-on data analysis, and in-depth review and presentation of ongoing research by participating students, with formal

lectures in project design, marker choice, statistical analysis, phylogenetics, phylogeography, and population genetics. Throughout the course, we emphasize practical applications to the real-world process of conservation.

Application deadline: August 31st, 2015. See "Acercas de las Pre-inscripciones" <http://regenec.org/taller/-nov2015/> for application process details.

For more information, please visit our website <http://regenec.org/taller/-nov2015/> or send an email to asistenciaregenec@gmail.com or regenec@gmail.com

La Red de Genética para la Conservación (ReGeneC) anuncia el X Taller Latinoamericano de Genética para la Conservación. La Red de Genética para la Conservación (ReGeneC) reúne a científicos con experticias en distintas áreas de esta temática que trabajan en la región. El X Taller Latinoamericano de Genética para la Conservación se desarrollará entre el 30 de Noviembre y 11 de Diciembre 2015, en Chillan, Chile. El curso es dictado en español, tiene nivel de postgrado y busca, entre otros aspectos, formar y favorecer la integración de recursos humanos para facilitar la conservación y el uso adecuado de la riqueza biológica de esta región. El curso combinará sesiones de discusión, clases prácticas de análisis de datos y revisión profunda y presentaciones de investigación activa por los estudiantes, con ponencias formales en diseño de proyectos, selección de marcadores, análisis estadísticos, filogenia, filogeografía y genética de poblaciones. A través del curso, se enfatizarán aplicaciones prácticas al proceso de conservación en el mundo real. Fecha límite de postulación: 31 de Agosto de 2015. Ver la sección "Acercas de las Pre-inscripciones" en <http://regenec.org/taller/-nov2015/> para detalles del proceso de postulación. Para más información, visite nuestro sitio web <http://regenec.org/taller/-nov2015/> o contáctenos por correo electrónico en las siguientes direcciones: asistenciaregenec@gmail.com o regenec@gmail.com

Dr. Elie POULIN Laboratorio de Ecología Molecular (LEM) Instituto de Ecología y Biodiversidad (IEB) Departamento de Ciencias Ecológicas Facultad de Ciencias, Universidad de Chile Las Palmeras 3425, Casilla 653 CP 780-0024, Santiago, Chile <http://lem.dm.cl/> <http://www.ieb-chile.cl/> Phone: (56)-2-9787298 Fax: (56)-2-2727363 E-mail: epoulin@uchile.cl

Elie Poulin <epoulin@uchile.cl>

Glasgow Bioinformatic Oct19-23

Bioinformatics of geneticists and biologists (training course) 19th - 23rd October 2015

The course is being delivered by Dr. Nic Blouin and Dr. Ian Misner This 5 day course will be held at SCENE (Scottish Centre for Ecology and the Natural Environment), Glasgow, United Kingdom from 19th - 23rd October 2015

The handling of large datasets has become intractable without some level of bioinformatic literacy. Many biologists, especially in the field of genetics, find that there is a steep learning curve to develop the confidence required to explore their genomics datasets effectively. This bioinformatics short course includes a rich collection of hands-on instruction and lectures specifically intended to help novice users become comfortable with a range of tools currently used to analyse next-generation data. There is no prerequisite for this course other than a willingness to learn and to work hard throughout the week.

Course timetable: Day 1: Linux Linux is taught on the first day, this takes the entire day. Once you get through this portion you will be on your way to completing your own NGS analysis. A workbook has been created for this portion of the course. This is a step by step, or in the case, command-by-command, Linux guide. We complete each command as a class and discuss and review issues along the way.

Day 2: RNAseq We will cover two of the more popular tools in this workshop, The Tuxedo package & Trinity. Outcomes: confidence to design effective RNAseq experiments; knowledge of NGS sequencing platforms and their differing applications, ability to analyze Illumina data for quality and contamination; proficiency to implement the Tuxedo package to analyze an RNAseq dataset; create publication ready graphics with cummeRbund and EdgeR.

Day 3: Assembly Whether you have a reference genome or are working with de novo samples there are some basic tools and practices that we cover to help assist you in your genome project. In this module we will cover the basic metrics you should review when doing assembly as well as best practices to consider in your own project. Outcomes: take raw reads through a complete assembly process; working knowledge of different assem-

bly issues/challenges; the effect of assembly settings on assembly outcomes.

Day 4: Annotation We will use MAKER and Blast2GO and annotate the genome we assembled in the assembly module. Outcomes: understand the differences between functional and structural annotations; train MAKER to improve structural annotations; understand how MAKER improves with more evidence and training; visualize structural annotations; apply functional annotations with Blast2GO.

Day 5: Python Why Python? In truth it doesn't matter what coding language you learn but you should learn one. Python has a very straightforward syntax that is easy to understand. In this module we will utilize the clearly explained training examples from Python for Biologists. Outcomes: understand Python language syntax; create scripts to answer biological problems & parse and analyze BLAST outputs using custom Python code.

Fees: Cost is £540 for the 5 days including lunches and refreshments or £715 for an all-inclusive option which includes the addition of accommodation, breakfast, lunch, dinner and refreshments.

Intended audience: Research postgraduates, practicing academics, and environmental professionals in government and industry.

Teaching format: This is principally a hands-on course. Participants will conduct all analyses in this course using their own laptops. Introductory lectures on the concepts will be given as necessary. Participants need to bring their own laptops and should come willing to work diligently to complete all analyses during meeting times. The level of comfort of the class as a whole will determine the pace of the class. For further details or questions or to register please email oliverhooker@prstatistics.co.uk or visit www.prstatistics.co.uk Please feel free to distribute this material among colleagues if you think it is suitable

Additional upcoming courses; GENETIC DATA ANALYSIS USING R; APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS; SPATIAL ANALYSIS OF ECOLOGICAL DATA USING R; ADVANCING IN STATISTICAL MODELLING USING R; STABLE ISOTOPE MIXING MODELS USING SIAR, SIBER AND MIXSIAR;

“oliverhooker@prstatistics.co.uk”
<oliverhooker@prstatistics.co.uk>

RoyalStatSociety London
EvolutionComplexTraitsGWAS
Oct19

Hidden Complexities in Complex Traits and Genome-Wide Associations

(19th October 2015, Royal Statistical Society, London)

Genetics promises to help us understand the underlying evolutionary structure of complex traits and so give insight into the heritable component of many important diseases.

But scientific advances have remained incremental - with the implication that current methodology is limited. Improved statistical methods and modelling will be key to making the most of the existing data and preparing for the next generation of data.

This workshop aims to bring together experts on the methodology underpinning the analysis of complex traits, their relationship to genetics and biological function. Bringing together experts in both the statistical analysis of complex traits, and the practical analysis of them, we will discuss the current cutting edge of methodology and methodologically driven understanding of this notoriously difficult problem.

This workshop is on 19th October 2015 at the Royal Statistical Society in London, UK, from 9:30-5:30.

Speakers:

Jeffrey Barrett, Sanger Institute, UK Heather Cordell, University of Newcastle, UK Gibran Hemani, University of Bristol, UK Kirk Lohmueller, University of California Los Angeles, USA Gilean McVean University of Oxford, UK Nuala Sheehan, University of Leicester, UK Chris Spencer, Wellcome Trust Centre for Human Genetics, UK Eleftheria Zeggini, Sanger Institute, UK

This workshop is organised by Dan Lawson, Mark Beaumont and Nic Timpson of the University of Bristol.

For more information, and registration, see <http://www.sustain.bris.ac.uk/ws-hidden> "madjl@bristol.ac.uk" <madjl@bristol.ac.uk>

UAdelaide AdvancedBioinformatics
Nov9-13

Advanced Bioinformatics Workshop for Early Career Researchers 9 - 13 November, 2015 The University of Adelaide, North Terrace Campus

Hosted by the Australian Centre for Ancient DNA (ACAD), this workshop is back for 2015, and early bird registration is currently open. The workshop is based on the successful 2012 to 2014 workshops encompassing an intensive 5 day hands-on training course tutored by international experts utilising the latest techniques and available software for the analysis of Next Generation Sequencing (NGS), Genomics and Metagenomics data. This year's line-up is Paul Stothard (variant discovery, RNA-seq), Rob Knight (metagenomics, QIIME), Martin Kircher (NGS and data pre-processing) and Remco Bouckaert (BEAST, SNAPP).

Pre-requisites: Delegates must be familiar with UNIX environments and basic command lines, and will have a basic knowledge of the technology and analytical tools of NGS.

Early bird registration is now open with 40 seats available, so be quick to reserve your place. Further information can be found at the official website: <http://www.adelaide.edu.au/acad/events/bioinfo15/> - Bastien Llamas, PhD ARC Senior Research Associate

Australian Centre for Ancient DNA Department of Genetics and Evolution School of Biological Sciences The University of Adelaide South Australia 5005 AUSTRALIA Ph: +61 (0)8 8313 5565 | Fax: +61 (0)8 8313 4364 | Mob: +61 (0)411 539 426 E-mail: bastien.llamas@adelaide.edu.au Web: <https://www.adelaide.edu.au/directory/bastien.llamas> For more information about ACAD, check out our Gravatar < <http://en.gravatar.com/acadadelaide> > web page for links to our blog, recent publications and the official website.

CRICOS Provider Number 00123M

bastienllamas@gmail.com

UFlorida Beetle Classification May 2-6

TO ALL STUDENTS AND RESEARCHERS IN FOREST ENTOMOLOGY, ECOLOGY, AND RELATED FIELDS: The Forest Entomology Lab at the University of Florida is pleased to invite you to the SECOND Bark & Ambrosia Beetle Academy. This comprehensive, fun and nerdy workshop on the most intriguing forest pests will be held in Gainesville, FL, on May 2-6, 2016.

Are you a researcher or a student interested in bark and ambrosia beetles? Do you need to know more about the beetle identification, classification, ecology or damage? Learn from international experts through hands-on labs, field demonstration, lectures, and fun socializing. Choose one or both modules: Applied and Academic. See details at <http://www.ambrosiasymbiosis.org/academy/>. Sign up soon! Last year all 30 seats were taken in a few weeks.

Jiri Hulcr, Assistant Professor

University of Florida | School of Forest Resources and Conservation 352-273-0299
| www.ambrosiasymbiosis.org "Hulcr, Jiri"
<hulcr@ufl.edu>

UW Madison EvoSysBio Modeling Aug 25

Are you interested in breaking down barriers of communication between disciplines using innovative approaches for understanding evolution better?

Have you ever dreamt of a computer that could help navigate the messy realities of biology without needless complexity or bugs? Dream computers are one thing. Real ones are more frustrating.

All who have worked at interfaces between messy complexities of biology, the physical world, and precise mathematics can tell stories from the trenches. Reality is too complex, so we all simplify. We call these simplifications 'models', and our disciplines provide excellent tools for constructing them from different perspectives.

But the strength of one discipline is often the weakness of another, and we all have different pieces of the puzzle - each written in a different disciplinary language. Computers could help us see more of the big picture, if we could find a common lexicon.

This workshop is about putting pieces from different fields together for a lexicon we could share among each other and with computers. Join modeling experts at the interface between evolution, biochemistry, systems biology, simulation, math, computer science, and more at the:

Workshop on Evolutionary Systems Biology & Modeling 2015

August 25, 2015 (Tue)

2pm-9:30pm, 3rd Floor Teaching Lab, 330 N Orchard St, Wisconsin Institute for Discovery, University of Wisconsin-Madison

Evolutionary systems biology aims to build bridges between rigorous mechanistic models in evolutionary biology, molecular systems biology, and the many disciplines between them. At the workshop, we will discuss a broad mix of topics from gene regulatory networks to evolutionary biology, while highlighting some diverse theoretical challenges and quantitative methods that have proven useful to address them. Bring your laptop to get started with simulating a gene regulatory network. End the day by asking hard questions or share your insights in the Bazaar of Ideas. Who knows what you may learn.

For more details see the workshop website (free registration, needed for catering):

<http://evolutionarysystemsbiology.org/meeting/2015-Madison/index.html> Graduate students with interests in interdisciplinary research are particularly encouraged to consider submitting a poster or talk in one of the many areas relevant to evolution, systems biology or the quantitative methods they build on. Slots are still available.

See you in Madison, Laurence

– Laurence Loewe, Assistant Professor Laboratory of Genetics and Wisconsin Institute for Discovery, UW-Madison 330 N Orchard Street, Madison, WI, 53715, USA Phone: +1(608)-316-4324 email: loewe@wisc.edu <http://wid.wisc.edu/profile/laurence-loewe/> "loewe@wisc.edu" <loewe@wisc.edu>

Vairao Portugal Morphometrics Oct5-9 2

International Workshop “An Introduction to Geometric Morphometrics using R”

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

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

R language for statistical programming.

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

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

COURSE INSTRUCTORS

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

Deadline for registration is August 20, 2015.

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

CIBIO Divulgação

Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from ‘blackballed’ addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that ‘on vacation’, etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail’s your code can be temporarily changed to 000000.

To send messages to the 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 L^AT_EX files, Excel files, etc. ... plain old

ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by \LaTeX do not try to embed \LaTeX or \TeX in your message (or other formats) since my program will strip these from the message.