

# 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 ASN Jan13-15 2014

Dear Colleagues,

I am pleased to announce that on January 13-15, 2014, the American Society of Naturalists will hold a conference at the Asilomar Conference Center, on the spectacular Monterey peninsula in coastal California (http://www.visitasilomar.com). The conference is titled "Next generation naturalists: new perspectives on integrating evolution ecology and behavior".

The American Society of Naturalists is the oldest scientific society in North America and is associated with the journal The American Naturalist. The society's goal is to advance and to diffuse knowledge of organic evolution and other broad biological principles so as to enhance the conceptual unification of the biological sciences. In keeping with this goal and the diverse subject matter in the American Naturalist, the Asilomar conference will emphasize: 1) interdisciplinary research spanning the areas of evolution, ecology, and behavior, 2) effective integration of theory, field and lab experimental research, and emerging genomic and bioinformatic perspectives The conference will take on a unique format in order to provide both a venue for presenting your own research, as well as a setting for public discussions to define an intellectual agenda for our disciplines.

We hope that you will set aside the dates of January 13-15 2014 to attend the Asilomar meeting. To be put on a mailing list for future announcements regarding registration, conference format, and calls for symposium proposals, please email amsocnaturalists@gmail.com with the subject line "Subscribe to Asilomar emails:

Miami Intl BiogeographySociety Jan 9-13 $\ldots \ldots 5$
Niteroi Brazil Comparative Genomics Oct 17-19 $\ \ldots 5$
UCollegeLondon LERN Oct26

<your email>".

Sincerely, Dan Bolnick ASN Secretary danbolnick@austin.utexas.edu

PS: Anyone interested in helping to plan the logistics or scientific agenda for the meeting can contact Daniel Bolnick (danbolnick@austin.utexas.edu).

danbolnick@austin.utexas.edu

## EAWAG Switzerland ApplEvol Nov22-23

Dear Colleagues

We would like to draw your attention to a two-day symposium on evolutionary applications:

#### EVOLUTIONARY ECOLOGY AND THE MANAGE-MENT OF AQUATIC ECOSYSTEMS

22 - 23 November 2012 at the Swiss Federal Institute of Aquatic Science and Technology (Eawag) in Dubendorf, Switzerland

Evolutionary and ecological processes occur over similar timescales and affect the emergence, maintenance, and change of biological diversity. The potential for rapid evolutionary processes can also affect a broad range of applied issues, such as the effects of invasive species, the conservation of threatened species, the management of aquatic pathogens or ecosystem services. We will discuss how approaches from evolutionary ecology can contribute to solving environmental problems in aquatic ecosystems. This is a science-stakeholder interaction symposium that aims to foster collaboration between researchers and practitioners. It comprises talks by invited speakers, contributed talks, podium discussions and a poster session.

Invited speakers: Frédédric Silvestre, University of Namur, Belgium Craig Primmer, University of Turku, Finland Joanne Webster, Imperial College London, UK Andy Sih, University of California, USA Mikko Heino, University of Bergen, Norway Luis Santamaria, IMEDEA-CSIC, Spain

Please find all relevant informations under www.eawag.ch/appliedevo2012.

Because the event is limited to 80 participants, we request a PRE-REGISTRATION BY E-MAIL UNTIL 31 AUGUST 2012 (appliedevo@eawag.ch). Final registration and Abstract submission is by 30 September 2012.

We hope to see you there.

Katja Räsänen, Christoph Vorburger, Blake Matthews & Jukka Jokela

appliedevo@eawag.ch

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Please find all relevant informations under www.eawag.ch/appliedevo2012 Because the event is limited to 80 participants, we request a pre-registration by e-mail until 31 August 2012 (appliedevo@eawag.ch). Final registration and Abstract submission is by 30 September 2012.

We hope to see you there.

Katja Räsänen, Christoph Vorburger, Blake Matthews & Jukka Jokela

Christoph.Vorburger@eawag.ch

## Galveston Texas QuantitativeGenetics Feb16-22

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

Many diseases that affect humans, animals, and plants are so-called complex traits, in that variation in susceptibility between individuals is affected by multiple genetic and environmental factors. Thus, strategies to understand and utilize the genetic basis and genetic architecture of these traits rely on the application of quantitative genetics. Traditionally built upon statistical abstractions of genetic effects, the field of quantitative genetics is now rapidly advancing by making use of the extensive and rapid developments in genetic and genomic technologies to reveal explicit links between genes and complex phenotypes. The field of quantitative genetics, therefore, serves as a focal point for bringing together many existing and emerging areas of genetics, genomics, physiology, epidemiology, statistics, and computational biology. The strength and aim of the Gordon Research Conference on "Quantitative Genetics & Genomics" is that it brings leaders in the fields of human genetics, plant and animal breeding and genetics, and evolutionary genetics together in a unique format that promotes an open exchange of ideas and presentation of unpublished results on cutting edge developments in the field. In 2013, the Gordon Research CONFERENCE will be preceded by a Gordon Research SEMINAR, which will allow an unparalleled

opportunity for up and coming students and postdoctoral researchers to exchange ideas on the most cutting edge science, gain experience presenting their work in a high-profile setting, and interact with leaders in their field. The 2013 Conference and Seminar will focus on many cutting-edge developments in the field of quantitative genetics but with specific emphasis on the genetics of complex disease, including whole genome and next generation sequencing approaches to understanding and exploiting genetic variation, to identify causal genes and pathways, genome architecture and regulation, systems genetics, host-pathogen interaction and co-evolution, non-traditional forms of inheritance, and statistical genetics and genomics.

Applications for the Gordon Research Conference must be submitted by January 20, 2013. Please apply early, as some meetings become oversubscribed before this deadline.

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

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

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

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

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

Suzanne McGaugh <suzanne.mcgaugh@duke.edu>

## **Glasgow Popgroup Dec18**

The Population Genetics Group (PGG or PopGroup) is a yearly international meeting held in the UK, covering all aspects of Evolutionary Genetics. There are typically 150-200 participants and there have been increasing numbers from other parts of Europe and further abroad. It is a relatively informal meeting but with a high standard of talks, so it is an excellent place for PhD students to present their work and mingle with leading experts.

Registration for the 46th annual meeting, which will be held at the University of Glasgow in Scotland, is now open. Early-bird registration closes one month before the conference (Nov. 19) and registration will close 2 weeks before hand (Dec. 3). Please go to the conference website to register and to find further details about the programme, as well as information on travel and accommodation: http://www.populationgeneticsgroup.org/.

There will be an opening reception on Dec. 18, from 6 pm at the Jurys Inn in central Glasgow, where special rates for accommodation have been arranged. This will be preceded by an information session from the NERC Biomolecular Analysis Facility (NBAF), which provides access to high-level genomics, metabolomics and bioinformatics for the ecological and evolutionary research community in the UK using the latest technologies (http://nbaf.nerc.ac.uk/). Details to follow, but the NBAF session will run from 5 pm to 5.45 pm. Registration on Dec. 18 will start at 4 pm at the Jurys.

If you would like to be included in the email list for the conference, please use the following link to sign up. We won't be sending out further announcements to evoldir and so subscribing to the email list will keep you up to date with any news about the conference. You can also keep up to date with Twitter and Facebook.

https://spreadsheets.google.com/viewform?formkey=dEN2Y016ODdPTWRnNXhKSUFmbXY1RkE6MA We look forward to seeing you in Glasgow.

Barbara Mable Anna Muir James Buckley

Dr. Barbara Mable Rm 404 Graham Kerr Building Institute of Biodiversity, Animal Health and Comparative Medicine College of Medical, Veterinary & Life Sciences University of Glasgow Glasgow, Scotland G12 8QQ Email: barbara.mable@glasgow.ac.uk Phone: +44 (0)141 330 3532 Fax: +44 (0)141 330 5971 barbara.mable@glasgow.ac.uk

## Miami IntlBiogeographySociety Jan9-13

Registration is now OPEN for the 6th Biennial Conference of the International Biogeography Society Miami, Florida, USA; 9-13 January, 2013

For more information about the conference, and to register, please visit http://www.biogeography.org/html/-Meetings/2013/index.html .

The meeting has four successive SYMPOSIA (10th & 11th January) on broad foundational and cutting-edge topics and approaches in biogeography and macroecology, each with a suite of leading international scientists and \*openings for contributed papers\*:

1. Island Biogeography: New Syntheses (Organizers: Robert Whittaker & Kostas Triantis). 2. Beyond Bergmann: New Perspectives on the Biogeography of Traits (Organizers: Adam Algar & Nathan G. Swenson). 3. The Convergence of Conservation Paleontology and Biogeography (Organizers: Jenny McGuire & Edward Davis). 4. Predicting Species and Biodiversity in a Warmer World: Are We Doing a Good Job? (Organizers: Antoine Guisan & Niklaus E. Zimmermann).

Keynote lectures will be given by Dr. James H. Brown, after receiving the Alfred Russel Wallace Award in recognition of his lifetime of outstanding contributions to biogeography, and Dr. Miguel B. Araújo, after receiving the MacArthur & Wilson Award in recognition of his innovative early career contributions to biogeography.

The meeting also has 12 sessions of CONTRIBUTED PAPERS (12th January) and continues to feature its priority POSTER SESSIONS (10th & 11th January) sampling the widest diversity of research in biogeography.

In addition, before the meeting, on 9th January, five WORKSHOPS will be held: 1. Biodiversity Informatics 2. Communicating Biogeography 3. Biogeography of Stress 4. Popular Science Writing 5. Bayesian Statistical Analysis.

On 9th & 13th January arranged FIELD EXCUR-SIONS will visit sites of Florida's characteristic biodiversity.

Check out the IBS meeting website for more details

and to register (http://www.biogeography.org/html/-Meetings/2013/index.html)

The INTERNATIONAL BIOGEOGRAPHY SOCI-ETY (IBS; http://www.biogeography.org/) is a nonprofit organization, founded in 2000, with the mission to: - Foster communication and collaboration between biogeographers in disparate academic fields. -Increase both the awareness and interests of the scientific community and the lay public in the contributions of biogeographers. - Promote the training and education of biogeographers so that they may develop sound strategies for studying and conserving the world's biota. + As part of this mission, the IBS publishes the Open Access journal Frontiers of Biogeography (http:/-/www.escholarship.org/uc/fb).

Michael Dawson <mdawson@ucmerced.edu>

dawson.mn@gmail.com

## Niteroi Brazil ComparativeGenomics Oct17-19

Tenth Annual RECOMB Satellite Workshop on Comparative Genomics

October 17-19, 2012, Niterói, Brazil

Website: www.uff.br/recombcg \*\* Registration and poster submission are now open ! \*\*

The RECOMB Satellite Workshop on Comparative Genomics (RECOMB-CG) aims to provide the premier forum for new computational developments applied to all aspects of comparative genomics. RECOMB-CG 2012 will be held in October 17-19 in Niterói, Brazil. This is the first event of RECOMB-CG series organized outside Europe and North-America. Niterói is 14 km distant from Rio de Janeiro city, to which it is linked by the Rio-Niterói bridge and a ferry-boat service.

The highlights of the conference are the invited keynote speakers on recent biological research in areas pertinent to comparative genomics. In 2012 the confirmed speakers are:

- E. Virginia Armbrust (University of Washington, USA) - Mariangela Hungria da Cunha (Embrapa, Brazil) - J. Peter Gogarten (University of Connecticut, USA) - Dario Grattapaglia (Embrapa, Brazil) - J. Chris Pires (University of Missouri, USA)

Registration is now open on our website: www.uff.br/-

#### recombcg Important Dates:

Early registration: September 15, 2012

Poster submission deadline: September 22, 2012

Workshop in Niterói, Brazil: October 17-19, 2012

#### CALL FOR POSTERS

Poster abstracts must be one or two pages long and must contain: the title; the authors and their addresses (including email addresses); a short abstract using 10 point font or larger and single line spacing. A standard PDF file must be sent to recombcg12@easychair.org, by 11:59pm (Samoa time), September 22nd, 2012. Please include the words "RECOMB CG Poster Submission" in the subject line.

#### THEME AND SCOPE

The continuing advance of DNA sequencing technology has produced an avalanche of genome sequence and genome structural information across the evolutionary spectrum. Transforming that information into biological knowledge requires creative and innovative new computational and statistical methods for comparative genomics.

We solicit contributions on topics including comparison of genome structure and organization, genome function, and evolution. We particularly encourage contributions that use new computational methods to acquire new insight into biological processes. Advances in computational theory are also welcome.

Specific topics of interest include but are not limited to:

. Gene and genome duplication . Gene family evolution . Genome structural variation . Algorithms for comparative genomics . Genome rearrangements . Ancestral genome reconstruction . Multiple genome alignment . Genome sequence comparison . Modeling genome evolution . Comparative genomics for genome annotation . Gene tree reconciliation . Species and gene tree inference . Comparative metagenomics . Comparative genomics linked to proteomics, metabolomics, and other ~omic data . Comparative genomics and gene expression and regulation . Applications of comparative genomic methods

#### PAPERS

Paper submission is closed and notifications of acceptance have been sent. The list of accepted papers is available on our website.

sankoff@uottawa.ca

## UCollegeLondon LERN Oct2

The 2012 LERN Committee is pleased to announce:

The 10th Annual LERN Conference 10:00-17:30, Tuesday 2 October 2012 University College London (Free Registration)

The LERN conference provides an opportunity for postgraduate students and early-career researchers working on any aspect of evolution to present their work to a diverse audience. Contributions may be submitted in presentation or poster format. Last year's programme, available here, demonstrates the broad range of topics showcased at the conference. We welcome applications from researchers at institutions both inside and outside of London. Coffee breaks, lunch, and a post-event wine reception will be provided.

The conference spans a full day with four sessions. This year's session keynote speakers will be: - Dr Marc Jones, UCL - (the founding Chairman of LERN) - Dr Keith Jensen, QMUL - Professor Kate Jones, UCL and ZSL

Registration is free.

Please bring the conference to the attention of anyone who may be interested and contact us for any conference enquiries on londonevolution@gmail.com.

\*\*\*\* Abstract submission is now open \*\*\*\*

Talks are 15 minutes long with five minutes for questions. The poster display will run throughout the day, with specific sessions scheduled during plenary session breaks. Prizes will be awarded for the best talk and best poster.

\*To apply to present a talk or poster, please email your abstract (250 word limit) with the following information to londonevolution@gmail.com by Friday 2 September 2012: - Name - Institution and Department - Programme and year of study - Please indicate if your abstract is for a presentation or poster.

The LERN Committee London Evolu-Research Network tionary (LERN) http://http://twitter.com/www.londonevolution.net londonevolution http://facebook.com/londonevolution http://vimeo.com/londonevolution londonevolution@gmail.com

# GradStudentPositions

## AustralianNatlU PlantPlasticity

Australian National University (ANU)

PhD Project with Research Support Phenotypic plasticity & plant water use in a changing climate

This project will suit a student with interest and knowledge in plant evolutionary ecology, environmental physiology and/or ecological and evolutionary genetics

Although environmentally induced variation in phenotype (phenotypic plasticity) is ubiquitous, fundamental questions remain poorly understood. E.g.: When is plasticity adaptive? Which traits show such plasticity? Does plasticity contribute to diversification? And critically: How will plasticity affect plant response in a changing climate? This project offers an exciting opportunity for a student to join a happy and productive group at the ANU and to work with an international collaborative team. The student will develop his/her own project within the context of understanding the adaptive value and importance of phenotypic plasticity

UBourgogne AvianSexualSelection1	.8
UEdinburgh HostParasiteInteractions1	.9
UFlorence PopGenetics	20
UFlorida symbiosis2	20
UGeneva EvolutionaryBiol2	20
ULouisiana EvolutionaryBiology2	21
UMelbourne EvolutionAlgalNiches	21
UMuenster HostParasiteEvol	22
UNewBrunswick AlgalEvolutionaryGenomics2	22
UZurich HostParasiteEvolGen2	23
U Uppsala MossGenomics2	24
Vienna EvolutionMouseCommunication2	25

in water use traits in a changing climate.

Suitable applicants need to be highly motivated with strong academic and research backgrounds; skills in plant evolutionary ecology, environmental physiology and/or ecological and evolutionary genetics are required. Demonstrated ability to conduct fieldwork, and independent research experience are highly desirable. The project will apply techniques of environmental plant physiology in field, glasshouse and labbased studies. Interested students must apply for admission to ANU. Supervisors: Assoc Prof. (Future Fellow) Adrienne Nicotra, ANU in collaboration with Dr Christina Richards (University of Southern Florida), Prof. Fernando Valladares (CSIC, Spain), Prof. Mark van Kleunen (University of Konstanz)

Location: The Division of Evolution, Ecology and Genetics in the Research School of Biology, Australian National University, Canberra, Australia will be the student's base. The facilities and intellectual environment are outstanding and the Nicotra lab is a lively, hardworking and inquisitive place. We strive to do excellent, fundamental research that is relevant in the context of rapid global change. We do what we do because we love the challenge - and the fun of doing it. Application deadline: Some flexibility, but ideally Oct 31, 2012 for Australian and New Zealand applicants

Start date: Early 2013.

For further information contact: Adrienne Nicotra Phone: +61 2 6125 9763, Email: Adrienne.nicotra@anu.edu.au, http://www.anu.edu.au/-BoZo/staffandstudents/staffprofiles/nicotra.php niccy.aitken@anu.edu.au

#### **GriffithU EvolutionaryGenomics**

A Ph.D. scholarship in Evolutionary genomics and / or Bioinformatics is available in my research laboratory at Griffith University, Nathan, Australia

We have a world class Ancient Genomics laboratory. We are currently sequencing a number of extant and extinct vertebrate species. We are seeking an enthusiastic student with a strong interest in the evolutionary genomics and / or bioinformatics analyses of second generation sequence data from Illumina, FLX and iontorrent platforms.

The prospective student could work on one of the following project:

1. Ancient human poulation genomics

2. Evolutionary genomics of ancient penguin species

3. Reconstructing the genome of a number of extinct avian species

An honors or master's degree in biological, physical or computational science is required. Persons with a nonbiology degree should have some understanding of genetics and molecular biology.

We would not expect a starting PhD student to have all of the skills below, but an ability and desire to learn them is essential.

Molecular biology skills

A background in molecular techniques including PCRbased methods, cloning, Southern blot hybridisation, and introductory library building methods for second generation DNA sequencing.

Scripting: Perl/Python

Unix command line (particularly to use parallel computing clusters)

Programming: Java/C/C++ (OOPS concept)

Database: maintenance and design; MySQL/PosgreSQL/SQLite or similar

Familiarity with sequence databases and genome browsers (eg. NCBI/EMBL/DDBJ, UCSC)

Familiarity with the following software is desirable:

Read mapping: BWA; Bowtie; GSMapper (454); SOAP

De novo assembly: Velvet; SOAP de novo; Newbler (454)

Assembly summary: samtools

Please send your CV, a letter of application and other supporting documents to:

Prof David Lambert PhD FRSNZ Professor of Evolutionary Biology Griffith University N55 -2.13H (office and ancient DNA Laboratory) N34 2.05 (Laboratory) 170 Kessels Road, Nathan Qld 4111 Australia

Closing date: 1st September, 2012

Prof David Lambert FRSNZ FQA Griffith School of Environment and School of Biomolecular and Physical Sciences Griffith University 170 Kessels Road Nathan, 4111 Australia Phone +61 7 373 55298

In his memoir, "At Ease," Eisenhower delivered the following advice: "Always try to associate yourself with and learn as much as you can from those who know more than you do, who do better than you, who see more clearly than you." Ike slowly mastered the art of leadership by becoming a superb apprentice.

d.lambert @griffith.edu.au

## IGB Berlin AmphibianSexChromosome evolution

The Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) in Berlin invites applications for a:

PhD position on amphibian sex chromosome evolution

A three-year-PhD position in evolutionary biology is available at the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) in Berlin, funded by the German Research Foundation (DFG). The PhD student will be affiliated with the Humboldt University of Berlin, and working with Matthias Stoeck on the evolution of sex chromosomes of amphibians. We use next generation sequencing (NGS) genome data to develop molecular genotyping and sequence markers that will be applied in sibship and population genetics analyses to study the evolution of homomorphic sex chromosomes. Applications to endocrine disruptive substances of none-model anuran species are planned.

Requirements: We are looking for an enthusiastic, empirical and "organismal" PhD student with a master or diploma in (evolutionary) biology, experience with molecular wet lab approaches (PCR, genotyping, cloning), population genetics analyses, ideally experience with bioinformatics analyses of NGS data, and experience to work with live amphibians or fish.

Salary will be paid according to the TVöD for a 50% position. In keeping with the IGB's policy regarding gender equity, female applicants are particularly encouraged; disabled people with identical qualifications will be favored.

Please, send a motivation letter including research interests and experience, CV, and the email-addresses of at least two referees via email to: matthias.stoeck@igbberlin.de by September 12, 2012.

Leibniz-Institute of Freshwater Ecology and Inland Fisheries in the Forschungsverbund Berlin e.V. Department of Ecophysiology and Aquaculture Dr. Matthias Stoeck Müggelseedamm 310, D-12587 Berlin, Germany

The Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) is the largest freshwater ecology research institute in Germany. It is a member of the Forschungsverbund Berlin e.V. and the Leibniz-Association (www.wgl.de). The FVB manages eight large research institutes in Berlin that have close links to all three universities in the German capital. IGB offers excellent laboratory and field facilities for interdisciplinary research, large-scale experimental facilities, long-term research programs and data sets.

References: Colliard C., Sicilia A., et al., and M. Stoeck (2010): Strong reproductive barriers in a narrow hybrid zone of West-Mediterranean green toads (Bufo viridis subgroup) with Plio-Pleistocene divergence. BMC Evolutionary Biology 10: 232 (19 pp).

Stoeck M., Horn A., Grossen C., et al., and N. Perrin (2011): Ever-young sex-chromosomes in European tree frogs. PLoS Biology 9 (5): e1001062.

Stoeck M., Croll D., Dumas Z., Biollay S., Wang J., and N. Perrin (2011): A cryptic heterogametic transition revealed by sex-linked DNA markers in Palearctic green toads. J. Evol. Biol. 24: 1064-1070.

Matthias Stöck Leibniz-Institute of Freshwater Ecology and Inland Fisheries - IGB (Forschungsverbund Berlin) Müggelseedamm 310, D-12587 Berlin, Germany http://www.igb-berlin.de/ Tel.: 0049 (0) 30 64 181 683 Email: matthias.stoeck@igb-berlin.de

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#### LincolnU EvolutionCrypticFruitFlies

Running head: LincolnU.EvolutionCrypticFruitFlies

The evolutionary and diagnostic dilemma of cryptic species

A PhD scholarship is available within the Biosecurity Theme of the Bio-Protection Research Centre, Lincoln University, New Zealand for a candidate with a strong interest in entomology and molecular biology, good written and spoken English, plus enthusiasm to travel and work as part of a multidisciplinary team of scientists.

This project will be supervised by Karen Armstrong (Lincoln University), Tony Clarke & Mark Schutze (Queensland University of Technology) and Full funding Murray Cox (Massey University). through a Tertiary Education Commission grant to the Bio-Protection Research Centre, a New Zealand National Centre of Research Excellence. http://bioprotection.org.nz/research-categories/worldleading-biosecurity BACKGROUND: Cryptic species are biologically distinctive yet morphologically and genetically indistinct, therefore presenting significant theoretical and practical challenges. Such species question the current theories of evolution and biodiversity, but they simultaneously provide a valuable opportunity to explore and develop those theories. Where this concerns economically important pests, they also challenge the dogma upon which successful biosecurity and pest management systems rely on that target exotic or pest species can be accurately distinguished from non-target species.

The sympatrically occurring fruit fly species Bactrocera tryoni and B. neohumeralis are a classic example of this, and have been a model system for cryptic species research for fifty years. Whilst almost identical morphologically and appear genetically indistinct, they are indisputably separate species isolated by mating at different times of day. They are also biologically very different, with B. tryoni a major invasive pest and B. neohumeralis a non-invasive minor pest, thereby presenting biosecurity agencies with a diagnostic dilemma.

RESEARCH PROGRAMME: Within the emerging field of ecogenomics, the student will explore the genetic basis for the biological difference between these two species. Here the project sits amid several highly topical areas of evolutionary theory, of which the existence of 'magic traits' in speciation, i.e. traits experiencing divergent selection that also happen to enhance sexual isolation, is perhaps the 'hottest', but for which there are few experimentally tested cases. The project may also deliver new diagnostic markers for biosecurity, and therefore has the potential to be of major international interest on applied and fundamental science fronts.

The student is anticipated to develop and utilise a comparative transcriptomics approach. Given these native Australian species remain exotic to New Zealand, time will be spent in Queensland, Australia to undertake behavioural experiments, then in New Zealand to undertake the molecular analysis at the Bio-Protection Research Centre and develop skills in the bioinformatic analysis of next generation sequence data under guidance at Massey University.

Candidates should have a biological sciences degree (2.1-1st) including subjects in entomology. Experience with molecular lab work and/or bioinformatics is advantageous.

Closing date for applications is 3rd September 2012. Applicants should forward a letter of interest and curriculum vitae including the names and addresses of at least two referees by e-mail to Karen.Armstrong@lincoln.ac.nz. The position will start at the earliest possible date.

Dr Karen Armstrong Senior Research Scientist

Bio-Protection Research Centre P O Box 84 Lincoln University Lincoln 7647 Christchurch New Zealand

p +64 3 325 3838 extn: 8390 | f +64 3 325 3864 e Karen.Armstrong@lincoln.ac.nz | w http://bioprotection.org.nz Bio-Protection is a National Centre incorporating staff from Lincoln University, Massey University, AgResearch, Crop & Food Research and seven other collaborator institutes that conducts world class research and development to meet the biosecurity and pest management needs of New Zealand's productive and natural ecosystems

Lincoln University, Te Whare Wanaka o Aoraki New Zealand's Specialist Land-Based University

"Armstrong, Karen" <Karen.Armstrong@lincoln.ac.nz>

## MaxPlanckInst EcolEvo

We are seeking a motivated PhD student to join our research team working on eco-evolutionary dynamics at the Max Planck Institute for Evolutionary Biology in Plön, Germany.

We are looking for a highly motivated ecologist or evolutionary biologist to join our group Community dynamics at the Max Planck institute for Evolutionary Biology. The ideal candidate is fascinated by evolutionary and ecological questions, independent and creative. She/he has a background in evolutionary biology, population or community ecology and has worked with aquatic systems before. A MSc (or equivalent) in Biology is required.

Evolution in action has recently been recognized as an important player for many ecological interactions. It is now well recognized that evolutionary change can affect the interaction between species within in a few generations and that ecological interactions may influence the outcome of evolution in return. This project uses fast growing aquatic organisms (algae, viruses, rotifers) that allow tracking of evolutionary change and ecological dynamics in combination with subsequent analysis through mathematical modeling. For details of the study system refer to Becks et al. 2012 Ecology Letters, Ellner & Becks 2011 Theoretical Ecology, Becks & Agrawal 2010 Nature. For more information on potential projects contact Lutz Becks (lbecks@evolbio.mpg.de).

The institute offers a stimulating international environment and an excellent infrastructure with access to state-of-the-art techniques. The town of Plön is in the middle of the Schleswig-Holstein lake-district within a very attractive and touristic environment near the Baltic Sea, close to the university towns of Lübeck and Kiel. Hamburg and Lübeck are the closest airports.

The position is funded for three years, starting as soon as October 2012. We ask applicants to send a PDF file containing their CV and letter of motivation as well as contact information of two references by e-mail to Lutz Becks (lbecks@evolbio.mpg.de). We will begin reviewing applications starting September 1st until the position is filled.

The Max Planck Society is an equal opportunity employer.

Lutz Becks <lbecks@evolbio.mpg.de>

## MaxPlanckInst EvolutionBehaviour

Master internship in Ethology - Animal communication. (Vocal communication among zebra finches)

We are seeking one motivated master student (MsC internship or equivalent) interested in taking part in laboratory studies at the Max Planck Institute in Seewiesen, Germany. Applicants will complete his/her thesis being part of the behavioral neurobiology group, department Gahr. http://orn.iwww.mpg.de/2542/-Department\_Gahr Supervisor: Dr. Andries ter Maat

#### Tutor: Pietro D'Amelio

The project aims to clarify whether Zebra Finches are able to recognize the unlearned contact calls by vocal clues and whether these calls are necessary for pair bonding maintenance.

#### Project description:

The Zebra Finches are one of the commonest study model for research on vocal communication, mainly regarding song learning and production. However dynamics of call production and messages delivered still remain to be unraveled. Our group aims to find out why and how calls are elicited within a social network.

The relationships within pairs represent an especially salient aspect of the social system of Zebra Finches, a socially monogamous species with long term pairing. By employing behavioural analysis and correlating the call production of different individuals we want to investigate whether the different call types are important for pair bond maintenance and for advertising this to all the other members of the group.

Using techniques developed in our group, the student has to design experiments aiming to answer 2 questions:

a) Are Zebra Finches able to discern their mate's unlearned contact calls on the basis of their acoustic features?

b) Is calls production necessary for pair bond continuity?

Students are encouraged to develop their own experimental setting within the framework of the research program.

Main Material and Methods:

-Use of micro-cameras and backpack wireless micro-phones.

-Video analysis (software: Observer 10.5)

-Audio analysis

-Use of statistical software (R)

How to Apply:

Interested applicants are encouraged to make informal enquiries to Pietro D'Amelio, pdamelio@orn.mpg.de . Or directly send a CV and a short motivation letter to the address given below.

The student will work in the cutting edge environment of a Max Planck Institute that gives the possibility to follow seminars, participating to journal club, getting know with established research scientist http://orn.iwww.mpg.de/en It is possible to apply for accommodation in the guest house.

Pietro Bruno D'Amelio

PhD student Department Gahr Behavioural Neurobiology Max Planck Institute for Ornithology Eberhard-Gwinner-Straße Haus Nr. 6a 82319 Seewiesen

Tel.: +49 (0) 8157 932 - 263 pdamelio@orn.mpg.de

pie.damelio@googlemail.com

## MichiganTechU PlantEvolution

Graduate Assistantship available in Plant Evolutionary Ecology at Michigan Technological University.

I am seeking to recruit 1-2 highly motivated graduate student (s) for a M.S. or Ph.D., to study ecological, genetic, and quantitative approaches to the study of plant adaptation to abiotic and biotic environments. Student(s) will have the opportunity to work on one of a few new and on-going research projects in the lab and to develop independent research projects (with guidance from Dr. Hersch-Green). Research in the lab investigates the evolutionary and ecological consequences of hybridization, genome (polyploidy) and gene duplication, and sexual reproduction in complex plant communities. We also have an emphasis on pollination biology, plant-herbivore interactions, invasive species, and climate change research. Prospective students with a background and interest in evolutionary ecology, population and/or molecular genetics are encouraged to apply.

Qualifications include a strong academic record and an interest in evolutionary ecology.Evidence of excellent written and analytical skills, as well as enthusiasm for field and laboratory research will be a plus.

Interested persons should contact Dr. Erika Hersch-Green by email (eherschg@mtu.edu), and include a statement of interest and CV. An informal discussion of potential projects is encouraged and reference letters will be solicited at a later date. Suitable candidates will then be encouraged to submit a formal application to the graduate school at Michigan Technological University

Review of applications will begin immediately and continue until position(s) is filled. Start date is flexible and can be as early as January 2013.

Erika Hersch-Green

eherschg@mtu.edu

Erika Hersch-Green <eherschg@mtu.edu>

## Munich HostParasiteCoevolution

The Ludwig-Maximilians-University (LMU) in Munich is among the top one hundred universities in the world, and part of the German Excellence Initiative. The Department of Biology (Evolutionary Ecology) invites applications for the position of a

\*PhD student in Evolutionary Biology\*

Salary: E13/65% for 36 months (net: approx. 1100-1200 EUR / month)

Starting time: November 2012 or as soon as possible thereafter

Project title: "Red Queen dynamics in \*Daphnia\*; revealing the evolutionary change in a parasite population"

The PhD student will participate in a collaborative research project of Justyna Wolinska to investigate molecular signatures of host-parasite coevolution in the wild. This project is a part of a large research initiative funded by the German Science Foundation: "Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis". The overarching goal of this interdisciplinary research initiative is to use hostparasite coevolution as a powerful and versatile model for analysing the causes and processes of evolutionary adaptation across scales: from genomes to ecosystems (see http://ieb.uni-muenster.de/spp/). Because of its role as a driving force of adaptation and diversity, understanding host-parasite coevolution is an important challenge to evolutionary biology.

Specifically, the student will screen wild populations of \*Daphnia\* (host) for infections with a common protozoan (microparasite). In the precursor project a) we showed that this parasite is likely to induce evolutionary change in natural \*Daphnia\* populations (due to its high virulence and strong genetic specificity for infection); b) we have developed a molecular approach to study parasite population structure; and c) we have identified several field sites where this parasite is common. There are four objectives of the proposed new study. We want to investigate 1) temporal changes (i.e. within parasite populations) and 2) the spatial pattern (across populations) using molecular approaches. Importantly, 3) we will verify the results by applying different genetic markers. Finally, we will look for 4) molecular signatures of the genetic specificity of infection. The main molecular approach will be Next Generation Sequencing of some (polymorphic) genes of protozoan microparasites. In addition, we plan on extending the array of markers, by sequencing and analyzing the genome of a target parasite. Alternatively, for the development of new polymorphic markers, PCR amplification and Sanger sequencing of cloned fragments might be used. Depending on the interest of the student, he / she can be further involved in field and / or experimental work. In summary, this project should shed light on evolutionary changes in otherwise often omitted partners in the host-parasite coevolutionary research: the microparasites.

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

The student will take part in the organized PhD program of the university. In addition, the student will have the chance to collaborate intensively with other researchers. In particular, with Dr. Adam Petrusek (Charles University in Prague), Dr. Sabine Giessler (LMU, Munich) and the researchers who participate in the mentioned "Host-Parasite Coevolution" program (http://ieb.uni-muenster.de/spp/). There are generous funds to cover attendance of the national and international conferences as well as research stays (lab rotations) in other universities. Applications should include 1) a letter of interest with a description of relevant experience, 2) curriculum vitae, 3) abstract of the master thesis, 4) a list of publications (if any), 5) the names (with e-mail addresses) of three potential referees. Applications should be submitted as a SINGLE (!) PDF document to the following e-mail address: wolinska@bio.lmu.de.

Please submit your application by 9 September 2012.

For further information, consult:

Justyna Wolinska: \*wolinska@bio.lmu.de\*

\*http://www.evolutionary-ecology.bio.lmu.de/\*\*\* – Justyna Wolinska Ludwig-Maximilians-Universität München Department Biologie II Evolutionsökologie Grosshaderner Str. 2 82152 Planegg-Martinsried, Germany

Phone: +49 (0)89 2180 74201 Fax: +49 (0)89 2180 74204 email: wolinska@bio.lmu.de http://www.biologie.uni-muenchen.de/ou/ecology/evol\_e/people\_wolinska\_e.html

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#### Munich HostParasiteCoevolution 2

This is a reminder...

The Ludwig-Maximilians-University (LMU) in Munich is among the top one hundred universities in the world, and part of the German Excellence Initiative. The Department of Biology (Evolutionary Ecology) invites applications for the position of a

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The PhD student will participate in a collaborative research project of Justyna Wolinska to investigate molecular signatures of host-parasite coevolution in the wild. This project is a part of a large research initiative funded by the German Science Foundation: "Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis". The overarching goal of this interdisciplinary research initiative is to use hostparasite coevolution as a powerful and versatile model for analysing the causes and processes of evolutionary adaptation across scales: from genomes to ecosystems (see http://ieb.uni-muenster.de/spp/). Because of its role as a driving force of adaptation and diversity, understanding host-parasite coevolution is an important challenge to evolutionary biology.

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

The student will take part in the organized PhD program of the university. In addition, the student will have the chance to collaborate intensively with other researchers. In particular, with Dr. Adam Petrusek (Charles University in Prague), Dr. Sabine Giessler (LMU, Munich) and the researchers who participate in the mentioned "Host-Parasite Coevolution" program (http://ieb.uni-muenster.de/spp/). There are generous funds to cover attendance of the national and international conferences as well as research stays (lab rotations) in other universities.

Applications should include 1) a letter of interest with a description of relevant experience, 2) curriculum vitae, 3) abstract of the master thesis, 4) a list of publications (if any), 5) the names (with e-mail addresses) of three potential referees. Applications should be submitted as a SINGLE (!) PDF document to the following e-mail address: wolinska@bio.lmu.de.

Please submit your application by 9 September 2012.

For further information, consult:

Justyna Wolinska: \*wolinska@bio.lmu.de\* \*http:/-/www.evolutionary-ecology.bio.lmu.de/\* – Justyna Wolinska Ludwig-Maximilians-Universität München Department Biologie II Evolutionsökologie Grosshaderner Str. 2 82152 Planegg-Martinsried, Germany

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

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proach?

We are looking for excellent students who are interested in pursuing an interdisciplinary approach to their graduate training. Students may have majored in humanities, mathematics, or a social/natural science, and should be seeking broad and rigorous graduate training across these areas. We welcome students who have a Masters degree specializing in one of these areas and want strong interdisciplinary training at the doctoral level.

Students who participate in the program will receive a PhD in a home doctoral program and a graduate minor in Genetic Engineering and Society. The minor will include four courses, one of which will be taught in Latin America. In addition to full fellowships, funds are available for international internships.

Please visit our website for more details on the program, including a list of participating faculty: http://GeneticEngSoc.ncsu.edu/< http://geneticengsoc.ncsu.edu/ >. In addition to contacting potential faculty mentors, prospective students are encouraged to email questions to: GES\_GPM@ncsu.edu

- Karina L. Todd IGERT Program Coordinator

Thomas Hall, Rm. 1545 North Carolina State University Raleigh, NC 27695 ph: 919.515.1651 kl-todd@ncsu.edu

IGERT in Genetic Engineering and Society: http://geneticengsoc.ncsu.edu/ Karina Todd <kltodd@ncsu.edu>

## NorthCarolinaStateU 6 BiodiversityInvasives

We are recruiting 5-6 PhD students to participate in an NSF funded, IGERT in Genetic Engineering and Society: The Case of Transgenic Pests at North Carolina State University. This will be our IGERTs second year. In 2012, our cohort has been examining questions linked to the genetic modification of mosquitoes and the scientific, cultural and ethical ramifications this topic presents. Our student cohort entering in Fall 2013 will focus on the problems presented in alleviating negative impacts of invasive species on the biodiversity of island ecosystems. What are the social, ethical, and ecological consequences of current techniques and what would be those associated with a genetically engineered ap-

## RennesU PopGenetics and Asexuality

We invite applications for a full-funded PhD position at Rennes University, France

Population Genetics and Evolution of partial asexuality: Inferring and modelling the impacts of partial asexuality on population genomics

\*Assumptions and questioning\*

\*~~~~

The PhD student will tackle what are the quantitative effects of partial asexuality on the expected genetic/omic diversity and its structure in metapopulations when those ones undergo selective pressures and, Do the joint effects of the evolutionary forces and partial asexuality result in distinctive genomic patterns from which biologists may infer the current and past evolution of such species.

The PhD student will answer by completing a population genetics model dedicated to partially asexual organisms to take into account for selective processes and by analysing a wide range of datasets and simulations results. The mathematical model will allow to study the evolutionary specificities and the genomic patterns left by of such functioning, and to propose some inference methods. The model we use without selection has already shown that evolution of the genetic diversity of partially asexual species diverges the ones expected from pure sexual and asexual species.

\*The main prospective steps of the thesis\*

\*~~~~

The work will consist in extending a mathematical model by formalizing the selective processes applied on genotypes. The model will become automated in optimized computation algorithms (in collaboration with the Symbiosis team, IRISA, Rennes). The model outputs will be analyzed and confronted to simulation results, biological knowledge and experimental data (already acquiered in a wide range of organisms), the four other partners of the ANR (the collaborative grant that fund the PhD expenses) and a scientific network. The PhD student will explore the trends of his/her quantitative predictions, identify the specific effects of partial asexuality on population genetics indices under selection and participate in providing new descriptive indices adapted to such species (in collaboration with S.Arnaud-Haond, Ifremer, Montpellier). She/He will participate in the development of quantitative inference methods to identify forces and effective rates of asexuality under which genomes have evolved. Finally, the PhD student will reinterpret the historical significance of asexuality in the evolutionary histories of varied organisms.

#### /Methodological and technical approaches considered/

-Running and developing mathematical population genetics models (Markov chain, differential equation, diffusion process, network analyses, sensitivity analysis) and simulations.

-Low level parallel computation, optimized compilation, GPGPU.

-Analyses and interpretations of theoretical predictions in population genomics and of already acquired datasets (plants, algae, fungi, insects, coral, human deseases).

#### //

\*Scientific and technical skills required by the candidate \*

\*~~~~

We are looking for highly motivated students with a background in population genetics, applied mathematics or computer sciences. Applicants should have the equivalent of a masters degree. The working languages in the lab is English (French is a plus for social interactions, courses will be offered by the lab if needed). The student should be able to start by November 2012.

Good knowledge in at least one of those domains and a high motivation to learn the others: a) Mathematrical modelling (Markov chain, diffusion processes, stochastic differential equation); b) optimized algorithm and computation (python, C, GPGPU, cloud computing); c) Population genetics and Evolution. As a part of the PhD project will gain from collaborations and interaction with many other scientists from other institutes and coutries, we are looking for skilled applicants also at ease in teamworking.

Applicants should send a CV, an authorized copy of a Master or equivalent degree, and contact information of at least two reference persons by the 1st of September 2012 to solenn.stoeckel@rennes.inra.fr

For more information, please contact quickly solenn.stoeckel@rennes.inra.fr and jean-christophe.simon@rennes.inra.fr or by phone at +33 (0)2 23 48 70 83

\*More information about the Practical context and objectives of the  $PhD^*$ 

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This PhD position forms a part of a stating project entitling Revisiting the Population Genetics and Genomics of clonal organismsfunded by the French National Research Agency for the next 4 years. It will involve 4 other repute French teams in population genetics and will imply collaborations with other labs in other countries. The student will visit their labs yearly using the funds already allocated for and we will encourage the student to create his/her own collaborations to

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#### **TU Munich 2 PopulationGenetics**

Two Positions for PhD students in Population Genetics are available in the recently established Population Genetics research group of Aurélien Tellier at the TU Munich ("Technische Universitaet Muenchen"), campus Freising-Weihenstephan, Department of Plant Sciences. Webpage: www.popgen.wzw.tum.de /Projects:/The projects will be based on theoretical population genetics, including use of coalescent simulations, and analysis of sequencing data on various plant and/or plant pathogen species. The group and studentships are financed by the Synbreed program (http://www.synbreed.tum.de/) and the TUM. Several topics are possible depending on the applicant interests and experiences, ranging from mathematical to bioinformatics studies. 1) Development of statistical methods (based on coalescent theory and Approximate Bayesian Computation) to analyze next generation sequencing data from wild and domesticated plant species (and application to data within Synbreed), 2) Development of statistical methods using coalescent theory to study the evolution of plant pathogen species and application to data, 3) Population genetics theory of host-parasite coevolution, 4) Population genetics theory of seed dormancy.

/Qualifications:/Equivalent of a master's degree in mathematics, statistics or biology, and strong professional interests in evolutionary biology, plant genetics or theoretical biology. Team spirit, working independence, and knowledge of written and spoken English are necessary. The language in the lab is English.

The TU Munichis rated among the best in Germany by international standards. The Campus for Food and Life Sciences Weihenstephan hosts several research groups with relevance for the research projects: quantitative genetics and plant breeding (Prof Schoen), plantparasite interactions (Prof Hueckelhoven), plant evolution and biodiversity (Prof Schaefer), statistical biology (Prof Ankerst). The group will move during 2013 into the newly build Hans Eisenmann Zentrum on campus (http://www.hez.wzw.tum.de/) with state of the art facilities for computing and bioinformatics. The most recent relevant publications include: [1] Tellier A, et al. (2011) /PNAS/ 108: 17052-17057; [2] Zivkovic D and Tellier A, (2012) /Molecular Ecology in press/.; [3] Brown JKM and Tellier A, (2011) /Ann Rev Phytopathol/, 49: 345-367.

The salary is 50% TV-L E13 for three years. Funding

covers research and conference costs. The PhD student would benefit from the wide range of training courses offered by the TUM graduate school (www.gs.tum.de) and become part of the excellent research environment in Munich.

The TUM is interested in fostering career opportunities for women, therefore women are strongly encouraged to apply. Applicants with disabilities and more or less equal qualifications will be favoured.

/Application:/To apply please send to Aurélien Tellier (tellier@wzw.tum.de): 1) a CV, 2) a short statement of research interests and experience, and 3) contact information for two references(preferably everything in a single pdf file). Starting date is ideally October 2012 but applications will be accepted until the position is filled. For additional and informal inquiries, please do not hesitate to contact Aurélien Tellier.

Prof. Aurélien Tellier Technische Universität München Section of Population Genetics Maximus-von-Imhof Forum 2 85354 Freising GER-MANY phone: 0049-(0)8161-71-5896 email: tellier@wzw.tum.de www.popgen.wzw.tum.de Aurelien Tellier <tellier@wzw.tum.de>

## **TU Munich EvolutionaryEcol**

Position for a PhD student (m/f) in Evolutionary Ecology, working with Hanno Schaefer in the recently established plant biodiversity research group at the TU Munich ("Technische Universitaet Muenchen), campus Freising-Weihenstephan, webpage: http://www.biodiv.wzw.tum.de/. Project: The project could focus on pollinator-driven diversification in the plant family Cucurbitaceae (including field work in Africa, Asia, and the Carribean). Similar projects with other plant groups would be possible depending on the applicants interests and experiences.

Qualifications: Equivalent of a masters degree in biology, and strong professional interests in evolutionary biology, molecular ecology, conservation biology, or pollination biology. Team spirit, interest in field work in tropical countries, and knowledge of written and spoken English are necessary. Experience in ecological fieldwork and molecular lab work is advantageous.

The salary is 50% TV-L E13 for three years. All research and project-related travel costs (fieldwork, conferences) are covered. The PhD student would benefit from the wide range of training courses offered by the TUM graduate school (www.gs.tum.de) and become part of the excellent research environment in Munich.

The TUM is interested in fostering career opportunities for women, I therefore strongly encourage women to apply. Applicants with disabilities and more or less equal qualifications will be favored.

Application: Please send to Hanno Schaefer (hanno.schaefer@tum.de) a cover letter describing your interest in this position and your CV with details on previous research experience (preferably everything in a single pdf file). Start date ideally September 2012 but applications will be accepted until the position is filled. For additional inquieries, please contact Hanno Schaefer.

Prof. Dr. Hanno Schaefer Technische Universitaet Muenchen Plant Biodiversity research group Maximusvon-Imhof Forum 2 D-85354 Freising GERMANY

phone: 0049-(0)8161-715884 email: hanno.schaefer@tum.de

hanno.schaefer@tum.de

#### UAntwerp EvolutionaryEcolBegging

The Faculty of Sciences of the University of Antwerp is seeking to fill the following full-time (100 %) vacancy in the Department of Biology-Ethology

PhD student by the University Research Fund (BOF) in the area of Behavioural and Evolutionary Ecology

Job description You prepare a doctoral thesis in the field of Behavioral Ecology. The PhD project focuses on the evolutionary ecology of begging at the interface between mechanisms and function/evolution using avian model species (e.g. blue tits, gulls, starlings, canaries). Begging, the solicitation of food from parents the offspring, has a direct and significant effect on growth, survival, and thus ultimately on fitness. Obviously, begging for food from parents should elicit the transfer of resources, typically a greater amount than parents are selected to provide, since parents and offspring are, at least in birds, not genetically identical. Furthermore, when offspring seeks parental investment, their begging exerts a selective pressure on the parents. But begging is at the same time also a target of selection, because it is influenced by the parental response. Both behaviours should, therefore, ultimately become co-adapted. Being

a agent and a target of selection, begging follows a complex evolutionary trajectory, flavoured by evolutionary conflicts of interest. Possible lines of research are: -To test important evolutionary ecological predictions in the context of evolutionary conflicts of interest, scramble competition and the honest signalling of offspring requirement - To impose (artificial) selection on begging (a) to investigate genetic covariances and correlated responses in traits that generate trade-offs or that are co-adapted and (b) to identify underlying control mechanisms via a correlated selection on physiological traits - To study the regulating role of testosterone and corticosterone, since physiological mechanisms may affect or even constrain the response to selection by linking the expression of different traits across contexts or lifehistory stages - To investigate what mechanisms make begging adaptive and thus improve our understanding of the evolutionary ecology of life- history traits and fitness components Profile and requirements You hold a master degree in Biology; You are an enthusiastic, highly motivated student with a strong interest in Behavioral and Evolutionary Ecology, preferentially with previous experience in related research; You have good organizational, writing and presentation skills and should be able to work well both independently and in a team environment; We offer

A doctoral scholarship for a period of two years, with the possibility of renewal for a further two-year period after positive evaluation; The start date of scholarship will be October 1st, November 1st, December 1st 2012 or January 1st 2013; A monthly salary ranging from 2.070 - 2.120; A dynamic and stimulating group of researchers working on the interface of all 4 major aspects of animal behaviour (causation, development, function, evolution), with particular emphasis on bird family life (maternal effects, phenotypic plasticity, parent-offspring conflict & co-adaptation).

Interested? Applications may only be <http://solliciteren.ua.ac.submitted online be/Default.aspx?vid01320&fac=7&empl0&typep&lang=en> (vacancy number 2012AAPDOCPROEX115) and need to include a letter of motivation (approx. 250 words) and contact information of up to two referees, closing date August 12th 2012; A pre-selection will be made from the submitted applications. The remainder of the selection procedure is specific to the position and will be determined by the selection panel; The interviews will take place from August 20th until August 31st 2012; Ellen Huijer (TEL 03 265 31 45); see also www.ua.ac.be/vacatures; for questions about the profile, please contact Prof. Wendt Müller (wendt.muller@ua.ac.be), see also http://www.ua.ac.be/wendt.muller Wendt Müller University

of Antwerp Department of Biology-Ethology Campus Drie Eiken C-127 Universiteitsplein 1 2610 Antwerp (Wilrijk), Belgium

e-mail: Wendt.Muller@ua.ac.be web: http://-www.ua.ac.be/wendt.muller tel +32 32652292 fax +32 32652271 mobile:+32 473567276

Müller Wendt <wendt.muller@ua.ac.be>

## **UBourgogne AvianSexualSelection**

#### \*PhD PROPOSAL\*

\*Post-copulatory sexual selection in the houbara bustard\*

/A three year PhD position is available to work on a collaborative project dealing with the post-copulatory sexual selection in the houbara bustard./

In most animal species, females mate with multiple males giving rise to the potential for sperm competition and cryptic female choice. These post-copulatory components of sexual selection add to those acting on males to attract mates (pre-copulatory sexual selection).

Although the study of post-copulatory sexual selection has flourished in the last decade, there are very few biological systems that are amenable to the experimental study of sperm competition and cryptic choice.

Houbara bustards are endangered bird species living in North Africa (/Chlamydotis undulata/), Middle East and Central Asia (/Chlamydotis macqueeni/). In order to restore and reinforce natural populations of houbara in Middle East, the National Avian Research Center (NARC) has promoted a captive breeding program in Abu Dhabi (EAU) under the leadership of the International Fund for Houbara Conservation. This breeding program is based on the collection of sperm which is subsequently used to artificially inseminate females under standardized conditions (Saint Jalme et al. 1994). This allows investigating several aspects related to sperm competition and cryptic choice, in a species where both pre- and post-copulatory sexual selection is supposed to be a strong selective force. Indeed, males harbor extravagant sexual displays (Chargé et al. 2010, 2011; Preston et al. 2011) and females have been shown to mate with multiple males in the wild, where the proportion of clutches sired by multiple fathers is fairly high (60%) (Lesobre et al. 2010).

In the first stage of the PhD thesis, we expect to better

characterize sperm traits that determine the likelihood to successfully fertilize eggs. Then, experimental work could be conducted to explore the following questions:

1)Is there a trade-off between pre- and post-copulatory components of sexual selection?

2)Is fertilization success mostly driven by sperm competition or cryptic choice?

3)Is there a scope for sexual conflict in this system?

In addition to their fundamental interest, the obtained results could also be valuable with respect to the genetic management of the captive breeding. On one hand, inseminating with a mix of semen could facilitate insemination procedure by reducing the time spent to select precise pedigree and by optimizing semen utilization (mixture of small ejaculates that are usually discarded could be easily used). On the other hand, sperm competition might result in severely biased paternity with a potential for strong involuntary selection acting on breeding males.

This is a collaborative project involving the NARC (Yves Hingrat, Loic Lesobre, Tony Chalah) where all the experimental work will be carried out and where the successful applicant will spend most of the time, the French CNRS in Dijon (Gabriele Sorci) and the Museum of Natural History in Paris (Michel Saint Jalme).

Interested applicants should send a CV and the name of three references to Gabriele Sorci (gabriele.sorci@u-bourgogne.fr) and Michel Saint Jalme (mstjalme@mnhn.fr).

\*Salary\*: 1,250 euros per month. Accommodation and food is provided by the NARC with no fees for the student.

\*Selected articles published by the group related to the project\*

Chargé R. et al. 2011. Immune-Mediated Change in the Expression of a Sexual Trait Predicts Offspring Survival in the Wild. PLoS ONE 6: e25305.

Preston B. et al. 2011. Sexually extravagant males age more rapidly. Ecology Letters 14: 1017-1024.

Chargé et al. 2010. Male health status, signalled by courtship display, reveals ejaculate quality and hatching success in a lekking species. Journal of Animal Ecology 79: 843-850.

Lesobre L. et al. 2010. Conservation genetics of Houbara Bustard (Chlamydotis undulata undulata): population structure and its implications for the reinforcement of wild populations. Conservation Genetics 11: 1489-1497. Lesobre L. et al. 2010. Absence of male reproductive skew, along with high frequency of polyandry and conspecific brood parasitism in the lekking Houbara bustard Chlamydotis undulata undulata. Journal of Avian Biology 41: 117-127.

Saint Jalme M. et al. 1994. Artificial insemination in Houbara bustard (Chlamydotis undulata): influence of the number of spermatozoa and insemination frequency on fertility and ability to hatch. Journal of Reproduction and Fertility 100: 93-103.

Gabriele Sorci <gabriele.sorci@u-bourgogne.fr>

## UEdinburgh HostParasiteInteractions

The evolutionary ecology of biological rhythms in hostparasite interactions

http://www.ed.ac.uk/schools-departments/biology/postgraduate/phdproj?tags=2&cw\_xml=-

projects\_institute.php#SReece\_7 The discovery of biological rhythms, such as circadian rhythms, in parasite behaviours [1] and host immune responses [2] suggests that timing matters for how hosts and parasites interact with each other. However, to date, the study of parasite biological rhythms has rarely considered whether parasites are organising their own schedules or whether parasites are passive and scheduled by aspects of host physiology with circadian rhythms. Furthermore, the study of circadian immune responses has largely occurred without involving disease or links to parasite behaviours. This project will bridge this divide to investigate 'what roles do the rhythms of hosts and parasites play in disease and 'what are the consequences for host-parasite coevolution'?

Specifically, the project will use an established disease model (rodent malaria [3-5]) to link parasite and host biological rhythms to ask the following questions: (a) What impact do circadian rhythms in immune factors have on protecting the host from disease? (b) How do host rhythms influence how successfully parasites exploit their hosts and transmit to new hosts? (c) Have parasites evolved time-keeping mechanisms to better exploit host resources or to evade immune killing? (d) Do the developmental schedules of parasites influence the outcome of competitive interactions between coinfecting parasites? This project will synergise several disciplines across biology including the systems biology of circadian rhythms, behavioural and evolutionary ecology, evolutionary immunology. The approach will begin by collecting data from conducting experiments in the lab [e.g. 1] to elucidate the daily schedules of host-parasite

interactions during infection. Depending on the student's interests, the project could develop into focusing on further experiments and/or could involve using computational biology to undertake statistical inference of disease processes [e.g. 6] to quantify the costs and benefits of rhythms to hosts and parasites, and investigate whether host rhythms drive the evolution of parasite rhythms and vice-versa.

[1] O'Donnell A.J., Schneider P., McWatters H.G. & Reece S.E. (2011) Fitness costs of disrupting circadian rhythms in malaria parasites, Proceedings of the Royal Society of London, Series B, 278(171): 2429-2436

[2] Keller M., Mazuch J., Abraham U., Eom G.D., Herzog E.D., Volk H.D., Kramer A. & Maier B. (2009) A circadian clock in macrophages controls inflammatory immune responses. Proceedings of the National Academy of Sciences, USA, 106(50):21407-12.

[3] Reece S.E., Ramiro R.S. & Nussey D.H.N. (2009) Plastic parasites: sophisticated strategies for survival and reproduction? Evolutionary Applications 2(1): 11-23

[4] Pollitt L.C., Mideo N., Drew D., Schneider P., Colegrave N. & Reece S.E. (2011) Competition and the evolution of reproductive restraint in malaria parasites. American Naturalist, 177(3): 358-367

[5] Mideo N. & Reece S.E. (2012) Plasticity in parasite phenotypes: evolutionary and ecological implications for disease. Future Microbiology 7(1): 17-24

[6] Miller M.R., Raberg L., Read A.F. & Savill N.J. (2010) Quantitative analysis of immune response and erythropoiesis during rodent malaria infection, PLoS Computational Biology, 6(9):e1000946.

This opportunity is only open to UK nationals (or EU students who have been resident in the UK for 3+ years) due to restrictions imposed by the funding body. By 20th July interested individuals should send a pdf - one document of 3 pages which should include their CV (2 pages - include the email addresses of 2 academic referees) and a statement of research interests (1 page) directly to sarah.reece@ed.ac.uk

Dr Sarah Reece Centre for Immunity, Infection & Evolution. Institutes of Evolution, Immunology and Infection Research, School of Biological Sciences, Ashworth Laboratories, University of Edinburgh, Edinburgh EH9 3JT Scotland, UK

Tel +44 131 650 5547 Fax +44 131 650 6564

sarah.reece@ed.ac.uk http://reece.bio.ed.ac.uk/ – The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

sarah.reece@ed.ac.uk

## **UFlorence PopGenetics**

Graduate position: University of Florence, Italy - " Population genetics and genomics

A PhD position is available in the Molecular Ecology Laboratory of Dr Claudio Ciofi in the new Department of Biology at the University of Florence, Italy.

We are looking for a motivated graduate student with strong interest in population genetics, evolutionary and conservation genetics and genomic sciences. Candidates with good research and writing skills and experience in SNP marker development and bioinformatics are strongly encouraged to apply. An MSc degree of equivalent (four-year undergraduate degree) in a relevant field is required.

The student will be mainly working on development, characterization and analysis of SNP markers in Komodo dragons using sample collected from wild island populations. The project is part of a long-term collaborative agreement with the Indonesian Institute of Science aimed at describing the evolutionary history of Varanus komodoensis and use molecular tools for management of extant populations. Short-term field work in southeast Indonesia may also be considered depending on funding availability.

The postgraduate degree at the University of Florence is a three-year research program. The successful candidate will receive a scholarship covering tuition fees and a stipend of 13,638 Euro per year. Stipend has a 50% increase during a maximum of 18 months spent abroad working in collaborating institutions. The student should be able to start by January 2013.

Applicants should send a CV, an authorized copy of a Master or equivalent degree, and contact information of at least two reference persons by the 1st of September 2012 to claudio.ciofi@unifi.it

Claudio Ciofi Department of Evolutionary Biology University of Florence Via Romana 17, 50125 Florence, Italy Tel: +39 055 2288290; Fax: +39 055 2288289 Email: claudio.ciofi@unifi.it claudio.ciofi@unifi.it

#### UFlorida symbiosis

A PhD student position in modern symbiology is available:

Are you interested in interactions between insects, fungi, and microbes? Join our new Forest Entomology and Symbiology team at the University of Florida to study the Ambrosia Symbiosis: beetles that farm fungal gardens to kill and digest trees. More at http://www.ambrosiasymbiosis.org/2012/03/now-accepting-graduate-students/ - combine molecular and organismal approaches

- study globally destructive invasive organisms

- use high-throughput metagenomics

- develop online resources for the public

- and get paid for it!

Call 352-273-0299 with questions, or simply send your CV and a no-nonsense summary of your accomplishments to Jiri Hulcr, hulcr@ufl.edu. Deadline: October 30, 2012. Start anytime, ideally January 2013.

"Hulcr,Jiri" <hulcr@ufl.edu>

### UGeneva EvolutionaryBiol

Graduate position:

PhD Position in Evolutionary Genetics / Adaptive Evolution

The laboratory of Molecular Phylogeny and Evolution in Vertebrates, leaded by Juan Montoya-Burgos, Department of Genetics and Evolution, University of Geneva, seeks for a PhD candidate with a strong interest in evolutionary biology and advanced knowledge in molecular techniques, gene expression analysis and/or DNA-sequence analyses.

#### **RESEARCH PROJECT:**

A significant part of the functional diversity of life on earth is thought to have evolved through multiple bursts of adaptive speciation. The process of adaptive evolution is therefore central in the field of evolutionary biology and the understanding of the genetic mechanisms underlying the evolution of adaptive traits remains a challenging task.

This project is aimed at investigating the evolution of genes that are involved in adaptive responses. The candidate will analyze the transcriptomes established in our laboratory to identify and characterize genes involved in the evolution of adaptive traits and to determine whether particular biological processes are enriched in positively selected genes. The candidate will establish correlations between the emergence of positively selected mutations and particular phenotypes. The role played by lineage-specific positively selected genes will also be assessed, in particular by the analvsis of the expression pattern of non-annotated positively selected genes. To these aims, the candidate will participate in the development of new combinations of state-of-the-art techniques to obtain homologous DNA sequences of interest in a large panel of closely related species.

We will use as model organism the Loricariinae catfish subfamily as it is highly diversified in terms of morphology, ecology, behavior, and in number of species.

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

The Department of Genetics and Evolution hosts research groups working on regulation of vertebrate development (Denis Duboule), artificial and natural evolution (Michel Milinkovitch), molecular phylogeny of protists (Jan Pawlowski), developmental and molecular biology of sensory systems in mammals (Ivan Rodriguez), development and regeneration in Hydra (Brigitte Galliot), regulation of development in Drosophila (François Karch), sex determination and early development in Drosophila (Daniel Pauli).

Ideal candidates will have a Ms degree in biology with a specialization in evolution, developmental genetics, or phylogenetics, should be experienced in laboratory techniques (e.g. DNA, RNA extraction, PCR and RT-PCR, DNA sequencing, cDNA library, cloning, In Situ Hybridization), with advanced skills in DNA sequence analysis and in gene expression analysis. The position is initially for three years. The selected candidate will be enrolled in the doctoral program Ecology & Evolution (http://biologie.cuso.ch/ecologie-evolution/welcome)

CLOSING DATE: Open until filled, but all application materials, including CV, a summary of research experience, copies of relevant published or in-press papers, and three reference persons should be received by 1st of September 2012 to ensure full consideration. The position will start at the earliest possible date. Candidates should indicate in a cover letter when they could take up the position.

Please send all application material to: Juan Montoya-Burgos, Dept. of Genetics & Evolution, University of Geneva, Sciences III, 30 quai Ernest Ansermet, 1211 Geneva 4, Switzerland; or as e-mail attachments to juan.montoya@unige.ch. For inquiries please contact juan.montoya@unige.ch.

Juan.Montoya@unige.ch

## ULouisiana EvolutionaryBiology

\*Doctoral Fellowships available for entering Ph.D. students in Environmental and Evolutionary Biology at the University of Louisiana \*

We will be awarding University of Louisiana Fellowships and Board of Regents Fellowships to Ph.D. students entering Spring and Fall 2013. Stipends are up to \$28,000 per year and also include a tuition waiver. Eligibility requirements include US citizenship (or permanent residency) or degree from a US institution. We will also have teaching and research assistantships available for incoming Ph.D. students. Potential applicants are strongly encouraged to directly contact prospective advisors. Their contact information and research interests can be found at our departmental web site (http:/-/biology.louisiana.edu/), which also has a link to our graduate programs (http://biology.ucs.louisiana.edu/content/graduate-programs). The Department of Biology has approximately 75 graduate students and 25 graduate faculty members conducting research on a wide variety of topics. For general information on the graduate program, please contact Dr. Scott France, graduate admissions chair (France@Louisiana.edu).

Paul Leberg <leberg@louisiana.edu>

UMelbourne EvolutionAlgalNiches

PhD position: Evolutionary dynamics of ecological niches

A PhD student position is available in the lab of Heroen Verbruggen at the University of Melbourne to work on the evolution of ecological niches of marine algae.

You will study how ecological niches of marine algae change over evolutionary timescales and how the niche affinities of lineages influence their speciationextinction dynamics. The project involves field work, DNA sequencing, molecular phylogenetics, ecological niche modeling and evolutionary modeling.

To be successful you will: \* satisfy the requirements for a PhD degree at the University of Melbourne (http:/-/goo.gl/VGRgQ) \* have experience in generating and managing DNA sequences \* have a strong interest in evolutionary biology and mathematical modeling \* evidence strong oral and written communication skills

To find out more about the project and the lab, go to http://www.phycoweb.net To apply, send your CV, a representative piece of English writing (e.g. MSc thesis), and the names and contact information of two or more references (at least one previous supervisor) to heroen.verbruggen@unimelb.edu.au. Informal enquiries are welcome.

Heroen Verbruggen

www.phycoweb.net algal evolution blog: phycoweb.wordpress.com

heroen.verbruggen@gmail.com

### UMuenster HostParasiteEvol

PhD student position: Ecological immunology and host-parasite interactions/coevolution

We invite applications for a PhD position in the Animal Evolutionary Ecology Group, Institute for Evolution and Biodiversity, University of Muenster, Germany

Project title: "Host immune strategies: remembering, resisting, tolerating, and being specific"

This project will address host-parasite interactions, using Drosophila melanogaster, from two perspectives: 1) examining how previous parasite experience can affect the host's defence strategy and its fitness consequences and 2) addressing potential genetic bases of parasite recognition, with a focus on a gene that is greatly diversified at the genetic and somatic level. The project will use bacteria as the model infection system and read-outs such as survival, bacterial load and fitness; as well as involve phagocytosis assays and using genetically modified fly lines.

The project is part of a nationwide initiative on "Host-Parasite Coevolution - Rapid Reciprocal Adaptation and its Genetic Basis" funded by the German Science Foundation (DFG) (http://ieb.uni-muenster.de/spp/-). This will provide the student with excellent additional opportunities such as lab exchanges and attending workshops with other researchers funded within the initiative. The student will also have opportunities to collaborate with other researchers at the IEB.

Muenster hosts many excellent scientific institutions, and is a dynamic city with a large number of students and a rich choice of social, cultural and sporting facilities (see http://www.muenster.de/en/ for further details).

Qualifications: We are looking for highly motivated students with a background in evolutionary ecology, immunology or parasitology. Applicants should have the equivalent of a masters degree in biology. The working language of the lab is English.

We invite applications from highly qualified candidates of any nationality. Women are especially encouraged to apply. Preference will be given to disabled applicants in case of equivalent qualification.

Application requirements: Please send applications via email in one single PDF file. The PDF should contain 1) a letter of motivation, 2) your CV including details of your research experience (with the abstract of your masters thesis) and publications (if any) and 3) the contact details of two potential referees. Please send your application in English. The deadline for application is the 14th September 2012. The start date will be November 2012 or as soon as possible thereafter, and the salary will be for 36 months (TV-L E13/65%). For more information or if you have any questions please contact Sophie Armitage.

Dr. Sophie Armitage sophie.armitage@uni-muenster.de http://ieb.uni-muenster.de/animalevolecol/people/armitage sophie.armitage@uni-muenster.de

> UNewBrunswick AlgalEvolutionaryGenomics

Graduate Student Position in Algal Evolutionary Genomics

Biology Department University of New Brunswick,

#### Fredericton

#### August 2012

One graduate student (MSc or Ph.D.) position is available in the laboratory of Dr. Adrian Reyes-Prieto in the Biology Department of the University of New Brunswick at Fredericton.

I seek an enthusiastic graduate student with strong interests in genomic sciences, evolutionary biology and microbial diversity. The candidate should have research skills, and some experience with molecular biology techniques and bionformatics. The selected candidate is expected to join the lab as soon as January 2013.

The student will participate investigating diverse aspects of the origin and evolution of photosynthetic eukaryotes. The candidate will generate genomic and transcriptomic data from diverse algal groups for evolutionary and comparative studies. Our research projects involve algal culture and molecular biology techniques, flow cytometry, "next-generation" sequencing, phylogenetics and bionformatics. This position will provide the opportunity to conduct novel research in microbial genomics, organelle evolution and evolutionary biology. NSERC funds for stipends/salaries up to 4 years are available.

My research program is affiliated to the CIFAR-Integrated Microbiology Program and the selected graduate student will have the opportunity to close interactions with prestigious research groups across Canada, Europe and USA (http://www.cifar.ca/integrated-microbial-biodiversity-program-members) via our ongoing collaborations and regular meetings.

Please apply by sending your Curriculum Vitae, contact information of at least two references, and a cover letter with statement of research interests to areyes[at]unb.ca. It is critical you contact me directly prior to applying to the graduate studies program

Information on graduate studies and application procedures for the Department of Biology at University of New Brunswick can be found online at www.unb.ca/fredericton/science/biology/-Degree\_Info/Graduate.html Adrian Reyes-Prieto, Ph.D. Assistant Professor Biology Department University of New Brunswick http://www.unb.ca/fredericton/science/biology/Faculty/reyesprieto.html 10 Bailey Drive Fredericton New Brunswick E3B 5A3 Canada

Adrian Reyes <areyes@unb.ca>

## UZurich HostParasiteEvolGen

PhD Position in Evolutionary Genetics of Wildlife Disease University of Zurich, Switzerland

A 3-year PhD position is available in Barbara Tschirren's group at the University of Zurich, Switzerland, to work on the genetic basis of Borrelia resistance in natural rodent populations.

Lyme borreliosis is the most important zoonotic disease in Europe and North America, having major debilitating effects in humans. It is caused by the spirochete Borrelia sp., which is transmitted by ticks of the Ixodes ricinus complex to animal hosts, in particular small rodents. Natural hosts are commonly and heavily infested with ticks throughout their life, and thus encounter Borrelia on a regular basis. Yet, only about 20-30% of animals become Borrelia infected, demonstrating that natural hosts have evolved powerful defence mechanisms, which prevent and / or control Borrelia infection. To date, this variation in Borrelia resistance remains poorly understood, which hampers further progress in the management of this emerging public health risk, as well as our understanding of coevolutionary processes in host-Borrelia systems.

In this PhD project, as part of the University Research Priority Program -Evolution in Action', we will combine ecological research in natural rodent populations with molecular work in the laboratory to obtain comprehensive insights into the genetic and regulatory basis of variation in resistance to Borrelia in the wild.

Sequencing of candidate regions in animals from populations, which differ in Borrelia prevalence (along altitudinal gradients in the Swiss Alps) will allow us to investigate the role of parasites in population differentiation. Due to climate change, Borrelia now occurs in Switzerland at altitudes that were previously Borreliafree. This provides a unique opportunity to investigate changes in the genetic composition of host populations that have no coevolutionary history with Borrelia, providing a powerful model to study rapid evolutionary changes in response to emerging pathogens.

The ideal candidate for this project is fascinated by evolutionary questions, highly motivated, independent and creative, and has a strong interest to combine work in the field with molecular analyses in the lab. She / he has a background in evolutionary ecology or molecular ecology (or a related field) and some lab experience. The project requires substantial amount of fieldwork under sometimes difficult conditions (terrain, weather) for several weeks in the Swiss Alps. A driver's license is required.

The successful applicant will be based at the Institute of Evolutionary Biology and Environmental Studies of the University of Zurich, providing ample opportunities for collaborations and interactions with researchers working in related and complementary fields (http://www.ieu.uzh.ch). The research groups are very international and the working language is English.

Applications should include 1) a cover letter outlining your motivation to work on this project as well as your relevant experience, 2) a detailed curriculum vitae, 3) copies of academic qualifications, 4) the contact details of two academic referees, and 5) a 1/2-page description of your MSc project. Send the above as a single .pdf file to barbara.tschirren@ieu.uzh.ch

Review of applications will start on October 15 2012, but candidates will be considered until the position is filled. The ideal starting date is early 2013. For more information, feel free to contact me!

Barbara Tschirren SNF Assistant professor Institute of Evolutionary Biology and Environmental Studies University of Zurich Winterthurerstrasse 190 8057 Zurich Switzerland

Email: barbara.tschirren@ieu.uzh.ch http://www.ieu.uzh.ch/staff/professors/tschirren.html barbara.tschirren@ieu.uzh.ch

## **U** Uppsala MossGenomics

PhD position in evolutionary functional genomics at the department of Plant Ecology and Evolution, Evolutionary Biology Centre, Uppsala University, Swedenâ

Project description: In this project you will study genome evolution of early land plants. While mosses represent one of the first groups of land plants, fossil records as well as biogeographic distributions suggest a very slow rate of morphological evolution. Based on these observations, and that more than 90% of moss species present at the end of the Tertiary seem to be present today, mosses have been characterised as "unchanging sphinxes of the past". The reasons for these observations are unknown, but it has been suggested that the evolutionary potential of bryophytes is limited by a low rate of molecular evolution. A major part of the project will be devoted to comparative studies of a number of moss genomes to answer this question. Other sub-projects are focused on the molecular evolution of specific mechanisms e.g., circadian clock mechanisms, the genetics of adaptation in early land plants, and phylogenetic studies.

An important part of your work will include statistical and genome analyses of large DNA sequence data sets from a number of moss genomes, most of which have not been sequenced before. In addition, molecular and experimental studies of specific pathways and phenotypic traits may be included. The exact workplan of the thesis will be settled together with the doctoral student. ââThe PhD student will be based in the group of Ulf Lagercrantz at the Evolutionary Biology Center. (http://www.ebc.uu.se/forskning/IEG/-Plant/Research\_groups/Lagercrantz\_group/)

Qualifications: An MSc degree of equivalent in a relevant field is required. We seek a highly motivated student with thorough education and strong interest in evolutionary genetics/genomics, and population genetics. Previous experience with modern sequencing methods, bioinformatics, and statistics is advantageous. We are looking for individuals who can work independently but also as part of a team. Candidates must be fluent in English (orally and written). The successful candidate will receive her/his postgraduate training within the postgraduate school at the Evolutionary Biology Centre (http://www.ebc.uu.se/?languageId=3D1) that is one of world's leading research institutions in evolutionary biology.

Conditions: The postgraduate training comprises four years of full time studies. The successful candidate will receive a postgraduate fellowship the first year (15500SEK/month) and a postgraduate position year 2-4 (22400-25100 SEK/month). The position can be combined with up to 20% of teaching assistantship, which will then prolong the position accordingly.â Please feel free to contact Ulf Lagercrantz (ulf.lagercrantz@ebc.uu.se, +46 18 471 2863) for more information. Union representatives are Anders Grundström, Saco-rÃdet, tel. +46 18 471 53 80 och Carin Söderhäll, TCO/ST, tel. +46 18 471 19 96, Stefan Djurström, Seko, tel. +46 18 471 33 15.ââ

How to apply: Please prepare a letter of intent including descriptions of 1) your motivation for PhD studies in general and for this position in particular, 2) your education, especially in evolutionary biology, genetics/genomics/bioinformatics, molecular biology, and statistics. The application should further include a CV, an authorized copy of your MSc degree, and the names

#### September 1, 2012 EvolDir

and contact information (address, email address, and phone number) of at least two reference persons. Relevant publications (including BSc/MSc thesis) should be enclosed. The application must be written in English.ââYou are welcome to submit your application no later than August 15, 2012, UFV-PA 2012/1911. Use the link below to access the application form.

http://www.uu.se/jobb/phd-students/annonsvisning?languageId=3D1&tarContentId=-196845

Ulf Lagercrantz Dept. of Plant Ecology and Evolution Evolutionary Biology Centre Uppsala University Norbyv. 18D SE-752 36 Uppsala Sweden T: 46 18 471 6418

ulf.lagercrantz@ebc.uu.se

## Vienna EvolutionMouseCommunication

PhD position: Chemosensory communication in wild house mice Dustin J. Penn, Konrad Lorenz Institute of Ethology Vienna, Austria

Project: This 3-year project will investigate the proximate mechanisms and evolutionary functions of complex, chemical signals in wild house mice. The project and position are funded by the Austrian National Science Fund (FWF).

Ideal candidate: We are looking for an enthusiastic PhD candidate with background in evolutionary/behavioral biology with strong interests in sexual selection or communication. The ideal candidate would have experience with mice (or other small mammals), chemistry (GC-MS or protein chemistry), and the ability to work inde-

pendently, as well as part of a team. Excellent writing and communication skills in English are necessary. Experience with molecular genetics, experimental design and/or statistics are desirable, but not essential. A BSc or MSc (or equivalent) in Biology is required.

Location: Our institute is located in the Vienna Woods, it is international and operates in English and German. Vienna is a very attractive international city (English is widely spoken), and it is generally ranked as one of top cities in the world to live. There are many cultural activities, outstanding public transportation, green spaces, and it is easy to leave the city for travel and outdoor activities, such as hiking, climbing and skiing.

To apply send: 1. 1-page cover letter outlining motivations, research interests and relevant experience; 2. CV with list of publications (if any); 3. copies of transcripts with academic qualifications; 4. contact information of 2 academic references; and 5. short abstract describing your previous research experience. Send enquiries and applications to: Dustin J. Penn (dustin.penn@vetmeduni.ac.at) Konrad Lorenz Institute of Ethology Department of Integrative Biology and Evolution University of Veterinary Medicine, Vienna, Austria http://www.vetmeduni.ac.at/klivv Application deadline: 30 September 2012 Starting date is flexible, but preferably before 1 November 2012.

#### Thank you, Renate Hengsberger

Konrad Lorenz Institute of Ethology Department of Integrative Biology and Evolution University of Veterinary Medicine, Vienna

# $\mathbf{Jobs}$

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## AlbertEinsteinCollege ComputBiol

The Albert Einstein College of Medicine, one of the leading medical schools in New York City, is seeking to fill multiple tenure track faculty positions in the newly formed Department of Systems and Computational Biology. Established in April 2008, the main goal of the new department is to advance our understanding of living systems by developing theoretical, computational and experimental approaches to study complex biological systems.

The College has 750 medical students, 325 graduate students and 360 post-doctoral fellows in training and boasts a strong research faculty covering broad areas of experimental biology, offering outstanding opportunities for collaborative interactions. The 200,000 square foot Center for Genetic and Translational Medicine at Einstein, which opened in late 2007, locates computational, systems and experimental scientists in physical proximity to foster interdisciplinary communication and collaboration. Highly competitive start-up packages are available. We seek outstanding scientists with broad experience and demonstrated collaborative interactions with experimental or clinical investigators. Candidates should have strength in a physical, mathematical or computational field at the Ph.D. or equiv-

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UmeaU TheoreticalEvolution
Uppsala TheorEvolEcol
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alent level. Experience applying these skills to a biological or biomedical area (demonstrated through publications or support) is also required. Areas of interest include, but are not limited to: Modeling cellular processes, such as signaling, transcriptional regulation and immune response; Pathway analysis; Genetic networks; Functional proteomics and genomics; Evolution of structure and function; Computational neuroscience; Mathematical and computational modeling of complex traits and diseases; QM and dynamic approaches to enzymatic catalysis and drug design.

Applicants should send a letter of interest, C.V., statement of research and teaching interests, and names of three referees, in electronic format to:

Systems and Computational Biology Search Committee Albert Einstein College of Medicine Jack and Pearl Resnick Campus 1300 Morris Park Ave. Price Center, Rm. 153 Bronx, New York 10461 E-mail Address: sysbio@einstein.yu.edu

Subject line should be: SCB Faculty Search

Yeshiva University is an equal opportunity employer committed to workforce diversity.

Apply Here: http://sysbio@einstein.yu.edu

Human Resources <mmcder2010@hotmail.com>

## CaliforniaStateU MontereyBay PopGenetics CompBiol

#### JOB ANNOUNCEMENT

The Biology Program within the Division of Science and Environmental Policy at California State University, Monterey Bay is seeking a \*population geneticist with strong computation biology \*skills to fill a tenure track assistant professor position. The applicant should be a dedicated teacher capable of successfully involving undergraduates in research. The successful candidate will work with other faculty to develop undergraduate curricula, professional outreach programs and extramural research or programmatic funding. Additional information of the Division and the Biology program can be found at http://sep.csumb.edu/sep/, the University and its vision at http://about.csumb.edu/visionstatement and our exceptional undergrad research program at http://uroc.csumb.edu/ . RESPONSIBILI-TIES

- Teach upper-division Evolutionary Biology & Population Genetics - Develop and teach upper division Bioinformatics & Systems Biology or a new upper division course in genomic or other computationally intensive branch of biology - Develop and maintain a research program that provides opportunities for undergraduates - Occasionally teach genetics or help with lower division instruction - Contribute to the development of the new university

#### QUALIFICATIONS (MINIMUM)

- PhD in Biology or related field at time of hire -Demonstrated excellence in teaching - Expertise in Population Genetics - Expertise in Computational Biology

#### QUALIFICATIONS (DESIRABLE)

- Research interests that leverage CSUMB's unique location at the interface between land and sea on the Central California coast - Expertise in a computationally intensive field of study such as transcriptomics that can be applied to projects suitable for the undergraduate research environment - A strong background in evolutionary biology - Experience mentoring student research and/or internships - Desire and ability to mentor and teach students from diverse cultural, ethnic, educational and economic backgrounds - A record of writing successful proposals for extramural funding - Experience with course and curriculum development

#### BACKGROUND CHECK

Appointment subject to a criminal background check

SCREENING BEGINS

09/04/2012

APPOINTMENT DATE

Fall 2013

#### FOR MORE INFORMATION

Interested candidates are welcome to contact Dr. Aparna Sreenivasan ( asreenivasan@csumb.edu <hkibak@csumb.edu>) for additional information about CSU Monterey Bay, the Division of Science & Environmental Policy, the Biology program or specific demands of this position.

## APPLY

All prospective applicants must apply online at https://mocha.csumb.edu/uhr/jobs/login\_applicant.jsp. A complete application includes a cover letter, a curriculum vita, a statement about your teaching philosophy and experience, and any other pertinent documentation and/or your website.

The cover letter should address how you meet the responsibilities and minimum qualifications, and any of the desirable qualifications that apply. Your cover letter should also address how your background and experience aligns with, and integrate across existing departmental strengths, such as organismal biology, molecular biology, field biology, and/or applied environmental science. It should also describe how you would contribute to the CSUMB Vision http://about.csumb.edu/visionstatement. Each document/file must be no more than 5MB.Only documents/files with the following extensions can be accepted: Microsoft Word (.docor .docx), Adobe Acrobat (.pdf), Rich Text Format (.rtf) or Plain Text (.txt) files. Upon offer of employment candidate must provide original transcript as evidence of attainment of highest degree.

\*Please do not send hard copy letters of recommendation until requested!\*

DIVISION OF SCIENCE AND ENVIRONMENTAL POLICY

https://sep.csumb.edu BENEFITS http://www.calstate.edu/Benefits/Summaries/-2007\_Faculty-Unit%203.pdf . CAMPUS HOUSING http://csumb.org/cehi/ VISION STATEMENT http://csumb.edu/site/x11547.xml ABOUT CSUMB

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

## ChicagoBotanicGarden ResTech Conservation

Job: Plant Conservation Research Technician & Program Analyst/Coordinator, Conservation and Land Management Internship Program

PURPOSE: This position is a split position, 50% research and 50% administration.

**RESEARCH TECHNICIAN:** The ideal candidate will participate in the collection of data in the lab and field, data analysis and the writing of peer-reviewed scientific papers. Experience in all or any combination of the following is preferred: leading/coordinating fieldwork, population genetics/parentage (microsatellites and/or RAD sequencing), plant reproductive biology and/or pollination biology, entomology (specifically hawkmoths and bees), plant identification, and basic ecological data collection. Research will focus on ongoing projects including the Oenothera, Castilleja, and CARICE Projects and others as they develop. To learn more about these projects, please visit the Skogen Lab website, http:/-/faculty.wcas.northwestern.edu/skogen/index.html

CLM PROGRAM ANALYST/COORDINATOR: Assist with the coordination and analysis of the CLM Internship Program, which hires 80-100 interns annually to assist federal biologists in the western US. Responsibilities include but are not limited to: advertisement & recruitment; organization & evaluation of applications; collection & processing employment paperwork for interns; payroll data collection & reporting; coordination of the training workshop; analyzing CLM Program data and evaluations for monthly, quarterly and annual reports; assisting with the supervision of volunteers, students

#### EvolDir September 1, 2012

or research assistants; others as they develop. For more information on the CLM Program, please visit www.clminternship.org We are looking for someone with a passion for education, research and botany. Proficiency in Microsoft Office is required, knowledge of data management software (Access, etc.), data analysis software (R, Structure, Hickory, MIGRATE, POPGENE, SPAGdDi, TESS, CERVUS, etc.), and experience publishing scientific papers are preferred. Ability to work under harsh conditions (extreme heat/cold, camping for 4+ weeks at a time) is required and experience leading/coordinating fieldwork (team) is preferred. This position requires a high level of attention to detail, strong organizational skills, and the ability to respond calmly to shifting priorities. The ideal candidate will have strong interpersonal skills, will be a self-starter, highly motivated, and able to function successfully within a team structure and independently. Must have excellent verbal, written, and communication skills.

Minimum of Master's degree in ecology, evolution, botany, biology and/or related field. Pay commensurate with experience, starting at \$38,000 annually. Grant funded ' salaried position but continued employment conditional on additional grant funding.

TO APPLY VISIT http://www.chicagobotanic.org/jobs/prog\_coord\_plantcons.php STARTING DATE Fall 2012 or Winter 2013. Open until filled; application review will begin Sept 10, 2012.

Questions? Please contact Krissa Skogen kskogen@chicagobotanic.org

kskogen@chicagobotanic.org

Claremont California SeedConservationManager

http://rsabg.org/employment/731-seed-conservationprogram-manager Seed Conservation Program Manager

Position Title: Seed Conservation Program Manager Reports To: Director of Horticulture Hours: Full Time, 40 Hours Week, Exempt Position

Position Summary

The Seed Conservation Program Manager serves as curator of the seed collections in support of the organizations programs in horticulture, conservation, and research; is responsible for coordinating and directing Seed Conservation Program daily operations; prepares the program operating budget; manages the Garden's Index Seminum Program and is responsible for the distribution of seed as well as plant tissue samples from the Living Collection; develops, coordinates, and/ or conducts seed-related activities and contractual agreements that enhance the organization's role and contribution in conservation, horticulture, and public education; and fosters mutually beneficial cooperative relationships with other botanic institutions, government regulatory and land management agencies, conservation and local community organizations, and private industry.

#### Duties and Responsibilities

Direct, coordinate, and accomplish the cleaning, testing, packaging and storage of all seed collections in accordance with current best practices. Order necessary supplies and schedule necessary repairs and/ or maintenance of Seed Bank equipment. In conjunction with supervisor, prepare and adhere to annual budget. Maintain BG-BASE computer data records and files for all seed accessions. With the assistance of the Plant Records Manager and the Garden's Webmaster, produce annual institutional seed list and publish the Index Seminum on the RSABG webpage. Process requests and distribute seed and tissue samples from the Garden's Seed Bank and Living Collection. Advance a connection between the Seed Conservation Program and retail nursery operations, locating and obtaining wild collected local genotype seed for use in production of retail plants. Train, direct, and oversee organizational volunteers, interns, and students in accomplishing Seed Conservation Program activities. Initiate projects and activities that maintain and/or improve the quality and usefulness of the seed collection and that increase current understanding of seed processing. storage, and germination techniques. Provide advice and assistance on seed-related activities as required by RSABG staff and students. Prepare written proposals and contracts for seed collection, storage, and consulting projects. Is responsible for scheduling, budgeting, monitoring and report writing as required for the implementation of contract agreements. Participates in or leads seed collecting efforts for the living collection, in collaboration with the curator of the living collection and/or Director of Horticulture. Obtain seed from the living collection for use in propagation for plant sales. Present talks, classes, and tours of the Seed Bank facilities. Work cooperatively with other RSABG program managers. Participate in other appropriate RSABG activities as required. Qualifications

Bachelors degree in botany, biology, horticulture, or

related science and/or related practical work experience. Masters degree in seed biology, physiology or ecology preferred. Working knowledge of the California flora, basic taxonomic principles, characteristics of major plant families, and field work experience desirable. Ability to type and basic computer skills essential. Good communication skills and willingness to work cooperatively and collaboratively with other department staff, volunteers, students and associates outside the institution. Physical stamina and agility to conduct field work. Ability to effectively train, supervise, motivate, and coordinate the work of students, volunteers, and interns. Must possess a California State Driver's License. RSABG offers competitive salaries and a comprehensive benefits package.

Qualified candidates please email, fax or mail resume and letter of interest to:

Rancho Santa Ana Botanic Garden Attention: Human Resources 1500 N College Avenue Claremont, CA 91711 Email: acharlap@rsabg.org or Fax: (909) 626-3489

Erin Tripp <etripp@rsabg.org>

## CornellRochester DrosophilaMicrobeEvol

#### TWO POSTDOCTORAL POSITIONS

# MOLECULAR EVOLUTION AND ECOLOGY OF DROSOPHILA-MICROBE INTERACTIONS

# CORNELL UNIVERSITY and UNIVERSITY OF ROCHESTER

Two postdoctoral positions are available from January 2013 with Dr Angela Douglas (Cornell University, USA) and Dr John Jaenike (University of Rochester, USA). The research project funded by NSF Dimensions of Diversity Program will integrate evolutionary genomics and ecological experiments to investigate the significance of mutualistic interactions in promoting the taxonomic and functional diversity of drosophilid flies and their gut microbiota.

The position at Cornell (Ithaca campus) will investigate host phylogenetic patterns in the taxonomic and functional diversity of the gut microbiota, and their responses to ecological perturbations. The experimental approaches will include analysis of 16S rRNA gene amplicon data, bacterial metatranscriptome and fly gut transcriptome data; prior expertise in molecular biology including next-gen sequencing is essential, and experience of insects, bacteriology or symbiotic associations is preferred.

The position at Rochester will be responsible for conducting field and laboratory experiments on the interaction between gut symbionts and the ecology of various species of Drosophila, and will interact with the Cornell group to explore the taxonomic and functional diversity of these microbiotas. Prior experience with experimental studies of insects is necessary, and experience with next-gen molecular methods is desirable.

Applications should be email sent by toAngela Douglas aes326@cornell.edu http://-John www.angeladouglaslab.com/openings or http://-Jaenike john.jaenike@rochester.edu www.rochester.edu/College/BIO/professors/jaenike. Please include a CV, statement of research, and details of three referees. The covering letter should include an explanation of how your qualifications and experience make you a good candidate for this position. Informal inquiries are welcome. To ensure full consideration, all materials should be received by October 31, 2012; however, applications will be accepted until the position(s) are filled.

john.jaenike@rochester.edu

## EastCarolinaU MicrobialEvolEcol

Individuals working at the interface of ecology and evolution are invited to apply for the following position:

#### Microbial Ecologist

The Department of Biology at East Carolina University [http://www.biology.ecu.edu] invites applications for a tenure-track position in Microbial Ecology at Assistant or Associate Professor level (will consider other titles based on degree and qualifications) beginning August 12, 2013. We seek a Microbial Ecologist investigating areas that may include but are not limited to: population dynamics, community structure and interactions (e.g. food-web dynamics, symbioses, etc.), ecosystem processes, and microbial diversity and function. Candidates studying prokaryotes, microscopic eukarvotes, and viruses will receive consideration. The successful candidate should contribute to at least one of the following departmental strengths: Biodiversity, Genomics/Bioinformatics, and Coastal Ecology. Applicants using state-of-the-art technologies such as next

generation sequencing are preferred. The successful candidate is expected to maintain a strong publication record, establish an externally funded research program, expand our microbiology course offerings, mentor undergraduate and graduate students, and contribute appropriate service to the university, community and profession. A track record of engaging with underrepresented groups is desirable. The successful candidate will have access to our research facilities [http:/-/www.ecu.edu/cs-cas/biology/facilities.cfm], which include a Central Environmental Laboratory, Cell Culture Laboratory, Microscopy and Imaging Facility, Genomics Core Facility, Greenhouse and a field station at the West Research Campus. In addition to interactions with Biology faculty, collaborative opportunities exist with the University<sup>1</sup>s Institute for Coastal Science and Policy, Brody School of Medicine, the NC Biotechnology Center, and the Coastal Studies Institute; appointment to ECU<sup>1</sup>s North Carolina Center for Biodiversity is possible.

ECU's application procedure requires online submission at www.jobs.ecu.edu using the position number 934005. Applicants should submit a letter of application, statements of research interests and teaching philosophy, a curriculum vitae, and arrange for three current letters of reference to be sent to: Microbial Ecologist Search Committee Chair, Department of Biology, Mail Stop 551, Howell Science Complex, East Carolina University, Greenville, NC, 27858-4353 or emailed to letsingerj@ecu.edu. A graduate transcript will be required upon employment. Inquiries should be directed to Dr. Anthony Overton, Search Committee Chair,overtona@ecu.edu. Screening of applications will begin on October 1, 2012 and continue until the position is filled.

East Carolina University is an Equal Opportunity/Affirmative Action University that accommodates individuals with disabilities. Individuals requesting accommodation under the Americans with Disabilities Act (ADA) should contact the Department for Disability Support Services at [252] 737-1016 (Voice/TTY). Proper documentation of identity and employability are required at the time of employment.

Jeffrey S. McKinnon, Professor and Chair Dep. of Biology, N108 Howell Science Complex East Carolina University Greenville, NC 27858-4353 Phone 252-328-5258; mckinnonj@ecu.edu http://www.ecu.edu/cscas/biology/mckinnon\_jeff.cfm "McKinnon, Jeffrey" <MCKINNONJ@ecu.edu>

## **FrenchGuiana Bioinformatics**

\*Bioinformatician\*

Starting date : as soon as possible.

Term: November 2014

Salary : 2200 euros / month

Location : Cayenne (French Guiana)

Institution : Institut Pasteur de la Guyane

Laboratory : Virus-Host interactions

Address: Institut Pasteur de la Guyane, BP6010, 97306 Cayenne cedex (French Guiana)

\*Job description and working environment\*

The Institut Pasteur de la Guyane (IPG) is recruiting a bioinformatician for a maximum 26-month period, depending on starting date, to work on the EU-funded STRonGer project (http://www.pasteur-cayenne.fr/stronger) which aims to conduct research on emerging and infectious diseases in French Guiana. The position can start as soon as possible and will remain open until filled. The post-holder will be under the supervision of the Virus-Host Interactions laboratory (LIVH). He/She will work closely with researchers, PhD students and post-doctoral fellows at the LIVH and the Parasitology laboratory. These teams undertake pluridisciplinary research (ecology, population genetics, evolution and resistance to therapeutics) on infectious and emerging diseases from viral (rabies, hantavirus in wild mammals) and parasitic origins (/Plasmodium/ in humans). He/She will also work in close collaboration with the sequencing platform and the bioinformatics service at the Institut Pasteur de Paris.

#### \*Objectives\*

The applicant will be responsible for the management and analysis of high-throughput sequencing data generated within the context of two projects at the IPG:

-Viral Biodiversity Project (LIVH lab): he/she will be involved in the analysis of high-throughput sequencing data to characterize the viruses found in three bat species. He/she will undertake basal treatment of raw sequences (validation, cleaning, assembling) and comparison to those already available in databases. He/She will work in close collaboration with lab members.

-Malaria Resistance Project (Parasitology lab): he/she

will participate in the comparative analysis of 20 Plasmodium genomes (genomic diversity, population analysis, SNPs calling) of isolates from French Guiana with the aim to find new genetic markers of antimalarial resistance. In close collaboration with lab researchers, a particular attention will be paid to the validation and expertise of the results.

\*Requirements\*

-Master's degree or equivalent

-Proven experience in the treatment of NGS data

-Good knowledge of Unix environment.

-Practical knowledge of Perl, Python ...

-Good knowledge of public databases and bioinformatics tools

-Ability to understand biological issues and capacity to propose bioinformatics solutions.

-Communication skills, team working

-Ability to work autonomously, organizational skills\*\*

-Fluent in English. French will be a plus.

\*Please send a CV and a cover letter to the project manager:\*

Angelina Azanza, aazanza@pasteur-cayenne.fr

## HarvardU EvolutionHumanBehavior

Title: Open-Rank Professorships in the Evolutionary Biology of Human Behavior

School: Faculty of Arts and Sciences, Harvard University

The Department of Human Evolutionary Biology at Harvard University is seeking to make up to two fulltime tenure-track or tenured appointments in behavioral biology. This area includes but is not limited to human behavioral ecology and non-human primate behavior. Applicants interests should be explicitly related to human evolution. We seek candidates who will complement the current strengths of the program, particularly those whose interests in behavior extend to cognition, ecology, genetics, or physiology. The appointment could begin as early as July 1, 2013.

Keywords: assistant, associate, faculty, instructor, tenure track, tenure, professor, Boston, Cambridge, Massachusetts, MA, Northeast, New England, behavioral ecology, cognition, cultural adaptation, primatology, human behavior, social evolution, socioendocrinology, behavioral demography

Basic Qualifications: Ph.D. required by expected start date.

Additional Qualifications: The Department administers a large and successful undergraduate concentration in Human Evolutionary Biology, hence excellence in undergraduate teaching is a priority. A strong research program, including the ability to offer graduate courses, is also expected. Our Doctoral program stresses integration of laboratory and field research and the cooperative training and mentoring of Ph.D. candidates.

Special Instructions: For tenure-track appointment, please go to http://academicpositions.harvard.edu/postings/4232 to apply. For tenured appointment, please go to http://academicpositions.harvard.edu/postings/4231 to apply. Please submit application no later than October 1, 2012.

Letters of nomination from third parties are also welcome.

Harvard is an Equal Opportunity/Affirmative Action employer. Applications from women and minorities are strongly encouraged.

Contact Information: Address enquiries to Professor Richard Wrangham, Search Committee Chair, Department of Human Evolutionary Biology, Harvard University, 11 Divinity Avenue, Cambridge, MA 02138 USA, or by e-mail to Meg Lynch (mlynch@fas.harvard.edu)

"Lynch, Margaret" <mlynch@fas.harvard.edu>

### HarveyMuddC ComputationalBiol

Harvey Mudd College invites applications for a tenuretrack faculty position at the rank of Assistant Professor, beginning fall 2013. We are seeking candidates with research expertise in the broad area of quantitative biology, and who have a range of interests in biology, including integrating computational and/or mathematical approaches in the life sciences. Possible areas of expertise include, but are not restricted to, systems biology, computational biology, mathematical modeling, synthetic biology, landscape ecology, climate-change biology and other fields that use modern quantitative approaches in biology.

education and are dedicated to becoming an excellent undergraduate teacher. Among the criteria for appointment are experience with students from diverse backgrounds and/or the ability to teach those students effectively. The successful candidate will be expected to actively participate in teaching our mathematical and computational biology major (including introductory biology and computational science, non-majors electives, and advanced courses appropriate to the person's expertise). The successful candidate will develop a vigorous independent, externally funded research program that will involve undergraduate students and will complement existing faculty research areas (http://www.hmc.edu/bio).

Harvey Mudd College is a small and highly selective private undergraduate college of science, mathematics, and engineering. In their first two years, all Harvey Mudd students complete a core curriculum comprising courses in biology, chemistry, computer science, engineering, mathematics, and physics, as well as the humanities, social sciences and arts. Harvey Mudd is a member of the Claremont University Consortium (http://www.claremont.edu), which includes four other undergraduate colleges and two graduate institutions. Claremont is about 30 miles east of downtown Los Angeles.

A Ph.D. is required and postdoctoral research experience is highly desirable. Applicants should send a cover letter, curriculum vitae, a 2-page statement of teaching experience and interests, and a 2-page statement of externally-fundable research plans as PDF files to https://academicjobsonline.org/ajo/jobs/1588. Review of applications will begin September 15, 2012. For further information contact: Associate Professor Robert A. Drewell (drewell@g.hmc.edu). Harvey Mudd College is an equal opportunity employer and is committed to the recruitment of candidates historically underrepresented on college faculties.

Daniel Stoebel Assistant Professor of Biology Harvey Mudd College 301 Platt Blvd. Claremont, CA 91711 USA

Daniel\_Stoebel@hmc.edu 909.607.1141

stoebel@g.hmc.edu

**IBED UAmsterdam 5 Biodiversity** 

We seek candidates who have a significant interest in The Institute for Biodiversity and Ecosystem Dynam-

ics (IBED) is one of eight research institutes of the Faculty of Science at the University of Amsterdam. IBED's mission is to increase our understanding of the diversity and dynamics of ecosystems from the level of genes to entire ecosystems.

Key to IBED's success is the group of top scientists that collaborate with (international) colleagues on many important questions in the field. They benefit from the range of expertise present in the institute and the truly excellent facilities at Science Park Amsterdam. To further strengthen IBED's research we are currently seeking five scientists that share our passion for the study of biodiversity and ecosystem dynamics, and can convey their enthusiasm to a broad range of students. This includes the following position:

Associate or Full Professor in Evolutionary Biology Evolutionary research at the University of Amsterdam has a long tradition, with chairs in Evolutionary Biology (mostly studying animals), in Experimental Plant Systematics, in Population Biology and several other groups working at the interface of (geo-)ecology and evolution. Due to the upcoming retirement of the chair holder IBED intends to fill a vacancy for an Associate or Full Professor in Evolutionary Biology.

Evolution is without doubt the unifying theory in biology. The major goals of evolutionary biology are to reveal the history of life on Earth and to understand the fundamental processes responsible for the biodiversity that we see today. We welcome candidates that can introduce their own vigorous research line to IBED, and are excited to be able to collaborate with colleagues from different disciplines on IBED's main mission: understanding how organisms interact with each other and their environment, and its consequences for adaptive processes at the different levels of biological organization: genes, populations, and species.

More information For more information about this or one of the other four positions, or for more details about the institute, its facilities and the application procedure please visit: http://www.science.uva.nl/IBED If you have specific questions send an e-mail to: jobsibed@uva.nl

Closing date for applications is 17 September 2012

#### Boris Jansen

University of Amsterdam Institute for Biodiversity and Ecosystem Dynamics (IBED) Dr. Boris Jansen Science Officer P.O.Box 94240 | 1090 GE Amsterdam Science Park 904 | 1098 XH Amsterdam The Netherlands T +31- 20 525 7444 | F +31 - 20 525 7832 http:/-/home.medewerker.uva.nl/b.jansen "Jansen, Boris" <B.Jansen@uva.nl>

## **IBED UAmsterdam PlantEvolution**

The Institute for Biodiversity and Ecosystem Dynamics (IBED) is one of eight research institutes of the Faculty of Science at the University of Amsterdam. IBED's mission is to increase our understanding of the diversity and dynamics of ecosystems from the level of genes to entire ecosystems.

Key to IBED's success is the group of top scientists that collaborate with (international) colleagues on many important questions in the field. They benefit from the range of expertise present in the institute and the truly excellent facilities at Science Park Amsterdam. To further strengthen IBED's research we are currently seeking five scientists that share our passion for the study of biodiversity and ecosystem dynamics, and can convey their enthusiasm to a broad range of students. This includes the following position:

Assistant or Associate Professor in Plant evolution and diversity

Research on the origins of diversity in plants at the University of Amsterdam has a rich history, going back to the work of Hugo de Vries. Within IBED's research theme Biodiversity and Evolution there is a vacancy in the group Experimental Plant Systematics for an Assistant or Associate Professor in Plant evolution and diversity.

The main focus of this field is to understand the processes that generate and maintain plant diversity among and within species. We are looking for an evolutionary ecologist with an excellent track record in studying plant evolution and adaptations to environmental conditions, using experiments under controlled or natural conditions and/or analyses of genetic and distribution data.

More information For more information about this or one of the other four positions, or for more details about the institute, its facilities and the application procedure please visit: http://www.science.uva.nl/IBED If you have specific questions send an e-mail to: jobsibed@uva.nl

Closing date for applications is 17 September 2012

"Jansen, Boris" <B.Jansen@uva.nl>

## IPK Germany PlantDomestication GroupLeader

Evolutionary Geneticist as Leader (f/m) of a Junior Research Group

The Institute of Plant Genetics and Crop Plant Research (IPK Gatersleben) in close cooperation with the newly founded German Biodiversity Research Centre (iDiv Leipzig) seeks to fill the position of the leader of a junior research group on plant domestication, preferentially working in Apiaceae.

For details regarding this position refer to the webpages www,ipk-gatersleben.de or www.idiv-biodiversity.de . Deadline is 15th September 2012

blattner@ipk-gatersleben.de

#### IllinoisStateU DiseaseEvolution

#### Job Announcement

\*ASSISTANT PROFESSOR of INFECTIOUS DIS-EASE ECOLOGY/EVOLUTION.\*The School of Biological Sciences at Illinois State University in Normal, IL (www.bio.illinoisstate.edu) invites applications for a tenure-track position as Assistant Professor in the area of Ecology/Evolution of Infectious Disease. The successful applicant should be engaged in research investigating principles of transmission dynamics of infectious disease in natural systems, including ecological or evolutionary processes and impacts. Requirements include a Ph.D., or equivalent, postdoctoral research experience, potential to secure external funding, and an interest in working within a diverse intellectual community. We seek a colleague with the potential to develop collaborations with current faculty investigating vector ecology, ecoimmunology, biomathematics, conservation, or microbiology. The successful applicant will be expected to develop an independent externally funded research program, to mentor graduate and undergraduate research students, and to teach graduate and undergraduate courses.Salary is commensurate with qualifications and experience. The School of Biological Sciences at Illinois State University is home to about 60

M.S. and Ph.D. students and over 500 undergraduate majors. To apply, send: a descriptive cover letter, CV, a 1-2 page statement of future research goals, and contact information for 3 references (as a single pdf); and up to 3 representative reprints (as separate pdfs) to Dr. Steven Juliano, c/o Sally Little via:salitt2@ilstu.edu. Review of applications will begin on November 1, 2012 and continue until the position is filled. Intended start date: August 16, 2013.

Illinois State University is an Equal Opportunity University encouraging diversity.

– Diane L. Byers Associate Professor in Evolutionary Ecology Behavior, Ecology, Evolution, and Systematics Section School of Biological Sciences Campus Box 4120 Illinois State University Normal, IL 61790 phone 309-438-8167 fax 309-438-3722 e-mail dlbyer2@ilstu.edu http://www.bio.ilstu.edu/dlbyer2/ dlbyer2@ilstu.edu

## LehighU EvolutionaryMicrobiology

Microbiologist

Tenure-Track Assistant Professor

Department of Biological Sciences

Lehigh University

Microbiologists with a Ph.D., postdoctoral experience, the ability to establish an exemplary externally funded research program, and a commitment to excellence in undergraduate and graduate instruction are invited to apply. The successful applicant will be from any area of microbiology, broadly defined, and will have the opportunity to influence the development of a university-wide health initiative, contribute to a multidisciplinary, collaborative research environment, and enhance existing departmental strengths that include molecular biology, cell biology, and biochemistry. Successful candidates will be expected to participate in our Ph.D. program in Cell and Molecular Biology. Candidates whose research programs additionally relate to Evolutionary Biology are particularly encouraged to apply. The College of Arts & Sciences at Lehigh is especially interested in qualified candidates who can contribute, through their research, teaching, and/or service, to the diversity and exc ellence of the academic community.

Applicants, please submit your curriculum vita, representative publications, a statement of research and teaching interests, and three letters of reference to https://academicjobsonline.org/ajo/jobs/1710 . For additional information contact Dr. Kathy Iovine, Chair Microbiology Search Committee, 111 Research Drive, Bethlehem, PA 18015, inbios@lehigh.edu.

For more information about the department please see: www.lehigh.edu/~inbios. The deadline for submission is October 10, 2012.

Lehigh University is an Equal Opportunity Affirmative Action Employer. Lehigh University provides comprehensive benefits including partner benefits. Lehigh University is a recipient of an NSF ADVANCE Institutional Transformation award for promoting the careers of women in academic sciences and engineering.

amber.rice@lehigh.edu

## MichiganStateU LabTech PlantEvolution

Michigan State University Lab Tech: Plant Biology

The Schemske lab (Department of Plant Biology) is seeking a full time lab technician for a research project investigating adaptation in the model plant Arabidopsis thaliana. Primary duties include 1) plant breeding (to produce hybrid seeds), 2) supervision of undergraduate assistants, and 3) implementation of greenhouse and growth chamber experiments. Experience with molecular methods is preferred but is not required.

This is initially a 9-month (starting September 2012) full time position (no benefits) with the possibility of extension. Salary will be commensurate with experience. A bachelor's degree is required and a background in biology is preferred.

Applicants should include a cover letter describing previous experience, a resume, and the names and contact information of two references. Review of applications will begin August 14, 2012 and will continue until the position is filled. Applications should be sent to: coakley@msu.edu

#### COAKLEY@MSU.EDU

## **Munich StatisticalGenetics**

The Statistical Genetics group in the evolutionary biology section of the Ludwig-Maximilians-Universitaet Muenchen (Munich, Germany) offers an

Assistant Position (Akademischer Rat/Akademische Raetin, A13, auf Zeit)

as from December 2012. Applicants should should provide expertise in one or more of the following fields: theoretical population genetics, evolutionary bioinformatics, stochastic processes with applications in evolutionary biology or ecology, quantitative genetics, or MCMC and other methods to analyze data in complex models. The assistant will be involved in the research projects of our group, which are mainly focussed on the development of mathematical models and methods for the statistical data analysis in population genetics, evolutionary ecology and phylogenetics. He or she will have to teach 5 hours per week. Prerequisites for the application are a doctoral degree in Mathematics, Statistics, Bioinformatics, Biology or a related field. Of advantage is experience in teaching in English and German, in the analysis of biological data (preferably in R), in interdisciplinary projects, in programming (preferably in C/C++), and in fundraising.

The position will be assigned for 3 years with the possibility of an extension by 3 more years.

The University of Munich is interested in increasing the number of female employees and encourages women to apply. The university is an equal opportunity employer and handicapped candidates with equal qualifications will be given preference.

Please send your application documents until September 23, 2012 to metzler@bio.lmu.de See also http:/-/www.uni-muenchen.de/aktuelles/stellenangebote/wissenschaft/20120821135330.html Prof. Dr. Dirk Metzler Biozentrum der LMU Department Biologie II Großhaderner Str. 2 82152 Planegg-Martinsried metzler@bio.lmu.de, http://evol.bio.lmu.de/\_statgen/ metzler@bio.lmu.de

## **PrincetonU MolEvolution**

#### ASSISTANT PROFESSORSHIP

#### MOLECULAR EVOLUTION

Princeton University's Departments of Ecology and Evolutionary Biology and of Molecular Biology jointly plan to hire one individual at the level of tenuretrack Assistant Professor, with a focus on molecular evolution. We seek an individual who would have strong connections in both departments. Sample areas might include, but are not limited to, microbial evolution, experimental evolution, epigenetics, metagenomics, and/or the evolution of development, using traditional and/or emerging model systems. We seek applicants who pursue experimental research that aims for significant conceptual and empirical integration across traditional disciplinary boundaries and who have a strong commitment to teaching.

Applicants should write a vision statement, no longer than 2 pages, that outlines one or more major unsolved problems in their field and how they plan to address them. The vision statement must be more than a précis of the applicant's prior and current research. Applications, including the vision statement, curriculum vitae, three reprints and contact information for three references, can be submitted online via http:/-/jobs.princeton.edu, to Req #1200524. Screening of applications will begin 1 October 2012.

Princeton University is an equal opportunity employer and complies with applicable EEO and affirmative action regulations.

Laura Landweber <lfl@princeton.edu>

QueenMaryULondon 6 EvolutionaryBiol

\*- Six academic positions in evolutionary biology and ecology -

School of Biological and Chemical Sciences, Queen Mary, University of London, London, UK

The School aims to recruit at least one professor and up to five posts at lecturer/senior lecturer/reader level in evolutionary biology and ecology The evolutionary geneticists group encourages applications from strong candidates working in our areas of interest (http://evolve.sbcs.qmul.ac.uk/)

For further details of the application procedure, see: https://ig24.i-grasp.com/fe/tpl\_QMUL01.asp?newms=jj&id=59225 \*\*Job reference QMUL0978\* \*Deadline 14th August 2012

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

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

## RoyalBotanicGarden Edinburgh 2 Biodiversity

Royal Botanic Garden Edinburgh (RBGE) Biodiversity Scientist (two vacancies) Permanent, full-time based in Edinburgh Salary range £24,543 to £31,815 with appointment dependent on experience

We have an exciting opportunity to appoint two permanent Biodiversity Scientists. We are seeking candidates who can demonstrate they have excellent potential as future research leaders and who make a persuasive case that they will develop a research programme that is complementary to, and supportive of, our science.

Specifically, the successful candidate(s) will develop a research programme, undertake research, write papers/publications, prepare funding proposals, and undertake supervision of MSc and PhD students as required. The successful candidate will also make a contribution towards teaching on our MSc course.

Applicants must be educated to PhD level (with PhD already obtained or about to be obtained) in a biodiversity science related discipline. You should be an excellent researcher with a proven track record appropriate for your career stage, and have strong scientific writing ability. You'll also need to be an effective communicator with the ability to clearly articulate the relevance of your research to both specialist and non-specialist audiences, and good interpersonal skills will be essential to develop and maintain effective relationships with colleagues.

In addition to the above, you should have experience in a specialised area of biodiversity science, be able to place your work programme into the broader context of RBGE's science and the more general landscape of biodiversity science, and understand key questions and challenges in one or more of the following fields: taxonomy, conservation, ecology, evolution and/or general biodiversity science.

Full details of the post, including a job description and person specification can be downloaded from our website at www.rbge.org.uk/about-us/vacancies. Further details of RBGE's science can be obtained from www.rbge.org.uk/science. Candidates are encouraged to look at the web-pages of the different science sections and also the RBGE biodiversity strategy in developing their applications (www.rbge.org.uk/assets/-
files/science/Science\_Strategy\_summary.pdf). Informal enquiries or questions with regards to these posts should be sent to Nicole McGregor on n.mcgregor@rbge.org.uk.

Interested applicants should send a CV and covering letter, outlining the skills and experience they could bring to the post, as well as a completed equal opportunities form to Nicole McGregor in our HR team at 20a Inverleith Row, Edinburgh EH3 5LR or n.mcgregor@rbge.org.uk by close of business on Friday, 7 September 2012.

If you have not heard from us by the 5 October, please assume that your application has not been shortlisted. No recruitment agencies please.

R.Yahr@rbge.ac.uk

#### StanfordU Programmer

A scientific programmer position is available in the Department of Genetics, at Stanford University. My group works on a variety of organisms and model systems ranging from humans and other primates to domesticated plant and animals. Much of our research is at the interface of computational biology, mathematical genetics, and evolutionary genomics.

I am looking for someone with experience in nextgeneration sequence analysis, scientific programming, and cloud computing. Knowledge of C/C++ is a must. If interested, please send me your C.V. in PDF format. The position is available immediately.

#### Carlos

Carlos D. Bustamante, Professor Department of Genetics Stanford School of Medicine 300 Pasteur Drive Lane Building, Room L-301 Stanford, CA 94305-5120
Phone: +1-650-723-6330 Fax: +1-650-723-3667 http://www.bustamantelab.org/ cdbustam@stanford.edu

"Carlos D. Bustamante" <cdbustam@stanford.edu>

## **UBirmingham 4 EvolutionaryBiol**

Four Lectureships / Senior Lectureships, plus Birmingham Fellowships School of Biosciences, University of

#### Birmingham

We invite applicants as part of a major investment by the University of Birmingham into Environmental Systems Biology. This interdisciplinary initiative builds on existing strengths in environmental genomics, metabolomics, organism physiology, computational biology and evolutionary ecology to understand moleculeenvironment interactions in the context of individual fitness and population-level responses to a changing environment.

We are interested in knowing how natural populations respond to environmental challenges that are driven by pollution and climate change, across rapid, seasonal and evolutionary timescales, with a particular focus on the keystone freshwater species and NIH model organism Daphnia. We aim for a deep mechanistic understanding of acclimation and adaptive processes in light of the organism's biology and ecological interactions, facilitated in part through computational biology. Our research leverages state-of-the-art âomics and computational facilities, including the national NERC metabolomics facility and the newly announced Joint BGI-Birmingham Environment and Health Initiative in genomics and metabolomics (see press release: http:/-/www.genomics.cn/en/news/show\_news?nid=99162)

We seek applicants for four Lectureships / Senior Lectureships who are building international reputations for research and innovation, and who will complement and enhance this Environmental Systems Biology enterprise, enter into interdisciplinary research collaborations, as well as contribute to the School's teaching portfolio. While exceptional individuals from all relevant disciplines are encouraged to apply, we particularly seek applicants in these four areas:

1. Molecular Ecotoxicology - for example to investigate the molecular responses of organisms to complex environmental exposures, at the genetic, epigenetic, metabolic or physiological levels. 2. Molecular Animal Physiology - for example to investigate the mechanistic basis of phenotypic plasticity; to determine how energy and metabolic homeostasis is maintained in fluctuating environments: to examine the mechanistic links between physiological stress tolerance and genetic adaptation. 3. Chemical Ecology - for example to extend metabolomics from intra- organism studies to investigating the production and subsequent response to chemical signalling molecules in the environment; to discover how environmental challenges may impact on organism- organism chemical communication. 4. Computational Biology - for example to utilize network biology to investigate the mechanistic basis underlying genomic, metabolomic, physiological and environmental interactions; to conduct genome-wide metabolic reconstructions or genome/metabolome-wide association studies, all within the context of organismal responses to environmental stress.

Post reference: 47513 ţ37,012 - Å£68,725 (Lecturer salary from Å£37,012 - Å£44,166 a year with potential progression (to Å£49,689 a year)). (Senior Lecturer/Reader salary from Å£45,486 - Å£52,706 a year with potential progression (to Å£68,725 a year)). Closing Date: 28 September 2012

In addition, as part of a University-wide scheme, we also seek applicants for 5-year Birmingham Fellowships in two (of 23) priority areas: 1. Sensing Environmental Stress 2. Mathematics, Biostatistics and Modelling in the Life and Environmental Sciences

See http://www.birmingham.ac.uk/staff/excellence/fellows/index.aspx for further details and the separate closing date.

For informal enquiries about any of these positions please contact Professor John Colbourne (J.K.Colbourne at bham.ac.uk), or Professor Mark Viant on 0121 414 2219 or M.Viant at bham.ac.uk

To download the details of these positions and submit an electronic application online visit: www.hr.bham.ac.uk/jobs Alternatively information can be obtained from 0121 415 9000

John Kenneth Colbourne School of Biosciences, The University of Birmingham Birmingham, B15 2TT, United Kingdom

Mount Desert Island Biological Laboratory Old Bar Harbor Rd., Salisbury Cove, ME 04672 MDIBL http://www.mdibl.org Daphnia Genomics Consortium - http://daphnia.cgb.indiana.edu John Colbourne <j.k.colbourne@bham.ac.uk>

# UBritishColumbia ResAssist Bioinformatics

Job Summary Will provide bioinformatic support for a large scale genomics project. The primary focus of this research is to generate a reference genome sequence for sunflowers using next generation sequencing technology, and to make this data and related resources publicly available.

Organizational Status The incumbent will report to the PI, Dr. Loren Rieseberg. Will work together with and

provide technical assistance to other members of the research group including post-doctoral fellows and graduate students. For Administrative matters reports to the Botany Administrative Manager.

Work Performed -Developing and running bioinformatic programs and scripts on Linux -Using BLAST to annotate and confirm genes -organizing large data sets for evolutionary studies -Bioinformatic analysis using BWA and SAMtools -Submitting sequences to NCBI and other public data repositories -Distributing data to collaborators as needed -Website development -Hardware maintenance -Other related tasks in support of the research project

Supervision Received Receives instructions during orientation, thereafter on new assignments or changes in procedures. Work is subject to check by the Principle Investigator (PI). Errors and incorrect decisions would be followed up by further training.

Supervision Given The position has no supervisory responsibilities.

Consequence of Error/Judgement Work will be clearly defined and tasks and duties will require following a protocol already in place; however, there is room for innovative thinking to improve upon existing protocols and provide input into the direction of the project. In most cases errors would require repeating the procedure.

Qualifications High School graduation. Undergraduate degree in Biology or Computer Science preferred. Minimum of 2 years related experience or the equivalent combination of education and experience. 2 years relevant experience with bioinformatic tools required. Completion of courses in evolutionary biology, statistics, molecular 2 years relevant experience with bioinformatic tools required. Proficiency with any of the following is required: Python, Perl, Haskell, C++, Java, and bash. Completion of courses in evolutionary biology, statistics, molecular biology and computer science an asset. Ability to troubleshoot; Ability to exercise initiative, tact and discretion; Ability to participate in and contribute to a multidisciplinary team; A high degree of motivation, enthusiasm and initiative; Strong problem solving and decision making skills; Ability to prioritize workload and meet deadlines; Attentive to detail, with the ability to work quickly and accurately; Ability to learn new software. UBC hires on the basis of merit and is committed to employment equity. All qualified persons are encouraged to apply. We especially welcome applications from members of visible minority groups, women, Aboriginal persons, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to engage productively with diverse communities. Canadians and permanent residents of Canada will be given priority.

Job Posting Job ID: 13341 (Repost) Location: Vancouver - Point Grey Campus Employment Group: CUPE 116(Service/Techs/Trades) Job Category: Research/Technical - CUPE 116 Classification Title: Research Asst/Tech 2 Business Title: Research Asst/Tech 2 Department: Botany Salary: \$38,928.00 (Annual) Full/Part Time: Full-Time Desired Start Date: 2012/08/27 Job End Date: 2013/07/31 Possibility of Extension: Yes

Funding Type: Grant Funded Closing Date: 2012/08/20 Apply here: http://www.hr.ubc.ca/-careers-postings/staff.php (job ID: 13341)

Sebastien Renaut <srenaut@interchange.ubc.ca>

sebastien.renaut@gmail.com

# UCalifornia LosAngeles TeachingEvolBiol

Life Sciences Open Rank Tenure Track Faculty Position Job Announcement University of California Los Angeles

The Division of Life Sciences in the UCLA College of Letters and Sciences announces the continuance of its special initiative to recruit excellent research scientists with a history and commitment to the mentorship of students from underrepresented and underserved populations. Candidates should have outstanding records of scholarly publications, research support, and teaching and be eligible for Academic Senate appointment in any of our departments of Life Sciences (www.lifesciences.ucla.edu), including psychology. The successful candidate will be expected to mentor undergraduates and to participate in campus-wide and departmental programs that provide research and professional development opportunities for our diverse student body, including MARC, (Minority Access to Research Careers), PEERS (Program for Excellence in Education & Research in Sciences), and the Biomedical Research Minor. Teaching assignments will take into account mentorship activities associated with the position. Faculty appointment will be made at a professorial rank commensurate with current academic standing and achievement. UCLA offers competitive salaries, research set-up funds, and recruitment allowances.

Nominations and questions should be sent to: Professor Paul Barber (paulbarber@ucla.edu) or Professor Anna Lau (alau@psych.ucla.edu). Application packages should be submitted online through [www.ibp.ucla.edu/mentorship] and include the following: 1) curriculum vita; 2) statement of research interests; 3) statement of teaching interests that includes information on formal and informal mentorship activities targeting underrepresented and underserved populations; and 4) cover letter that includes names of referees that can be contacted for letters. Review of applications will begin on 1 November 2012, and continue until positions are filled. Please use position number 0845-1213-01 in all correspondence.

UCLA is California's largest university, with an enrollment of nearly 38,000 undergraduate and graduate students. The UCLA College of Letters and Science and the university's 11 professional schools feature renowned faculty and offer more than 323 degree programs and majors. The Biosciences area at UCLA has more than 300 faculty members, includes many top ten ranked departments, and is consistently in the top ten in NIH funding. The UCLA College has a tradition of outstanding teaching and mentorship of undergraduates that the Division of Life Sciences will enhance through this special initiative. As a campus with a diverse student body, we encourage applications from women, minorities, and individuals with a history of mentoring under-represented minorities in the sciences. UCLA is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of faculty and staff diversity.

Dr. Paul H. Barber Department of Ecology and Evolutionary Biology Room 2145 Terasaki Life Science Building 610 Charles E. Young Dr. East University of California Los Angeles Los Angeles, CA 90095-7239 Phone: 310-794-5349 Fax: 310-206-3987 http://www.eeb.ucla.edu/Faculty/Barber The Diversity Project: http://www.eeb.ucla.edu/Faculty/-Barber/Intro.htm Coral Triangle PIRE Project: http://sci.odu.edu/impa/ctpire.html PEERS: http:// /www.ugeducation.ucla.edu/urc-care/progpeers.htm Paul Barber <paulbarber@ucla.edu>

#### UCambridge DrosophilaMolBioTech

We wish to appoint a research technician to join Dr Frank Jiggins' group here in the Department of Genetics, University of Cambridge. The post holder will work closely with two postdoctoral researchers on an ERC funded project led by Dr Jiggins, on a specific project looking at the genetics and evolution of insects (Drosophila) and their viral pathogens. Details of the research in the lab can be found at: http://www.gen.cam.ac.uk/research/Jiggins/index.html The work will involve both working with Drosophila (maintenance, rearing, helping with experiments) and molecular biology (RNA extractions, RT-PCR, quantitative PCR), as well as day-to-day organisation of the lab (ordering, lab up-keep etc). Experience of working with insects and of basic molecular biology would be an advantage, and previous research laboratory experience is required.

For more details and to apply see: http://www.jobs.cam.ac.uk/job/528 Closing Date for applications - 31 August 2012

bjl48@hermes.cam.ac.uk

# UCambridge ResAssist EvolutionaryEcol

# RESEARCH ASSISTANT IN EVOLUTIONARY ECOLOGY

A research assistant position is available to work with Dr Rebecca Kilner in the Department of Zoology at the University of Cambridge. The post is funded by the ERC.

The research assistant will work on a project investigating whether parental care can drive evolutionary change. Variation in the extent of parental care received during development induces considerable phenotypic variation in subsequent adult life. The aim of this project is to determine whether selection can act on such developmentally induced plasticity and thereby cause evolutionary change. We shall focus on burying beetles Nicrophorus spp as our model experimental system because we know from previous work that parent beetles establish developmental conditions for their offspring that have a profound effect on morphological, behavioural and social traits subsequently shown in adulthood. The successful candidate will divide their time between running large-scale experiments in the lab (including selection experiments) at the Department of Zoology and carrying out fieldwork at sites around Cambridgeshire.

We are seeking a highly motivated, enthusiastic researcher with at least a BSc in biological sciences (an MPhil would be an advantage) and with a background in evolutionary biology. Previous experience working with insects or selection experiments would be an advantage. A driving licence is essential.

The post is available for up to five years, with a probable start date of 1 November 2012. The starting salary is £23,811 - £26,779 per annum. The post is currently advertised on the website of the Zoology, Cambridge website (www.zoo.cam.ac.uk under 'job opportunities') where further information about the position can be found, as well as details about how to apply.

Informal enquiries are welcomed and should be sent to Rebecca Kilner at rmk1002@cam.ac.uk

"R.M. Kilner" <rmk1002@hermes.cam.ac.uk>

# UColoradoBoulder 2 EvolutionaryBiol

Two Assistant Professorships in Evolutionary Biology, University of Colorado-Boulder The University of Colorado and the Department of Ecology and Evolutionary Biology invite applications for two tenure-track positions at the assistant professor level in evolutionary biology. The successful candidate will have an outstanding research program addressing evolutionary questions at anylevel of biological organization and a commitment to excellence in teaching. Applicants should assemble a cover letter, a curriculum vitae, statements of research interests and teaching philosophy, and the names and addresses of three persons who are qualified to evaluate your potential for success in research and teaching. Application materials are accepted electronically at https://www.jobsatcu.com. Review of applications will begin on October 5, 2012. Contact Dr. Andrew Martin with questions: and rew.martin-1@colorado.edu. The University of Colorado is an Equal Opportunity Employer committed to building a diverse workforce. We encourage applications from women, racial and ethnic minorities, individuals with disabilities and veterans. Alternative formats of this ad can be provided upon request for individuals with disabilities by contacting the ADA Coordinator at: hr-ada@colorado.edu

Dr. Rebecca J. Safran, Assistant Professor Department of Ecology and Evolutionary Biology N395 Ramaley Hall University of Colorado, Boulder UCB 334 Boulder, Colorado 80309

Phone: 303-735-1495 E-mail: rebecca.safran@colorado.edu http://www.colorado.edu/eeb/facultysites/safran/Home.html Rebecca J Safran <rebecca.safran@colorado.edu>

### **UHawaii Chair Biology**

Dear Colleagues,

The University of Hawaii is looking for a Chair of Biology. We would love to get applicants with an evolutionary focus.

FULL PROFESSOR and CHAIR Department of Biology University of Hawai'i

The Department of Biology at the flagship Manoa campus of the University of Hawai'i seeks a senior colleague with a world class research program and the ability to lead the department to a new level of international achievement during a major phase of growth aimed at building strength in evolutionary biology. We are particularly interested in individuals with the vision to build research strengths that will capitalize on Hawai'i's unique evolutionary legacy and position as the US gateway to the Pacific Rim, as well as individuals who can foster and promote successful collaborative groups across diverse research fields (see http://www.hawaii.edu/biology).

The department is undergoing a phase of substantial investment in human resources and will occupy a newly renovated teaching and research building in 2013. The department trains over 1000 undergraduate majors and offers a graduate program with an enrollment of approximately 100 students. Furthermore, the department is a major contributor to an intercollege graduate degree program in Marine Biology and to a graduate specialization in Ecology, Evolution and Conservation biology.

To apply, please send pdf-formatted documents that include a vision statement for the chair's leadership role in the growth of the department, statements of teaching philosophy/experience and future research directions, CV, three publications, and letters of recommendation from three referees to biochair@hawaii.edu. For a complete job announcement, please refer to: http://workatuh.hawaii.edu.

Review of applications will begin October 1, 2012 and will continue until the position is filled. Direct inquiries

to Gert de Couet at biochair@hawaii.edu or 808-956-9686. The University of Hawai'i is an Equal Opportunity/Affirmative Action Institution and encourages applications from women and minority candidates.

Marguerite A. Butler Associate Professor

Department of Biology University of Hawaii 2450 Campus Rd., Dean Hall Rm. 2 Honolulu, HI 96822

Office: 808-956-4713 Dept: 808-956-8617 Lab: 808-956-5867 FAX: 808-956-9812 http://www.hawaii.edu/zoology/faculty/butler.html http://www2.hawaii.edu/~ mbutler http://www.hawaii.edu/zoology/ mbutler@hawaii.edu

## UHawaii Manoa EvoDevo

Assistant Professor in Evolutionary Developmental Biology Department of Biology, University of Hawai'i at Manoa

The department, which is in a phase of substantial growth, seeks a colleague who will complement existing strengths in the faculty (see www.hawaii.edu/biology) by establishing a vigorous research program that integrates developmental and evolutionary biology. Teaching responsibilities will include an advanced undergraduate course in developmental biology and a graduate course in the individual's specialty.

Applicants must have a Ph.D. in Biology or a related, evidence of significant research accomplishments and a commitment to excellence in teaching. Desirable qualifications include relevant postdoctoral experience, extramural funding, and teaching experience.

To apply, please send a single PDF document to dbsearch@hawaii.edu that includes: - a cover letter indicating how you satisfy the minimum and desirable qualifications; - statements of research experience and interests and of teaching experience and interests; - a detailed curriculum vitae; and - three representative publications. Also arrange to have three letters of reference sent to dbsearch@hawaii.edu. Applications must be received by October 1, 2012.

For a complete job announcement, please refer to http://workatuh.hawaii.edu, Position #84503. Inquiries: Dr. Andrew Taylor, taylor@hawaii.edu, 808-956-4706.

The University of Hawaii is an Equal Opportunity/ Affirmative Action Institution and encourages applications from women and minority candidates. Andy Taylor <taylor@hawaii.edu>

## **UMaryland MarineInvert PopBiol**

Faculty Position in Ecological Genetics and Population Biology

The Horn Point Laboratory (HPL) of the University of Maryland Center for Environmental Science (UM-CES) is seeking a highly qualified individual specializing in ecological genetics applied to understanding population biology of marine invertebrates. Candidates whose research integrates field and laboratory work and who have experience in the application of ecological genomics approaches to sustainable management and restoration of aquatic resources and/or population connectivity and dispersion are encouraged to apply. The successful candidate will be expected to develop rigorous, high-profile, externally funded research programs that maximize the available resources at Horn Point Laboratory and within UMCES, and to teach and mentor graduate students.

Excellent opportunities for collaborative, interdisciplinary research on a wide range of environmental science topics are available. Current research areas among the 29 faculty members at the Horn Point Laboratory include Food-Web Dynamics, Aquaculture and Restoration Ecology, Microbial Ecology and Biogeography, Plankton Ecology, Larval Transport, Climate Change, Physical Oceanography of Estuaries and Coasts, Sediment Transport, and Ecological Forecasting. There is also potential for collaboration with colleagues throughout the three other laboratories that compose UMCES as well as other branches of the University System of Maryland (USM). There are strong programs in Fisheries Science and Toxicology at the Chesapeake Biological Laboratory in Solomons; Molecular Biology at the Institute of Marine and Environmental Technology in Baltimore; and Freshwater and Terrestrial Ecology at the Appalachian Laboratory in Frostburg. Additional research opportunities are available through various institutional mechanisms. For example, UMCES is a partner within CINAR, a new NOAA-funded Institute for the North Atlantic Region (http://www.cinar.org/). These efforts are part of a larger UMCES commitment to translating scientific knowledge to resource managers and policymakers in support of sustainable ecosystems. Close proximity to the Washington-Baltimore area and its three airports fosters collaborative opportunities with other non-UMCES research institutions, facilitates travel to more distant research sites, and promotes access to major funding agency offices.

The location and facilities of HPL support a wide array of estuarine and marine research activities. HPL is located on 344 ha of waterfront preserve along the shore of the Choptank River that opens into the Chesapeake Bay. This geographical location enables faculty to develop research programs on the Chesapeake Bay, the largest estuarine system in the United States, and on the coastal bays and ocean, which are within a few hours' drive. HPL offers outstanding facilities including a modern, Aquaculture and Restoration Ecology Laboratory that houses state-of-the-art shellfish and finfish hatcheries with a flowing seawater system and dry laboratories. An analytical services laboratory, advanced molecular instruments, and multiple highend computer clusters are available on campus. Field studies at HPL are supported by a diversity of outboard powered boats and a new 24.7m research vessel, specifically designed for estuarine and coastal research (http://www.umces.edu/research-discovery/rvrachel-carson), as well as a newly acquired REMUS 600 AUV.

UMCES faculty advise and mentor graduate students in Ecology, Environmental Science, Fisheries Science, Oceanography, and Environmental Chemistry through the University System of Maryland's Marine, Estuarine, and Environmental Science (MEES) program (http://www.mees.umd.edu). Faculty members are required to teach one graduate course every other year and mentor graduate students in the MEES program. Fellowships, teaching assistantships, and travel funds for graduate students are available through HPL and USM. There are no undergraduate teaching duties associated with this position.

The appointment will be tenure track. The position is 12 month with 75% annual hard-money support, with the balance to be generated from external grants and contracts. A Ph.D. and postdoctoral experience is required. We are seeking to make the appointment at the Assistant Professor level, but exceptional applicants at higher levels will be considered. Applicant review will emphasize the candidate's track record of publications and grant capture commensurate to career stage and the ability to develop a dynamic, externally funded research profile with an international profile. Salary and benefits are competitive and dependent on qualifications.

Candidates should email copies of their letter of appli-

cation, curriculum vitae, statement of future research directions, graduate teaching

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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

# UMemphis Ecology Genetics Genomics

Tenure-track Assistant Professor in Ecology The Department of Biological Sciences at the University of Memphis (http://www.memphis.edu/biology/) seeks to complement and build on existing strengths in ecology and evolution by inviting applications for a tenuretrack position in ecology at the rank of assistant professor to begin August 2013. We seek an outstanding ecologist with an integrative research program designed to understand the genetic mechanisms underlying responses of organisms to their natural environments. Preference will be given to ecologists whose research is in the specific areas of ecological genetics/genomics. Exceptionally qualified applicants in other sub-disciplines of ecology will also be considered. The successful applicant will be expected to develop an externally funded research program, supervise PhD and MS students, and contribute to the teaching curriculum by developing courses in general ecology, as well as in his/her area of expertise. Candidates must have a PhD and post-doctoral experience, a record of peer-reviewed publication and other scholarly accomplishments.

The University of Memphis is a leading metropolitan research institution with over 30 faculty members specializing in diverse sub-disciplines of the biological sciences. The Feinstone Center for Genomic Research (http://www.memphis.edu/feinstone/ ), the interdepartmental Program in Bioinformatics (http:/-/www.memphis.edu/binf/ ), the Ecological Research Center (http://www.memphis.edu/erc/), the Integrated Microscopy Center (http://www.memphis.edu/imc/), and the Meeman Biological Field Station (http://www.memphis.edu/meeman/), are all administered through the department and offer outstanding opportunities for research, teaching, and collaboration.

Candidates should submit a letter of application, statements of research interests and teaching philosophy, and a cv online at https://workforum.memphis.edu/-applicants/jsp/shared/frameset/Frameset.jsp?time=-

1317675455052 Applicants should also provide contact information for three references willing to write letters of recommendation and have referees upload letters at the time of application. Review of applications will begin on September 20th, 2012. Inquiries should be directed to Dr. Randall Bayer, Chair, Ecology Faculty Search, Department of Biological Sciences, The University of Memphis, Memphis, TN 38152, USA (or email rbayer@memphis.edu). Women and minorities are encouraged to apply. The University of Memphis is an equal opportunity/affirmative action employer that accommodates individuals with disabilities.

Duane D. McKenna Assistant Professor Department of Biological Sciences Associate, Program in Bioinformatics Associate, W. Harry Feinstone Center for Genomic Research University of Memphis 3774 Walker Avenue Memphis, TN 38152

phone: (901) 678-1386 email: dmckenna@memphis.edu website: https://umdrive.memphis.edu/dmckenna/public/index.html

# UMichigan Evolution Ecology Agriculture

Ecology and Evolutionary Biology - University of Michigan

Ann Arbor, MI, USA

Faculty Position in Sustainable Food Systems

The Department of Ecology and Evolutionary Biology (EEB) at the University of Michigan (UM) seeks applicants for a full-time, nine-month faculty position in sustainable food systems. We seek applicants working in ecological or evolutionary aspects of the food system, from domestication to production to consumption. The research focus could include the study of agricultural landscapes, ecological networks in agroecosystems, global aspects of agriculture (e.g., hypoxic zones or climate change), evolutionary aspects of naturalenemy behavior and domestication, or the evolution of pesticide or pest resistance. The applicant's substantive training and expertise may be in any natural science relevant to the sustainability of food systems, including agroecology, agroforestry, hydrology, ecological modeling, spatial analysis, molecular biology, genetics, genomics, pathology, and related disciplines. We seek

candidates with experience, skills, and interest in integrating knowledge from multiple domains, in addition to their disciplinary perspective, through collaborations with people in other disciplines.

This position is one of five that are intended to broaden and deepen the University's commitment to research and teaching in the area of sustainable food systems. The position is inherently interdisciplinary, bringing together new and existing faculty in a cross-disciplinary teaching and research program in sustainable food systems. This cluster includes positions in four other units: the School of Natural Resources and Environment, the School of Public Health, the A. Alfred Taubman College of Architecture and Urban Planning (position filled), and the Stephen M. Ross School of Business. Successful candidates will work in their primary discipline and will also help build cohesion and capability (such as graduate training and joint courses) among the large and diverse group of UM faculty interested in sustainable food systems. The successful candidate will be expected to (1) develop a widely recognized research program that attracts external funding, (2) mentor and supervise doctoral and master's students, (3) support the teaching mission of EEB at both graduate and undergraduate levels, and (4) interact effectively with other members of the food systems cluster.

The position is likely to be filled at the assistant professor (tenure-track) level, although exceptional candidates at higher ranks will be considered. A Ph.D. in a relevant discipline or interdisciplinary program is required.

Applications should include a cover letter, CV, concise personal statements describing plans for research and for education, and three letters of reference. See the checklist and instructions for submitting an application online at http://sitemaker.umich.edu/sustainablefoodsystems Review of applications for the position in EEB will begin on October 1, 2012. Applications will be accepted until the position is filled. Campus visits are expected to occur in November. The position is expected to begin on September 1, 2013.

Women and minorities are encouraged to apply. The University is supportive of the needs of dual-career couples. The University of Michigan is an equal opportunity/affirmative action employer.

Inquiries should be directed to Dr. Catherine Badgley, Chair, Sustainable Food Systems EEB Faculty Search, (cbadgley@umich.edu)

tyjames@umich.edu

#### **UMinnesota FungalEvolution**

The College of Biological Sciences at the University of Minnesota announces \*up to two tenure-track positions in fungal biology\* at the assistant professor or associate professor level. The position(s) will complement a faculty cluster focused on plant and fungal evolution. Research that facilitates collaborations in evolutionary genomics, phylogenetic systematics, evolutionary ecology, molecular biology or cellular biology of fungi is of special interest. We welcome applicants working in any area of fungal biology and are particularly interested in those whose research explores the interface between organismal and genetic approaches to the study of evolutionary processes.

The position(s) in the Fungal Evolution cluster are part of a larger cluster hiring effort. The College of Biological Sciences at the University of Minnesota is hiring 16 scientists to form six interdisciplinary clusters in emerging areas of biology that connect with other STEM disciplines. The research clusters are organized around the following research themes: cellular biophysics, functional proteomics, fungal evolution, genome variation, microbial systems and synthetic biology, and theoretical biology.

Interested in joining the CBS faculty as part of a collaborative fungal evolution research cluster? Visit the colleges cluster hiring website for detailed information and to apply: http://z.umn.edu/cbsclusterhiring Applicants are encouraged to submit materials by \*November 1, 2012\* for consideration by the search committee.

Find out what makes Minnesota a great place to work and live. Learn more about the College of Biological Sciences http://cbs.umn.edu, the University of Minnesota http://umn.edu and the Twin Cities http:/-/umn.edu/wishyouwerehere The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. The University supports the work-life balance of its faculty and especially encourages applications from women and members of under-represented groups.

Questions related to the logistics of applying should be

sent to Nicole Matteson, matteson@umn.edu

Questions related to the position itself should be sent to George Weiblen, gweiblen@umn.edu

George Weiblen <gweiblen@umn.edu>

#### **UMinnesota GenomicVariation**

### MULTIPLE POSITIONS IN GENOMIC VARIATION

Researchers using genomics, statistical genetics and computational biology to study fundamental questions about GENETICS, EVOLUTION, and the GENETIC BASIS OF COMPLEX PHENOTYPES AND BEHAV-IOR are encouraged to apply.

Positions are part of an initiative to fill 16 positions (including positions in theoretical biology, fungal evolution, and microbial systems biology) to form interdisciplinary clusters in emerging areas of biology that connect with other STEM disciplines.

Evaluation of applications will begin October 15.

Applications should be submitted online via www.cbs.umn.edu/facres/cluster-hiring-cbs \*Job description\*

The College of Biological Sciences at the University of Minnesota (cbs.umn.edu) seeks candidates for up to four tenure-track assistant professor (and/or tenured associate professor) positions in genomic variation. These positions are part of a larger effort to build a focused research group that analyzes genome-scale datasets to better understand variation within species. We welcome applicants who will study how genomic variation (including structural, gene expression and epigenetic changes) affects phenotypic outcome among individuals within a population or among different cells. Researchers who utilize a combination of tools including genomics, statistical genetics and computational biology to study fundamental questions about genetics, evolution, and the basis of complex phenotypes and behavior are encouraged to apply. The development of a strong research program linking variation in genomes to differences in phenotype is expected to provide powerful insights into the basis of disease, local adaptation, behavioral or other complex traits, and will provide important resources for crop, animal and human health improvement.

\*Duties and Responsibilities: \*

The successful candidate will develop a strong, extra-

murally funded and collaborative research program investigating how genomic variation leads to variation in phenotypes, pursue a scholarly, innovative and collaborative teaching program, advise undergraduate, graduate and postdoctoral research, and participate in professional service. This position provides opportunity for collaboration in genetics, genomics and computational biology, and access to students in multiple graduate programs.

\* \*

\*Required Qualifications:\*

- Ph.D. and/or M.D. (or foreign equivalent) and appropriate post-doctoral experience - Strong publication record in disciplines related to the position - Potential to initiate and sustain strong research program in genomics - Ability to communicate effectively with multiple audiences - Track record of interacting creatively, collaboratively and productively with other scientists - Evidence of commitment to teaching and student learning

\* \*

\*Materials Required:\*

- Letter of application/intent - CV - Names/contact information for three professional references - Statements of research and teaching

\* \*

\*Environment:\*

The University of Minnesota-Twin Cities campus has extensive research facilities; genomics core facilities, field research stations, greenhouses, museum collections, herbarium and laboratories. The campus is located in the heart of the Minneapolis-Saint Paul metropolitan area, which is rich in cultural and natural attractions (umn.edu/wishyouwerehere).

The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. The University supports the work-life balance of its faculty and especially encourages applications from women and members of under-represented groups.

Founded in 1851, the University of Minnesota, with its five campuses and 67,932 students, is one of the largest, most comprehensive universities in the United States, and ranks among the most prestigious research universities in the world. It is both a major research institution, with scholars of national and international reputation, and a state land-grant university, with a strong tradition of education and public engagement.

Questions related to the logistics of applying should be sent to Nicole Matteson matteson@umn.edu

Questions related to the position itself should be sent to Nathan Springer springer@umn.edu

ptiffin@umn.edu

## **UNotreDame ResTech RareSpecies**

Molecular Research Technician, University of Notre Dame

We seek a highly motivated person to join our workgroup as a research technician. Our group is studying the molecular detection of rare species in aquatic systems using genetic tools. The Research Technician will support the research activities of the faculty, postdocs and graduate students in the lab. This includes support for sample collecting and processing, data organization and analysis, report writing, and general lab and equipment maintenance. Applicants should have a strong interest in ecological or environmental science and possess an enthusiasm for laboratory research. Opportunities to contribute to manuscripts and proposals, build professional experience, and further training in molecular research will be provided. Responsibilities for this position include performing general molecular laboratory functions including DNA extractions, PCR, gel electrophoresis, data entry, and report writing. Additional duties include, but are not limited to ordering supplies, equipment sterilization and sample processing preparation. To apply, please visit jobs.nd.edu/applicants/Central?quickFindY076. Please apply online and do not contact hiring manager directly. Review of applications will begin on August 21, 2012 and continue until position is filled.

Thank you again for your assistance!

Best wishes,

Crysta

Crysta Gantz Lab Program Manager, Lodge Lab Department of Biological Sciences University of Notre Dame 180 Galvin Life Sciences Building P.O. Box 369 Notre Dame, Indiana 46556-0369 Office: 574-631-2849 Lab: 574-631-4153 cgantz@nd.edu

Crysta Gantz <Crysta.Gantz.2@nd.edu>

## UOslo ScientificLabManager

The Natural History Museum - University of Oslo Senior Engineer Scientific Lab Manager

The Natural History Museum (NHM) is Norway's largest natural history museum, located in the beautiful Botanical Garden in central Oslo. The staff con-

tiful Botanical Garden in central Oslo. The staff consists of approximately 150 people, many with an international background, working with research, scientific collections, taching and public outreach in biology and geology (see http://www.nhm.uio.no/). Biological research at the Natural History Museum includes phylogenetics, population genetics, phylogeography, biogeography and both traditional and environmental DNA-barcoding. Several projects are based on ancient DNA. The research is based on a wide variety of molecular data including AFLPs, microsatellites, and Sanger and high-througput next-generation sequencing of DNA and RNA.

The DNA laboratory at the Natural History Museum is equipped with instruments for DNA and RNA extraction, PCR/qPCR, cloning and Sanger sequencing (ABI 3130XL). A separate well-equipped lab is dedicated to ancient DNA research. Collaboration with the Norwegian Sequencing Centre provides access to ROCHE 454 GS FLX, Pacific Bioscience PacBio SR, Illumina HiSeq 2000 and IonTorrent PGM sequencing platforms. The DNA lab has an international user group consisting of approximately 40 people, including 2-3 technicians.

The Natural History Museum is seeking an enthusiastic and experienced scientific lab manager for the DNA laboratory. The position is available immediately.

Responsibilities Daily operation and technical service of the DNA laboratories Healthy and safety practices in the DNA laboratories (including Standard operating procedures) Managing the DNA lab resources; budget, internal accounting and allocation of technicians Support, training and supervision of laboratory users at all levels in both the regular DNA lab and the ancient DNA lab Support and advice researchers and research groups on lab-based methodology in new and ongoing projects (DNA/RNA laboratory techniques and Next-Generation sequencing technology Stay up to date with recent technical developments in relevant fields of molecular genetics and supply technical expertise to the researchers Take an active and leading role in future developments and upgrades of the DNA laboratory

Requirements PhD in a molecular lab-based discipline of biology, or equivalent work experience Documented extensive experience with laboratory techiques (DNAextraction, PCR, Sanger sequencing A strong interest in learning and teaching new techniques Experience in the full research process, from the planning stage to publication of results Good communication skills in English Strong leadership and mentoring qualities, coupled with highly effective communication and motivational skills

Desired experience Administrative experience Work experience in biology or a related field, preferably in a university environment RNA, ancient DNA, fragment analyses and Next Generation Sequencing techniques Knowledge of a Scandinavian language

Personal Qualities Work excellent independently and in a team Highly organised and efficient Excellent interpersonal and communication skills Innovative and solution oriented Ability to multi-task and respond to changing and challenging priorities

We offer A pleasant and inspiring working environment Salary in the range between pay grade 56-62 (NOK 460 400 - 513 000 per year), depending on qualifications and experience Favourable pention arrangement Attractive welfare arrangements

The online application must include: Application letter CV (summarizing education, work experience, pedagogical experience, administrative experience and other relevant activities) Copies of educational certificates and transcipt of records A complete list of publications Names and contact details of 3 references (name, relation to candidate, e-mail and telephone number All documents should be in English or a Scandinavian language

Send application online http://uio.easycruit.com/vacancy/787579/71922?iso=no

The University of Oslo has an agreement for all employees, aiming to secure rights to research results a.o. The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply. The University of Oslo also has a goal of recruiting ethnic minorities to Norway in academic positions. Ethnic minorities are encouraged to apply.

Region: Oslo Job type: Permanent Working hours: Full-time Working days: Day Application deadline: 20.08.2012 Reference number: 2012/7558 Home page: http://www.nhm.uio.no Contacts: Jon Lønnve, seksjonssjef Telephone: +47 22851753 Magnus Popp Telephone: +47 22851875 \_\_/\_\_

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

#### **UPenn EvolutionaryTheory Cluster**

Tenure-track Assistant Professor appointment in evolution University of Pennsylvania, Philadelphia, PA

The School of Arts and Sciences at the University of Pennsylvania invites applications for a tenure-track assistant professor appointment in evolution, broadly interpreted. We are interested in exceptional scientists and mathematicians who have well-developed research programs employing mathematical or computational techniques to study the evolution of dynamical processes far from equilibrium in the context of any of the following: biology, chemistry, or materials from the molecular to the systems scale, language, geology, psychology, or the environment. The successful candidate's primary appointment will be in a single department in the natural sciences: Biology, Chemistry, Earth and Environmental Science, Linguistics, Mathematics, Physics and Astronomy, or Psychology. Secondary appointments in other departments can be arranged, as appropriate. This appointment will be the first in a cluster of appointments across the natural sciences in various aspects of evolution; the successful candidate should therefore have a strong interest in building such a program and in interacting with researchers from other disciplines whose research lies within the overarching theme of evolution. The successful candidate will teach courses in his or her home department and will participate in the development of curriculum pertinent to the theme of the cluster. Include a curriculum vitae, a research statement that includes the candidate's perspective on how she or he fits into one of the core departments, links to no more than three journal publications, and the contact information for three individuals who will be contacted by the University with instructions on how to submit a letter of recommendation. Review of applications will begin 16 November 2012 and will continue until the position is filled.

Joshua B. Plotkin Department of Biology University of Pennsylvania 433 S. University Ave, Philadelphia PA 19104 http://mathbio.sas.upenn.edu/ jplotkin@sas.upenn.edu

493765&stp=AW&sLanguage=en James Hereward <j.hereward@uq.edu.au>

# UQueensland InsectPopGeneticist

Insect Population Genetics Post-Doc position at the University of Queensland, Australia:

Globally, food security has become a major concern. Stored grains suffer severe losses, with insect pests of major concern. Phosphine fumigant is the treatment of choice against these pests because it is the cheapest and most benign compound environmentally and leaves no residues on the food. Several major insect pests have developed resistance to phosphine, and the international collaboration of this project is dedicated to understanding the ecological basis of phosphine resistance and to developing suitable management strategies. This position, based at The University of Queensland, will involve strong collaboration with colleagues at the Queensland Department of Agriculture, Forestry & Fisheries and colleagues at several institutions in India. The research will involve population genetics screening and analysis as well as ecological fieldwork, possibly also in India.

The Postdoctoral Fellow will work with pest management specialists, molecular biologists and ecologists to determine how phosphine resistance develops, increases in frequency and spreads spatially, and how best to contain it. This will include experimental manipulation of populations to assess the role of migration and selection on the fate of resistance genes.

This is a full-time fixed term appointment at Academic level A, until 31 March 2015. The remuneration package will be in the range of \$70,677 - \$75,868 pa plus superannuation contributions of up to 17 %. (Total package will be in the range of \$82,692 - \$88,766 pa).

Applications close 27 Aug 2012 11:55pm E. Australia Standard Time

To discuss this role please contact Assoc Prof Gimme Walter on +61 7 3365 2228, or email g.walter@uq.edu.au.

http://www.seek.com.au/Job/postdoctoralresearch-fellow-in-insect-population-genetics/in/brisbane-cbd-inner-suburbs/22912615 http:/-/uqjobs.uq.edu.au/jobDetails.asp?sJobIDs=-493765&sReferrer=home&lApplicationSubSourceID=-&lWorkTypeID=&lLocationID=&sJobNo=-493765&lCategoryID=&lBrandID=&sKeywords=-

# USalzburg PlantEvolutionaryEcol

The Plant Ecology group at the Department of Organismic Biology, University of Salzburg, which will start working October 1st 2012, invites applications for an

Assistant Professor (tenure track) in Plant Ecology

available from October 1st 2012. The initial appointment is for six years with the possibility of promotion to a permanent position.

The position will focus on Experimental Plant Ecology, preferably on evolutionary or community ecology, and at least partly study chemical communication in plantplant, plant-animal or multitrophic interactions. The successful applicant should not only have an excellent research experience and publication record but also experience with teaching and grant acquisition. Good knowledge of chemical-analytical (GC, GC-MS) and chemical-electrophysiological (GC-EAD) techniques as well as expertise in designing and performing behavioral assays with insects is of advantage. Experience with molecular (e.g. biosynthesis of flower scents, scent genes) or neurophysiological (perception of volatiles by insects) methods is also helpful. The successful candidate, which has a PhD preferably in Biology, will teach courses (usually in German) in Plant Ecology (4 hrs per week and semester) and supervise undergraduate as well as graduate students. She/he is expected to apply for external funding. Applications (in German or English) should include a letter of motivation describing the qualifications and research interests, a CV, a list of publications (including presentations at conferences, universities or other research institutes), an overview of teaching experience, copies of not more than three publications, and a statement of future teaching and research activities. The documents should be sent to the president of the University of Salzburg, Univ.-Prof. Dr. Heinrich Schmidinger, Serviceeinrichtung Personal, Kapitelgasse 4, 5020 Salzburg, Austria. The closing date for applications is August 22, 2012. For additional information, see www.uni-salzburg.at, Career & Jobs, or contact stefan.doetterl@uni-bayreuth.de.

Stefan Dötterl <stefan.doetterl@uni-bayreuth.de>

# USouthAlabama VertebrateEvolution

Faculty Position in Vertebrate Ecology

The University of South Alabama Department of Biology seeks applications for a tenure-track Assistant Professor position in the area of Vertebrate Ecology. Applicants with broad training in ecology and systematics of vertebrates are preferred. The individual is expected to teach an undergraduate class in Biology of Terrestrial Vertebrates, a class in one of the following areas: Herpetology, Ornithology, or Animal Behavior, and may develop a graduate course in their specialty. Preference will be given to candidates who can also teach our core course in Genetics. The successful candidate will serve as curator of the university's Vertebrate Natural History Collection. Candidates are expected to develop an externally funded research program. Candidates must have a Ph.D. in Biology or related field. Postdoctoral experience preferred.

Send cover letter, vitae, official graduate and undergraduate transcripts, statements of teaching philosophy and research goals, and three original recommendation letters to: Vertebrate Ecology Search Chair, University of South Alabama, Department of Biology, 5871 USA Dr. N, Rm 124, Mobile, AL 36688; (251) 633-6331.

Review of applications will begin 1 October 2012 and continue until the position is filled. The University of South Alabama is an Equal Opportunity/Equal Access Employer.

aboettch@southalabama.edu

gram in the Dana and David Dornsife College of Letters, Arts and Sciences. We seek an outstanding scholar in the area of human or nonhuman primate evolutionary genetics, with the goal of understanding and reconstructing human prehistory. An ideal candidate would conduct research in molecular phylogenetics, population genetics, or paleogenomics of humans or nonhuman primates. The successful candidate will have an active research program, a commitment to excellence in both graduate and undergraduate teaching and will become an integral member of a new interdisciplinary program in Human and Evolutionary Biology. Applicants should hold a Ph.D. degree and have a strong record of publishing and grant funding. Applicants should apply by email with a cover letter that describes research and teaching interests, a C.V., pdfs of up to three sample publications and should request the three letters of recommendation be sent no later than November 1, 2012 to: Search Chair, Human and Evolutionary Biology, PED 107, University of Southern California, Los Angeles, CA 90089-0652. Application materials and letters of recommendation may be emailed as pdfs to stanford@usc.edu.

In order to be considered for this position, applicants are also required to submit an electronic USC application; follow this job link or paste in a browser: https://jobs.usc.edu/applicants/-Central?quickFind=65969 .USC strongly values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups are encouraged to apply.

Craig Stanford Professor, Departments of Biological Sciences and Anthropology PED 107 University of Southern California Los Angeles, CA 90089-0652

http://dornsife.usc.edu/labs/stanford/home/index.cfm craig stanford <stanford@usc.edu>

# USouthernCalifornia PrimateEvolutionaryGenetics

Title: Univ of Southern California Human/Primate evolutionary genetics scholar

#### Content:

The University of Southern California invites applications for a tenure-track position at the rank of assistant professor in the Human and Evolutionary Biology proUTexasAustin LabTech GenotypingStickleback

University of Texas/Austin: Molecular laboratory technician position The laboratory of Dr. Daniel Bolnick, in the Section of Integrative Biology at the University of Texas at Austin, seeks an organized and experienced individual to fill a molecular laboratory technician position. The technician will be expected to work with lab members to carry out extensive genotyping, as part of a study of the evolution of immune genes of threespine stickleback (Gasterosteus aculeatus), an emerging model organism in evolutionary genetics. Applicants must have extensive lab experience with molecular genetics, including DNA extraction, quantitation, PCR, and sequencing. Some experience with real-time PCR, molecular cloning, the use of automated liquid handling robots, and/or bioinformatics would be beneficial but are not essential. Strong organizational skills are a necessity, and an ability to work with others.

The Bolnick lab's research focuses on evolutionary ecology of trait variation within populations, including variation in diet, courtship traits, and immune function. More information on research in the lab can be found at https://webspace.utexas.edu/dib73/-Bolnicklab/Bolnicklab.htm?uniq=3D5ptsas . Minimum qualifications: A Bachelor's or Master's degree in an appropriate field of evolutionary biology or molecular ecology/genetics and the demonstrated ability to perform the molecular laboratory techniques listed above.

To apply, pleases send a CV, cover letter, and two letters of recommendation as pdfs to Dr. Bolnick (danblonick@austin.utexas.edu). Previous experience in the laboratory should be highlighted in both the cover letter and letters of recommendation wherever possible. Questions may be directed to the same email address.

This is a full-time position, initially appointed for a period of 6 months. Salary and benefits are competitive, and depend on the applicant's qualifications. The position duration could be extended, depending on performance and availability of research funds. The chosen applicant will be expected to start after September 15, and no later than November 1, although starting date within that range is flexible. Applications will be accepted until the position has been filled.

Dr. Daniel I. Bolnick

Early Career Scientist Howard Hughes Medical Institute

Associate Professor Section of Integrative Biology One University Station C0930 University of Texas at Austin Austin, TX 78712

512-471-2824 fax 512-471-3878 danbolnick@austin.utexas.edu https://webspace.utexas.edu/dib73/TheBolnickLab/Home.html danbolnick@austin.utexas.edu

# UWisconsin Madison MolEvolPopGenetics

#### UNIVERSITY OF WISCONSIN-MADISON

#### Position Vacancy Listing

PVL# 74450 Working title: Assistant Professor -Molecular Evolution and Population Genetics Official title: ASSISTANT PROFESSOR(C40NN) Degree and area of specialization: PhD with expertise in a Biological Science is required

Minimum number of years and type of relevant work experience: Postdoctoral experience is highly desirable. Preference will be given to candidates that present evidence of excellent teaching skills, a record of publishing in peer-reviewed journals and success attracting extramural funding.

Principal duties: The Entomology Department at the University of Wisconsin-Madison has long been a world leader in both basic and applied aspects of insect biology, and has expertise ranging from the molecular through landscape levels. We wish to complement and better integrate these strengths by establishing a new position in Molecular Evolution and Population Genetics of Insects. We seek an individual who studies ecological and evolutionary processes from a population genetics perspective. Emerging issues, such as invasive species, climate change, and infectious disease, that affect our food supply, natural resources, and health are of particular interest. This person is expected to maintain strong interactions among the research, teaching and outreach missions of the Entomology department, as well as complement existing programs in other colleges and UW departments.

The candidate filling this position will contribute to both undergraduate and graduate instruction. She/he will be responsible for developing and teaching two courses in their areas of interest, each offered every other year. All of our faculty contribute to our graduate seminar series and mentor undergraduate independent studies.

The successful candidate will: develop a strong, independent, extramurally funded research program; develop an innovative undergraduate and graduate teaching program; build collaborative relationships in research and instructional programs; and contribute to service and outreach functions of the Department, College, University and professional societies.

This position is a tenure-track nine-month appointment at the level of Assistant Professor (80% research, 20% instruction). The position carries a commitment to the three important functions of resident instruction, research, and outreach, as well as professional and university service as appropriate to Faculty rank.

A criminal background check will be conducted prior to hiring.

Appointment type: Faculty

Department(s): CALS/ENTOMOLOGY

Full time salary rate: Minimum \$80,000 ACADEMIC (9 months) Depending on Qualifications

Appointment percent: 100%

Anticipated begin date: AUGUST 26, 2013

Number of positions: 1

TO ENSURE CONSIDERATION Application must be received by: OCTOBER 15, 2012

HOW TO APPLY: Applicants send CV, one - two page statement of research interests and plans, a similar statement of teaching philosophy, and a list of three letter-writers to Professor Kenneth Raffa, at pop\_gen@entomology.wisc.edu. Please reference PVL 74450.

Applicants can find relevant information at http://www.entomology.wisc.edu

Interested individuals are welcome to contact Professor Kenneth Raffa at pop\_gen@entomology.wisc.edu to discuss this opportunity. Unless another application procedure has been specified above, please send resume and cover letter referring to Position Vacancy Listing #74450 to

Kenneth Raffa

Phone: 608-262-1125

1630 Linden Dr

Fax: N/A

Room 237

Email: raffa@entomology.wisc.edu

Madison, WI 53706-1598

Relay Access (WTRS): 7-1-1 (out-of-state: TTY: 800.947.3529, STS: 800.833.7637) and above Phone number (See RELAY\_SERVICE for further information.) NOTE: Unless confidentiality is requested in writing, information regarding the names of applicants must be released upon request. Finalists cannot be

gu aranteed confidentiality. UW-Madison is an equal opportunity/affirmative action employer. We promote excellence through diversity and encourage all qualified individuals to apply.

Johanne Brunet <jbrunet@wisc.edu>

# **UmeaU EcosystemScience**

Tenured faculty position (equiv. associate professor) at Umea University, Sweden

Senior Lecturer in Ecosystem Science

Application deadline 15 October. See the complete ad at http://www8.umu.se/umu/aktuellt/arkiv/lediga\_tjanster/312-729-12.html The Department of Ecology and Environmental Science (http://www.emg.umu.se/english/?languageId=1) searches for a senior lecturer in Ecosystem Science with a specialization in ecology, evolutionary ecology, physical geography, or environmental science with a biological focus. The successful candidate is expected to carry out research within the area of Ecosystem Science defined in a broad sense, take an active part in our undergraduate and graduate teaching, and interact with other researchers and research groups at the Department.

The position is permanent and its responsibilities include research, teaching, and administration. During the first three years, research will constitute 75% of the full working time. The remaining part will include teaching and/or administrative tasks. The responsibilities and the proportions between these duties can be altered after the initial three year period.

The holder of this position is expected to develop Ecosystem Science research at the Department, attract external grants for her/his own projects, and initiate and participate in larger grant proposals from the Department. The successful candidate for this position must therefore be prepared to actively build both internal and external scientific net-works. The specific research should have a focus in ecology or evolutionary ecology, physical geography, or environmental science with a biological specialization, and can be either theoretical or experimental. Present research at the Department covers all of these areas with a range of specializations, as presented on our research web-page: (http://www.emg.umu.se/english/research/?languageId=1). The successful applicant must have a research profile and research plan that is judged to be novel, and with a focus that will benefit from and allow for integration with on-going research at the Department.

The Department is responsible for a broad spectrum of undergraduate courses on the bachelor and master levels, see http://www.emg.umu.se/english/education/-. The holder of the position will be expected to actively participate in teaching and developing of courses or parts of courses, and to supervise longer projects and exam theses, both related to her/his own main subject area and to other specific specializations.

More information and instructions for applicants are found at http://www8.umu.se/umu/aktuellt/arkiv/lediga\_tjanster/312-729-12.html Sebastian Diehl Professor of Ecology Department of Ecology and Environmental Science Umeå University 90187 Umeå, Sweden E-mail: sebastian.diehl@emg.umu.se

sebastian.diehl@emg.umu.se

## **UmeaU TheoreticalEvolution**

Tenured faculty position (equiv. associate professor) with close to 100% research time during first 4 years guaranteed!

Senior Lecturer in Theoretical Ecology

Application deadline 20 September. See the complete ad at http://www8.umu.se/umu/aktuellt/arkiv/lediga\_tjanster/312-383-12.html The Department of Ecology and Environmental Science has 150 members from 20 different countries including 50 PhD students and 15 professors (for more information see the department's homepage: http://www.emg.umu.se/english/-?languageId=1). Our department offers a unique breadth of research and education in ecology, physical geography, paleolimnology and environmental health.

IceLab (Interdisciplinary Science Laboratory) seeks to constitute a hub of interdisciplinary, theoretical science at Umeå University that gathers researchers looking for new ways of modelling and analyzing systems within a broad spectrum, including life- and social sciences. At present, IceLab is a joint collaboration between the Departments of Ecology and Environmental Science, Mathematics and Mathematical Statistics, and Physics.

In a joint effort, IceLab and the Department of Ecology and Environmental Science are now announcing a position as senior lecturer to carry out research within the area of theoretical and computational ecology defined in a broad sense. Research may include studies of evolutionary processes, population and community dynamics, and/or biogeochemical processes. We are looking for a visionary researcher who is able to develop and scrutinize causal explanations for phenomena driven by dynamical feedbacks under environmental and organismal constraints. The successful candidate is expected to join us in developing the dynamic and international environment at IceLab and to strengthen the scientific interactions between IceLab and the Department of Ecology and Environmental Science. Candidates who link theory with experimental and empirical data are therefore particularly encouraged to apply, but we welcome applications from all candidates with a relevant background. The candidate shou ld be competent to teach undergraduate courses in evolutionary ecology, community and ecosystem ecology, and/or theoretical ecology and modelling.

The applicant should have a PhD, or an equivalent exam, with focus on theoretical modelling of research problems in ecology, evolutionary biology, or a related field. Documented experience of real interdisciplinary collaborations, as well as several years of international post-doc experience, are highly qualifying.

The position as senior lecturer is permanent and its responsibilities include research, teaching, and administration, with a strong emphasis on research during the first four years. The successful applicant is expected to create his/her own research group and to supervise graduate students as well as post-docs. He/she is also expected to attract research grants from external sources of funding and to have a vivid collaboration with scientists at both Umeå University and other universities. In the evaluation, particular emphasis will be given to scientific skills. Pedagogical and administrative skills and the ability to collaborate with other researchers are also considered. Merits and skills will be evaluated in relation to the seniority of the candidate, and we encourage both qualified junior and senior candidates to apply.

Applicants should submit, electronically or in hardcopy form:

- a curriculum vitae (CV), - copies of relevant degree certificates and diploma, - a statement of academic, interdisciplinary, and teaching qualifications, - a publication list, - copies of relevant articles, numbered according to the publication list, - a research plan (maximum 5 pages) with a strong basic science approach that explicitly addresses opportunities for in house collaborations, - a list of 3 references (with contact details).

All documents submitted in hard-copy form should be

in three copies, and all electronically submitted material should be in MS Word or PDF format. Note, in order to be considered, applications must include copies of reprints.

For further information concerning the position, please contact Prof. Sebastian Diehl, phone +46-(0)90-786 5738, sebastian.diehl@emg.umu.se and/or Assistant Prof. Martin Rosvall, phone +46-(0)70-239 1973, martin.rosvall@physics.umu.se.

Your complete application, marked with reference number 312-383-12, should be sent to jobb@umu.se (state the reference number as subject) or to the Registrar, Umeå University, SE-901 87 Umeå, Sweden to arrive September 20, 2012 at the latest.

Sebastian Diehl Professor of Ecology Department of Ecology and Environmental Science Umeå University 90187 Umeå, Sweden

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# annonsvisning?tarContentId=3D195904 Closing date for application is September 5, 2012

For further information about the position, please contact Professor Mats Bjorklund (Head of Animal Ecology) telephone +46-(0)18-471 2666, email mats.bjorklund@ebc.uu.se or Professor Jon Agren (Head of Department of Ecology and Genetics) telephone +46-(0)18-471 2860 or email Jon.Agren@ebc.uu.se

The Evolutionary Biology Centre of Uppsala University offers a vibrant research environment and bridges a broad range of disciplines in the biological sciences. Information about the Evolutionary Biology Centre and the Department of Ecology and Genetics can be found at www.ebc.uu.se

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

jon.agren@ebc.uu.se

# Vienna HeadMolGenetics

\*Head of Molecular Genetics Laboratory\*

Department of Integrative Biology and Evolution

University of Veterinary Medicine, Vienna, Austria

We seek an interactive, motivated scientist capable of managing a genetics laboratory. Independent research is necessary though the main emphasis is to collaborate and support scientists in our department. A PhD in life sciences and a strong background in molecular genetics (e.g., DNA capillary sequencing, microsatellite typing, fragment analysis, SSCP, DGGE, Southern blotting, Western blotting, real-time PCR) are required. Experience with MHC-analyses, RNA-analyses, and diverse genomic techniques (next-generation sequencing) are an advantage. Post-doc experience is preferred.

Our department has a well-equipped genetics laboratory, technicians, and animal facilities. Vienna is generally ranked as one of the top cities in the world to live. The department operates bilingually, but German is useful.

The position is permanent, salary depends upon experience. To apply, please send (preferably via email) (1) CV, (2) publications, (3) a brief statement of research interests, (4) names of 3 people who can be contacted for letters of reference.

# Uppsala TheorEvolEcol

Associate Professor/Senior Lecturer in Theoretical Evolutionary Ecology (with the possibility of being employed as Professor)

Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University

The position includes teaching at graduate and undergraduate level, research, and some administration. The holder of the position is expected to contribute actively to applications for external research grants and to the development of the research and teaching of the department.

In ranking eligible candidates, equal importance will be given to scientific and teaching skills. When judging scientific proficiency special importance will be given to research qualifications within theoretical evolutionary ecology, such as mathematical modelling, computer simulations, or other such theoretical activities.

More detailed information about the position and information about how to apply can be found at http://www.uu.se/jobb/teacher/- Please submit applications until \*August 24th 2012\* quoting the reference number 2012/0803 via email (preferably) to \*bewerbungen@vetmeduni.ac.at <mailto:bewerbungen@vetmeduni.ac.at>\* or by post to the Personnel Department of the University of Veterinary Medicine, Veterinärplatz 1, A-1210 Vienna, Austria. Please do not forget to include the reference number or we shall be unable to relate your application to the correct vacancy announcement.

Prof. Dr. Walter Arnold Savoyenstr. 1, A-1160 Vienna Research Institute of Wildlife Ecology Phone +43/1/4890915-100, Fax-333 University of Veterinary Medicine http://www.fiwi.at

Walter Arnold <Walter.Arnold@fiwi.at>

# WashingtonStateU EvolutionaryGenomics

Ecological or Evolutionary Genomics Assistant Professor School of Biological Sciences, College of Arts and Sciences, Washington State University

The School of Biological Sciences at Washington State University, Pullman, Washington, invites applications for a full-time, permanent, tenure-track faculty position in ecological or evolutionary genomics. This position is to be filled at the Assistant Professor level and will begin in August of 2013. Candidates should have the ability to combine cutting-edge research technologies with innovative analytics to investigate processes shaping organismal ecology and evolution. Candidates should complement our existing faculty strengths in organismal and evolutionary biology, molecular evolution, population and ecological genetics, systematics, ecology, development, and physiology. Candidates able to bring large-scale patterns of genomic, transcriptomic, or proteomic data to bear on fundamental problems in ecology and/or evolution are especially encouraged to apply.

Required qualifications include an earned doctorate at time of application, a record of research accomplishment in ecological or evolutionary genomics, evidence of commitment to teaching excellence, and effective communication skills. Successful candidates will be expected to develop and maintain an active research program supported by extramural funding, train graduate and undergraduate students, participate in graduate and undergraduate teaching, participate in service needs, and advance the universitys commitment to diversity and multiculturalism.

To apply visit www.wsujobs.com and upload application materials. Applications must include a letter of application addressing qualifications, a curriculum vitae, separate teaching and research statements and three selected reprints of published or in press papers. Three (3) letters of recommendation that address the applicants history of and potential for research, teaching and communication excellence are required. The reference letters will be automatically requested and obtained from the reference provider through our online application system. Review of applications with reference letters begins October 1, 2012.

For information on the position or the status of your application, candidates may contact Dr. Gary Thorgaard (gary.thorgaard@wsu.edu).

Full notice of vacancy can be viewed at https://www.wsujobs.com EEO/AA/AD

"Thorgaard, Gary H" <gary.thorgaard@wsu.edu>

# WashingtonU MicrobiologyEvolution

#### DEPARTMENT OF BIOLOGY

#### ASSISTANT PROFESSOR IN PROKARYOTIC BI-OLOGY

The Department of Biology at Washington University in St. Louis (http://www.wubio.wustl.edu) invites applications for a tenure-track faculty position at the Assistant Professor level in the area of Prokaryotic Biology. We seek an innovative and accomplished scientist whose research addresses fundamental biological processes in bacteria and/or archaea at the molecular level. Specific areas of interest include but are not limited to: cell biology, physiology, population genetics, ecology, evolution, systems biology and genomics.

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 essential. Duties will also include serving as a formal advisor to select 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 15, 2012 and will continue until the position is filled. Applicants should submit the following application 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: microsearch@biology.wustl.edu. Questions regarding the search process should be directed to Petra Levin (plevin@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

Joan E. Strassmann Professor of Biology

Department of Biology Washington University in St. Louis One Brookings Drive Campus Box 1137 St. Louis MO 63130

phone: (314) 935-3527 fax: (314) 935-4432 cell: (832) 978-5961 skype: strassm e-mail strassmann@wustl.edu http://strassmannandquellerlab.wordpress.com/

Blogs: http://sociobiology.wordpress.com/http://slowbirding.wordpress.com/ http:/-/goodbyehouston.wordpress.com/ Twitter: @JoanStrassmann

Joan Strassmann <strassmann@biology2.wustl.edu>

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#### Dear Colleagues,

I'm delighted to inform you about the launch of AppEEL - the Lisbon Applied Evolutionary Epistemology Lab. AppEEL is part of the Lisbon Centre for Philosophy of Science, and is located at the Faculty of Science of the Portuguese University of Lisbon. We will

# Appl Evolutionary Epistemology Lab

start our activities in September 2012. You can find us at http://appeel.fc.ul.pt We kindly invite you to the following events we're organizing.

#### 1. TWO INTERNATIONAL SCHOOLS ON EVOLU-TION FOR INTERNATIONAL MASTER, PHD, AND POST-DOCTORAL STUDENTS

Winter: March 11th to March 15th, 2013 | Summer: July 15th to July 19th, 2013 The Winter School courses will focus on Macroevolution and the Major Transitions; Language Evolution; Symbiogenesis, Lateral Gene Transfer and Hybridization. The courses will be taught by: Michael Arnold, Folmer Bokma, William Croft, Daniel Dor, Bruce S. Lieberman, William Martin, Eörs Szathmáry, Mónica Tamariz and Douglas P. Zook. Registration opens in September 2012. The Summer School courses will focus on Evolutionary Theory, Sociocultural Evolution and Philosophy of Biology. The courses will be taught by: Frédéric Bouchard, Nathalie Gontier, Fiona Jordan, Emanuele Serrelli, Derek D. Turner, Luis P. Villarreal, and Michael Ruse. Registration opens in Winter 2012. Information on the Schools can be found at http://evolutionschool.fc.ul.pt 2. A 3-DAY INTERNATIONAL CONFERENCE ON EVOLUTIONARY PATTERNS

Horizontal and Vertical Transmission and Micro- and Macroevolutionary Patterns of Biological and Sociocultural Evolution, May 27th to May 29th, 2013 Plenary talks are provided by Michael Benton, Tal Dagan, John Jungck, Carl Knappett, Daniel McShea, Alex Mesoudi, Mark Pagel, Tyler Volk and Richard Watson. Information on the conference can be found at http:/-/evolutionarypatterns.fc.ul.pt 3. A SESSION FOR THE 2012-AAA MEETING ON TREE AND NET-WORK MODELS OF CULTURAL TRANSMISSION

November 15th, 2012 The symposium will be part of the Evolutionary Anthropology Society meeting, and is scheduled for Thursday, November 15th , 2012, from 08:00 AM to 09:45 AM, at the Hilton San Francisco, Golden Gate 3, San Francisco, USA. The full program can be found at http://appeel.fc.ul.pt/sub/eve/dir/aaa/aaa2012.html 4. TWO SESSIONS FOR THE 2013-AAAS MEETING ON HOW TO EXTEND THE MODERN SYNTHESIS

February, 2013 The focus of the sessions will be how Symbiogenesis, Horizontal Gene Transfer, Virolution and Macroevolutionary studies call for an Extended Synthesis. The sessions will be part of the AAAS History and Philosophy of Science meeting, and will take place in Boston, in February, 2013. The full program can be found at http://appeel.fc.ul.pt/sub/eve/dir/aaas/aaas2013.html We look forward to meeting you! Nathalie Gontier

Nathalie Gontier, PhD

Director - Applied Evolutionary Epistemology Lab http://appeel.fc.ul.pt | nlgontier@fc.ul.pt

Centre for Philosophy of Science | http://cfcul.fc.ul.pt Faculty of Science, University of Lisbon, Portugal

AppEEL Announcements <appeelannouncements@fc.ul.pt>

Australia Volunteer AvianEvolution

Volunteer field assistant: We are looking for a field assistant to help monitor nesting in a colour-banded population of superb fairy-wrens near Melbourne, Australia for a study on animal personalities. Dates: 1 October 2012 to 31 January 2013 (4 months). Duties include regular censusing of colour-banded birds, searching for and monitoring nests, behavioural observations, video analysis, and data proofing. Working days are long, with early starts six days a week. Enthusiasm and a strong work ethic are a must. The study is based at Serendip Sanctuary, a small reserve on the outskirts of Melbourne. Qualifications: experience monitoring colour-banded birds and searching for nests. Must be an early riser, physically fit, able to work in extreme weather conditions, and enjoy basic shared living conditions. Onsite accommodation in a house with shared dorm-style room is provided, but assistants cover travel to the site and their own food costs. The project will reimburse up to AUD\$500/mo towards receipted food and travel expenses. For more information contact: Michelle Hall (hall.m@unimelb.edu.au) and Raoul Mulder (r.mulder@unimelb.edu.au). To apply, please email a letter outlining previous field research experience, and a resume including names and contact information for 3 referees.

Dr Michelle L Hall Research Fellow Department of Zoology, University of Melbourne Melbourne, VIC, 3010, Australia email: hall.m@unimelb.edu.au phone: + 61 3 83446232

hall.m@unimelb.edu.au

#### **Biochemistry** phenoptosis

Call for papers To the Researchers in the biological fields related to programmed death phenomena

A few days ago, a special issue of Biochemistry (Moscow) dedicated to the phenomenon Phenoptosis was published. The prestigious journal Biochemistry (Moscow) is directed by Prof. Vladimir P. Skulachev (http://www.belozersky.msu.ru/en/component/contact/contact/1-skulachev-v-p.html?allpapers=1) and published in both Russian and English (http://www.springerlink.com/content/106282/?MUD=MP). The aforesaid special issue is also freely available at http://protein.bio.msu.ru/biokhimiya/contents/v77/-ToC7707.html The magazine and its authoritative Editor-in-Chief plan the publication of other special issues devoted to the phenomenon phenoptosis and, if possible, the creation of a new journal specifically devoted to this subject. Phenoptosis is defined "the

programmed death of an individual" [Skulachev, V. P. (1999) Biochem. (Moscow) 64, 1418-1426] or, more broadly, "the death of an individual caused by its own actions or by actions of close relatives (siblicide; in particular, the parent-caused death of an offspring or filial infanticide) and not caused primarily by accidents or diseases or external factors, which is determined, regulated or influenced by genes favoured by natural selection. "[Libertini, G. (2012), Biochem. (Moscow) 77, 707-15].

A classification of the various types of phenoptosis and a number of significant examples can be found in this latest publication freely available at: http://protein.bio.msu.ru/biokhimiya/contents/v77/pdf/bcm\_0707.pdf In particular, it highlights how the aging of the individuals of our species is classified as "slow phenoptosis" ("Obligatory and slow phenoptosis, subtype B-2: Increasing Age-related mortality in multicellular eukaryotes"), a term coined by the same Skulachev.

This call for papers invites to submit articles related to the phenomenon phenoptosis, in particular:

- Evolutionary mechanisms that determine the phenomenon in its various forms;

- Likewise about the presence or absence of the phenomenon in related species, or in the same species in different conditions; - Physiological mechanisms that determine the phenomenon in its various forms;

- Mechanisms of behavioral phenomena and their neurophysiological roots that determine phenoptotic phenomena;

- Experimental conditions that block, modify, control or alter the phenomenon.

Articles should be submitted to the journal Biochemistry (Moscow), following the rules for the authors listed on the site of Springer: http:/-/www.springer.com/life+sciences/biochemistry+% 26 + biophysics/journal/10541 and also specifying that the paper is proposed for the special issues dedicated to phenoptosis.

Possible questions may be asked to the Editor-in-Chief Prof. Skulachev (skulach@genebee.msu.ru).

Furthermore, scholars interested in participating in the Scientific Board are asked to show their willingness. In particular, this invite is for scholars interested to phenoptotic phenomena in the following fields:

- Entomology; - Arachnology; - The study of invertebrates not included in previous categories; - The study of vertebrates; - Sociobiology; - Botany; - Single-celled species.

The above said possible willingness should be addressed to Prof. Skulachev. Questions about it can be directed to the same Prof. Skulachev (skulach@genebee.msu.ru) or, as a preliminary, to the writer of this note (giacinto.libertini@tin.it).

Giacinto Libertini (on behalf of the Editor-in-Chief as deputy for the special issues of Biochemistry (Moscow) dedicated to Phenoptosis)

"giacinto.libertini@tin.it" <giacinto.libertini@tin.it> "giacinto.libertini@tin.it" <giacinto.libertini@tin.it>

# Choanoflagellate samples

Dear colleagues,

I would be grateful if one of the teams working with Choanoflagellate protists such as /Monosiga brevicollis/ could send at UCL (Belgium) some alive or fixed material for an important course in Invertebrate Zoology for second year biology students. I would like to show the students the possible link between Protists and Sponges. Of course we can pay the cost for preparing / sending the material.

Please contact me at caroline.nieberding@uclouvain.be Thank you a lot in advance,

Sincerely Yours, Caroline Nieberding (Université catholique de Louvain-la-neuve, Belgium)

Caroline Nieberding <caroline.nieberding@uclouvain.be>

## DNA from NCBI proteinID

Hello,

I have many NCBI protein gi number and accession number. I need to know the GC content of the corresponding DNA sequences which encodes these proteins. Is there a way to do that?

Thanks in advance!

Haiwei Luo University of Georgia

Haiwei Luo <hluo2006@gmail.com>

#### Data in Arlequin

Dear folks, I've got the following example of msats data for Arlequim:

[Data] [[Samples]] SampleName="MICR1" Sample-Size( SampleData= {

Genot<br/>1 $\ 27\ 12\ 23\ 17\ 13\ 22\ 16\ Genot2\ 1\ 15\ 22\ 16\ 13\ 22\ 16$ 

The user manual (v.3.1) idicates the following explanation: "To make things clear, the genotype "Genot1" in the first population, has been observed 27 times. For the first locus, 12 and 13 repeats were observed, 22 and 23 repeats were observed for the second locus, and finally 16 and 17 repeats were found at the third locus."

The questions are: (a) If a Genot1 repeats 27 times, what are in fact those 12/13, 23/22, and 17/16 repeats? (b) we have used Arlequim to test population structuring by gene sequences. For example, we supposedly detected in a sample of 32 specimens a Cyt b haplotype occuring 17 times and another one occuring 15 times...Cool! 17+15 2. Comparing such hypothetical example with that one provided by the user manual for

Msats emerges a misunderstanding format . Thanks a lot and best regards. Rodrigo rodrigotorres@ufpe.br

# Distance between protein sequences answers

Dear Evoldir Members,

Thank you very much for the answers! Here I summarize them:

Alexandros Stamatakis: you can do this with RAxML, given that you have an alignment for the prot seqs. Run RAxML (please get the latest version from GITHUB at: https://github.com/stamatak/standard-RAxML) as follows: ./raxmlHPC-SSE3 -P proteinMatrixName -t referenceTree -s alignment -f x -m PROTGAMMAWAG -n T1 Via -P you read in the protein substitution matrix: -P Specify the file name of a user-defined AA (Protein) substitution model. This file must contain 420 entries, the first 400 being the AA substitution rates (this must be a symmetric matrix) and the last 20 are the empirical base frequencies -f x: compute pair-wise ML distances, ML model parameters will be estimated on an MP starting tree or a user-defined tree passed via "-t", only allowed for GAMMA-based models of rate heterogeneity Don't be irritated by the WAG n the model string -m PROTGAMMAWAG RAxML will ignore WAG and only use the information that the GAMMA model of rate heterogeneity is to be used. The -f x option will then just compute pair-wise ML distances between all pairs of sequences. The starting tree passed via -t is used to estimate the ML model parameters (in the above case just the alpha parameter) that are then used for calculating pair-wise distances. \*\*\*\*\*

Gangolf Jobb: Treefinder can. Use the "MAP" model, see manual page 28 (www.treefinder.de). \*\*\*\*\*

Gwennaël Bataille: I think the R software should allow this, since it is very flexible. Books like "analysus of phylogenetics and evolution with R" by Emmanuel Paradis could be useful for this, I suppose. Or alternatively, the r-sig-phylo mailing list, where you can ask specific questions.

\*\*\*\*

Joe Felsenstein: I think it is possible in PAML too. I have some Mathematica files that calculate various of the required matrices. We hope to add WAG and MtREV too to Protdist this year.

\*\*\*\*

Cameron Weadick: You can use the aaratefile option in the PAML software package's CODEML program to specify your own amino acid substitution rate matrix. \*\*\*\*\*

Carolin Kosiol: If you like to use PHYLIP, the AA substitution matrices need to be encoded in the "protdist.c" file in the form of an eigen-decomposition that is produced with Mathematica. A description of eigendecomposition and other methods to implement substitution matrices can be found in the following article: Kosiol C and Goldman N, 2005. Different versions of the Dayhoff rate matrix. Mol Bio Evol 22: 193-199.

I've tried Treefinder but unfortunately I was not able to import my aminoacid distance matrix to this software and I wasn't able to detect the reason why it didn't like the file format of the matrix. Finally I've solved the problem with RAxML.

Bests, Eszter Ari

2012-07-06	11:29	keltezéssel,
evoldir@evol.biolo	gy.mcmaster.ca írta:	

Dear Evoldir Members,

I would like to calculate distances (distance matrix) between protein sequences using my own predefined aminoacid substitution matrix. Do you know a software that allows this? The phylip protdist may allow it but I was not able to find a description about the format of the substitution matrix.

Thanks for the suggestions!

Eszter Ari

 Ari, Eszter assistant lecturer Eotvos L. Univ., Dep. of Genetics arieszter@gmail.com +3613722500/8691

Ari Eszter <arieszter@gmail.com>

## **Drosophila Activity Monitor**

I am searching for a Drosophila activity monitoring system to borrow or buy for the study of Culex mosquitoes. If anyone has an idea or questions about the details, please contact me at: achonnen@igb-berlin.de.

Dipl. Biol. Ann-Christin Honnen

Best, Ann-Christin Honnen

Leibniz-Institute for Freshwater Ecology and Inland Fisheries Mueggelseedamm  $301\ 12587\ Berlin\ R\ 106\ +49\ (0)30\ 64\ 181\ 693\ achonnen@igb-berlin.de$ 

www.igb-berlin.de www.igb-berlin.de/mitarbeitendeigb.html?show18 achonnen@igb-berlin.de

#### Drosophila isofemale lines

I am currently maintaining a number of Drosophila melanogaster and D. simulans isofemale lines (listed below), which myself and others have collected from wild populations over the last few years. Unfortunately I am no longer able to maintain these lines and so was wondering if anyone would be interested in them before I destroy them.

In addition to the lines themselves, Casey Bergman and I have recently released whole-genome sequences for 20 lines from the French population (see http:/-/bergmanlab.smith.man.ac.uk/?p=1685), and hope in the near future also to release whole-genome sequences for 15 lines from each of the Georgia (D. melanogaster) and Ghana populations.

If anyone would be interested in any of these lines then please let me know.

Best wishes,

Penny Haddrill p.haddrill@ed.ac.uk

32 D. melanogaster lines from Athens, Georgia, USA, collected in August 2009

19 D. simulans lines from Athens, Georgia, USA, collected in August 2009

76 D. melanogaster lines from Accra, Ghana, West Africa, collected in January 2010

39 D. melanogaster lines from Montpellier, France, collected in August 2010

18 D. melanogaster lines from Marrakech, Morocco, North Africa collected in September 2010

38 D. melanogaster lines from Sussex, UK, collected in July 2011

Institute of Evolutionary Biology University of Edinburgh Ashworth Laboratories King's Buildings Edinburgh EH9 3JT UK

Tel: +44 (0) 131 6507335 Fax: +44 (0) 131 6506564 p.haddrill@ed.ac.uk

### **Drosophilid** genomes

Dear all,

Sorry for a Drosophila-specific question to a general list.

Can anyone tell me if there is a list being maintained anywhere of all the Drosophilid species genomes and transcriptomes that are being (or have been) sequenced? Data on Species, Research Group, Genome, Transcriptome, and expected completion date would be very welcome.

If no such list exists, but you are currently sequencing either a genome or a transcriptome, and you don't mind the research community knowing that you are doing it - please let me know, and I'll endeavour to create such a list.

I have somewhat dubious transcriptomes (fragmentary & highly heterozygous, created from pools of from wildcaught flies as a side-product of another project) for: D immigrans, D obscura, D subobscura, D tristis and D subsilvestris, which I'd be happy to share with interested parties

Best wishes,

Darren -

Darren Obbard Institute of Evolutionary Biology Room 123, Ash 2, Ashworth Labs Kings Buildings University of Edinburgh, UK darren.obbard@ed.ac.uk http:/-/www.biology.ed.ac.uk/research/groups/obbard/ The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.

darren.obbard@ed.ac.uk

#### **ESEB** outreach fund

\*ESEB Outreach Fund\*

The European Society for Evolutionary Biology (ESEB) welcomes applications to the ESEB Outreach Fund for projects that promote evolution-related activities. With a total annual budget of 15000 Euro, the goal of this initiative is to improve public knowledge about evolution globally.

Applications for funding will be accepted for educational initiatives that promote evolution, development of evolutionary material (books, films, websites) intended for a general audience, public outreach seminars, public exhibitions, etc.

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

- Ute Friedrich ESEB office Manager Le Biophore University of Lausanne CH-1015 Lausanne Switzerland Phone: +41 (0)21 692 4207 Email: office@eseb.org

European Society for Evolutionary Biology www.eseb.org office@eseb.org

# EncyclopediaOfLife ResearchWishes

Dear Colleagues,

The Encyclopedia of Life (EOL) is pleased to announce the call for 'research wishes < http://eol.org/info/347 >.' Users are invited to submit longstanding research questions that involve a large number of taxa. EOL will prioritize resources based on the top ten wishes as voted by the EOL community.

Do you have a longstanding research question, involving a large number of taxa? Do you suspect the sum of human knowledge contains enough information to provide the answer ? Maybe you have never tackled it because it is just way too much work to extract it from its myriad locations? Can EOL help? Tell us the question you want to ask. Tell us the kinds of data you would need. Let us help get you access to the data that will allow you to answer the big questions.

Please see the EOL Wishes for Research < http://eol.org/info/347 > page for more information, the online nomination form, and details on prizes.

Anyone with a strong interest in science is invited to articulate a research question. Wishes will be accepted through September 15, 2012.

Please help us spread the word by sharing this an-

#### September 1, 2012 EvolDir

nouncement with your contacts. Questions? Email Jen Hammock at hammockj@si.edu.

Thanks, Cyndy Parr

Cynthia Sims Parr, parrc@si.edu Director, Species Pages Group Encyclopedia of Life http://www.eol.org Office: 202.633.9513, Fax: 202.633.8742 Room W118

Mailing address: National Museum of Natural History Smithsonian Institution P.O. Box 37012, MRC 106 Washington, DC 20013-7012

csparr@gmail.com

#### Evolution2012 photos

Hi, all:

I am interested in any shot that gives some indication of the size of the group that assembled this year. I have searched the web and emailed one of the meeting organizers already; so far, I've been unable to locate anything. If I had it to do over again, I'd take the shot myself, preferably from somewhere high up on one of the escalators between levels 2 and 3 and during a coffee break. But one from one of the poster sessions before dark might work as well or perhaps even better. Just wondering if anyone else has something that might work.

Thanks in advance.

Paul Mack, Ph.D Associate Professor of Biology Department of Sciences and Mathematics Mississippi University for Women 1100 College Street, MUW-100 Columbus, MS 39701 662-329-4987 sdfdf "I do not feel obliged to believe that the same God who has endowed us with sense, reason and intellect has intended for us to forego their use." - Galileo

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pmack@as.muw.edu

# **Exemplar species**

We need your help creating a list of exemplar species from across the tree of life!

As our team works to build an open tree of life for the systematics community, we are also working on an educational version of the tree for the public . Our goal is to depict about 200 better-known (i.e. phylogenetically or otherwise important in some way (pathogen, food source, etc.)) species from all three domains of life. The intended audience of this effort includes educators, students, and the public in general.

Please follow the link below to vote for your 5 best exemplars... https://www.surveymonkey.com/s/favorite\_species\_for\_tree\_of\_life And please conversation website join the through our (http://opentreeoflife.org/), email (opentreeoflife@googlegroups.com), or twitter (opentreeoflife).

Thank you!

lkatz@smith.edu

#### **FreeSoftware Phylogenetics**

Hello all,

I have a couple of undergraduate students in my fish biology class this summer working on the systematics of a genus of marine cottid fishes and they are looking for advice on the best free and user friendly software for tree building using morphological data. Any thoughts are most appreciated.

Matt Knope

Matthew Leo Knope <knope@stanford.edu>

#### **GreatTit BloodSamples**

Dear Evoldir community,

I am looking to acquire blood samples from the Great Tit (Parus major), preferentially from the U.K but anywhere in Europe would suffice.

If anyone could help I would very much appreciate an email from you.

Thanks,

Jackie Lighten Dalhousie University Canada Jackie.lighten@dal.ca Jackie Lighten <jackie.lighten@dal.ca> low, Department of Biology, Brigham Young University, 601, Widtsoe Building Provo, UT 84602-5255 USA. Ph: 801-422-1733

"D.H.N. Munasinghe" <dhnm@zoo.ruh.ac.lk>

### **Independence of Dyads**

Dear List:

I have a pairwise genetic relatedness matrix that is 610 individuals on a side so their are 185745 unique dyads. These are divided into four categories: unrelated (n9275), half siblings (n234), full siblings (n"6), and parent-offspring pairs (n). Homogeneity of variance is decreases in quality with decreased sample size in each category, as might be expected. I would like to test the means of the geographic distances between individuals in each dyad against eachother, but there two issues to be resolved. First, are these dyads independent? E.g., the FS dyad below involves individuals 1 and 3 and the PO dyad also involves individual 1. Second, what to do with the grossly uneven sample size?

Matrix ind<br/>1 ind2 ind3 ind4 ... 1 - 2 PO - 3 FS U - 4 U U U - ...

Thanks, Steve

 Steve Kimble PhD candidate, Department of Forestry and Natural Resources Purdue University skimble@purdue.edu sjkimble@gmail.com 205.337.4843 http://web.ics.purdue.edu/rodw/Steve%20Kimble.htm steve kimble <sjkimble@gmail.com>

# Input data into Arlequim

Dear all,

I also cannot undersated how to prepare input file for Arlequin, if there are multiple alles for one locus (from microsatellite data). I really appreciate if someone could explain it.

Thank you.

Dona

Dr. D.H.N.Munasinghe Visiting Post Doctoral Fel-

# Margulis film

New documentary about Lynn Margulis

The Revolution is in Progress

Dear Friends and Colleagues of Lynn Margulis,

I am writing to ask your help in raising funds to produce a documentary film about the revolutionary ideas that Lynn Margulis and her colleagues "including many of you" introduced to the world.

You can help by (1) putting us in touch with individuals at foundations who know of Lynn's work and who might be interested in supporting this film, (2) sharing any contacts at US and overseas television networks, and (3) donating directly to the film through our not-for-profit partner, the Global Film Network, on our [2]website. Links: 2. http://hummingbirdfilms.us2.list-manage1.com/track/click?u=4434e85393980c9e77860022d&id=-

0387cf68af&e=8193204ad7 After I completed EVO: Ten Questions Everyone Should Ask about Evo-([3]www.hummingbirdfilms.com/evo) lution Lynn insisted that I make another film that addressed several cutting edge scientific ideas. Together we had started discussing the content for this new film. Now, with the help of Jim MacAllister, I have begun this exciting and much needed project. I am gratified by the growing list of her colleagues who are offering me their encouragement, knowledge, and time to develop this project. Links: http://hummingbirdfilms.us2.list-manage.com/-3. track/click?u=4434e85393980c9e77860022d&id=-

daf613d0eb&e=8193204ad7 As you can read on our [4]website and in the proposal ([5]click for PDF [6]here), the documentary addresses common misconceptions about science, evolution, the role of the genome, bacteria, and the environment that Lynn worked so hard to change. I expect the film to be distributed in theatres, on DVDs, television, museum kiosks, the internet, online and to high school and university libraries. We will make a special version, with a Teachers Guide, for high school science classes that will be distributed by NSTA (National Science Teachers Association) who is distributing EVO and its Teachers Guide. Links: 4. http://hummingbirdfilms.us2.list-manage2.com/track/click?u=4434e85393980c9e77860022d&id=-1d65f67d86&e=8193204ad7 5. http://hummingbirdfilms.us2.list-manage1.com/track/click?u=4434e85393980c9e77860022d&id=-7e5a9498aa&e=8193204ad7 6. http://hummingbirdfilms.us2.list-manage2.com/track/click?u=4434e85393980c9e77860022d&id=-

e1870050e7&e=8193204ad7 The production budget for the film is \$200,000. My plan is to begin shooting in the next couple months in the U.K where I plan to interview Denis Noble, Stephan Harding, James Lovelock, and Donald Williamson. I will then do several interviews in the US. I have an immediate need of \$35,000.

In his e-mail agreeing to be interviewed, James Shapiro comments that "this is a very important project because the science is now moving very fast and people deserve to be made aware of all the progress."

My goal is to make a compelling and inspirational film that excites people about new ways of thinking and new and important ideas that affect our daily lives.

This letter is an invitation for you to join me.

Sincerely, John Feldman Hummingbird Films

Please make all donations payable to Global Film Network and send to John Feldman, Hummingbird Films, PO Box 292, Spencertown, NY 12165. All contributions are tax deductible. Or you can contribute by credit card through PayPal on our [7] website (scroll down to the "donate" button on the webpage). [8] friend on Facebook [9] forward to a friend Copyright AAC 2012 Hummingbird Films, LCC All rights reserved. Links: 7. http://hummingbirdfilms.us2.list-manage.com/track/click?u=4434e85393980c9e77860022d&id=-201ff24fad&e=8193204ad7 8. http://hummingbirdfilms.us2.list-manage.com/track/click?u=4434e85393980c9e77860022d&id=d34540f825&e=8193204ad7

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

# Minimum information phylogenies

What data makes a phylogenetic tree useful?

When publishing a phylogenetic tree, or evaluating a tree, we generally want more than simply the tree structure - for example, who inferred the tree? using what data and what methods? what are the organisms at the tips? what are the support values? Of course, those who use / evaluate trees want as much data as possible about a tree. Those who publish / database trees want a quick and simple submission system. How do we balance these sometimes conflicting viewpoints?

The following survey asks you to categorize various data elements about trees in terms of 1) how useful is the data? and 2) how difficult is it to collect? The survey should take about 10 minutes.

https://duke.qualtrics.com/SE/?SID=-

SV\_b2upIMII4fxJkAA This survey is brought to you by MIAPA and Open Tree of Life. MIAPA (http://www.evoio.org/wiki/MIAPA) aims to develop a formal spec for Minimum Information About a Phylogenetic Analysis. The Open Tree of Life (http:/-/opentreeoflife.org) is collecting input phylogenies for synthesis into a comprehensive tree of life. We will share the results via the MIAPA and Open Tree of Life websites, and results will inform the MIAPA standard as well as the collection trees for Open Tree of Life.

If you have any questions about this project, please contact Karen Cranston (karen.cranston@nescent.org).

Thank you! Karen Cranston (on behalf of MIAPA and Open Tree of Life) National Evolutionary Synthesis Center

karen.cranston @gmail.com

Karen Cranston <karen.cranston@gmail.com>

#### Paper on Bee micros

Dear Evoldir Members,

Does anyone has a copy of the following article:

Paxton R.J., Wießschuh N. and Quezada-Eun J.J.G. 1999. Characterization of dinucleotide microsatellite loci for stingless bees. Mol. Ecol. 8: 685-702.

I've tried to download it from the journal website, but the pages described in the reference doesn't exist there.

Thanks in advance.

Fábio B. Britto Universidade Federal do Piauí - Campus Profa. Cinobelina Elvas Rodovia Municipal Bom Jesus-Viana, Km 01 Bairro Planalto Horizonte Bom Jesus, PI CEP 64900-000 Brazil

Fabio Britto <fbbritto@yahoo.com>

# **Philippines VolunteerDivers**

Volunteer Divers in Marine Protected Areas (Philippines), Sept/Oct 2012

Project Seahorse and its NGO partner in the Philippines are seeking volunteer, certified SCUBA divers (minimum 15 logged dives) who are interested in participating in a long-term monitoring program for marine protected areas (MPAs) in northern Bohol, Philippines.

The surveys are conducted biannually, one in the dry season (March/April) and one in the wet season (Sept/Oct). An eight-week commitment is required comprising approximately two weeks of training and six weeks of survey work. Surveys are easily influenced by weather and other unpredictable events, so the duration of the fieldwork may vary. If completed quickly, volunteers will be asked to assist with other conservation work, such as data encoding or assisting with other biological field programs.

Download an application in pdf or Word format. The application deadline for the Sept/Oct 2012 survey has been extended to Aug 23, 2012. Please email your application to Angelie Nellas at a.nellas@projectseahorse.org.

# Shipping dry DNA pellet

Hi,

I was wondering if anyone has experience shipping dry DNA overseas. Is it possible to just ship tubes with the dry DNA pellet after a phenol-chloroform extraction? Is it necessary to use a speed vacuum? Any other methods available?

Thanks in advance for your reply! Best, Margarita López-Uribe Margarita Maria Lopez <mm\_lopezu@yahoo.com>

# Shipping dry DNA pellet answers

Thanks to all of you for your responses!

Please find below all the messages that I received. For the most part, people said that they have not experience problems shipping the dry pellet but some people expressed some concerns about the ability to resuspend overdried DNA after applying the speed-vacuum.

Cheers, Margarita

-----

We regularly ship dry DNA and it works very well.

EtOH precipitation and vaccum or air dry. Ship the pellet as is and rehydrate to use.

Hope this helps

Eric Parent Pêches et Océans / Fisheries and Oceans Institut Maurice Lamontagne/ Maurice Lamontagne Institute 850 route de la mer Mont-Joli, Qc G5H 3Z4 Canada

Hi.

The company we currently use asks us to ship DNA in alcohol, but I think I did post some dry DNA pellet a long time ago.

Best, Maureen

I don't know whether that helps but I used RNA stable (Biomatrica: http://www.biomatrica.com/rnastable.php) to ship my RNA samples from Germany to the USA for later microarray analyses - and it worked pretty well! I know that Biomatrica also offer "DNAstable" which - as I guess - should work similarly for DNA samples... For my RNA preparations I needed to speed vac - I guess it should be the same with DNA... As far as I remember you can download a pdf from the Biomatrica homepage which describes the procedures which are needed for preparing your samples - just have a look there...

Good luck!

Best,

Dörthe

Dr. Dörthe Becker Institute of Zoophysiology University of Münster, Germany

Hindenburgplatz 55 48143 Münster Germany

\_\_\_\_\_

We have good experience with freeze-dried samples. We received quite some genomic DNA samples from collaborators that way, but also normally primers are shipped freeze dried. I do not know about shipping pellets, but can tell you that we in rare cases air-dry pellets even over the weekend (but they are of course dry after a few hours) and they dissolve fine after the 2 days. So if the shipping is not too long, drying them and sending them should work as well. I would not recommend to speedvac them completely dry. In my experience an overdried pellet dissolves only very hard and it's not perfect for the DNA, either. I would in any case try some mock samples first to see if it works for your amounts, pellet size, extraction method, shipping conditions, ...

Good luck!

Sabine

\_\_\_\_

 PhD student Max-Planck-Institute for Chemical Ecology Department for Entomology Hans-Knoell-Str. 8 07745 Jena Germany

it is fine to just ship tubes with the dry DNA pellet directly after DNA extraction; however, it would be best to re-suspend the pellet first to check the quality of the DNA before you send it. If you do this, then you can simply allow an aliquot of the re-suspended DNA to dry out at room temperature or speed vac under a low heat. It is not always necessary to go to the trouble of re-precipitating and drying the pellet (which also runs the risk of you loosing some of your valuable DNA).

Hope this helps, Will G-C

I've done this quite a bit and there's never been a problem. Drying with a speed-vac would be best but if you don't have one, then just letting it evaporate would be fine too. Probably best to put a tissue or something loosely over the top. You could put it in an incubator or heat block to speed that evaporation along but don't set it too warm, else it might affect (denature) the DNA - no more than 40 deg I reckon. Make sure it's totally dry before you seal it up and send it.

All the best, Niccy

Niccy Aitken Research School of Biology The Aus-

tralian National University Canberra, ACT 0200. Australia

\_\_\_\_\_

You should not have problems sending dry DNA. I have even send DNA in solution through Fedex and the PCRs worked after been stored in the customs office for days! DNA is pretty stable, and when is dry you shouldn't expect much troubles.

cheers

sergio Dr. rer. nat. Sergio Vargas R.

s.vargas@lrz.uni-muenchen.de gio.vargasr@ecci.ucr.ac.cr

I've heard the DNA can be hard to rehydrate after speed vac drying (I haven't tried so i dont know) It's my understanding that lyophylizing is better - that's how primers get shipped If you have access to a lyophylizer, its pretty easy - just practice with some colored water before drying your samples so you dont end up sucking the samples out of the tubes. the key is to make sure the samples never thaw

best diana

Diana Wolf phone:(907)474-5538 Associate Professor fax:(907)474-7666 Institute of Arctic Biology Dept. of Biology and Wildlife 311 Irving I 902 N Koyukuk Drive University of Alaska Fairbanks Fairbanks, AK 99775-7000

What is the size of the DNA which you need to send? If it's high molecular weight material and the downstream application is library construction or similar, it might not be a good idea to vacuum it. We've sent DNA



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

# Software PartitionFinder

Dear All,

We're pleased to announce the release of Partition-Finder v1.0.1, a program for the combined selection

ser-

of partitioning schemes and models of molecular evolution. It can automatically and objectively select the best partitioning scheme and associated models of molecular evolution for any DNA or protein alignment. PartitionFinder is free and open source, works on all major operating systems (see FAQs for Linux), and runs on multiple processors to make it as fast as possible.

You can download PartitionFinder here:

www.robertlanfear.com/partitionfinder The website also has links to the manual, FAQs, a tutorial, a google group for questions, the source code, and the paper in MBE describing the program and the algorithms it implements.

PartitionFinder can be used to:

\* Find best fit partitioning schemes for DNA and protein datasets, given a set of starting partitions \* Calculate the AIC, AICc and BIC of any given partitioning scheme for any given dataset \* Calculate best fit models of molecular evolution for partitioned or unpartitioned datasets \* Compare all the usual models of molecular evolution for DNA and protein alignments

We are actively developing the program, so please do get in touch if you have questions, suggestions, or comments.

Yours,

Rob Lanfear

– Ecology, Evolution, and Genetics, Australian National University, Australia

July-September National Evolutionary Synthesis Center, USA

rob.lanfear@gmail.com

## Software SBEToolbox

#### Dear all,

We present SBEToolbox (Systems Biology and Evolution Toolbox), an open-source Matlab toolbox for biological network analysis. It calculates a variety of centralities and topological metrics, clusters nodes into modules, and interactively displays the network using different graph layout algorithms. Efficient lightweight design allows large-scale networks to be handled. Straightforward implementation and the inclusion of high-level functions allow the functionality to be easily extended or tailored. SBEGUI, a menu-driven GUI of SBEToolbox, is highly interactive, enabling easy usage of most network and graph algorithms without prior knowledge of programming. The stand-alone executable SBEGUI, running on all major operating systems, does not require the installation of Matlab system. Availability: Pre-compiled stand-alone executable for all major operating systems and source code are freely available at http://sbetoolbox.sourceforge.net . Your comments are always welcome.

#### James Cai

Veterinary Integrative Biosciences Texas A&M University College Station, Texas 77843 Email: jcai@tamu.edu http://genomezoo.net JCai@cvm.tamu.edu

# PostDocs

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## **BielefeldU EvolutionRecombination**

Dear members of evoldir,

The Biomathematics group at the Faculty of Technology, Bielefeld University, has a vacancy for a

Research Associate (postdoc, TVL-E13)

for a period of 3 years, starting in November 2012 or later; extension is possible.

We are looking for an individual with a PhD in Mathematics, Biomathematics, or Mathematical statistical physics, to work on a project in mathematical genetics. The project will investigate the dynamics of recombination processes and so-called ancestral recombination trees. The project is part of the recently-established Priority Programme on 'Probabilistic Structures in Evolution' (DFG-SPP 1590), see http://ekvv.unibielefeld.de/blog/uniaktuell/entry/professorin\_ellen\_baake\_koordiniert\_neuen or http://www.dfg.de/foerderung/info\_wissenschaft/archiv/2011/info\_wissenschaft\_11\_36/index.html,

which offers an excellent research environment. The same holds for Bielefeld University, a particular strength being due to close interaction between biomathematics, mathematics, bioinformatics, and biology.

Informal inquiries and applications should be sent to the address below before Aug. 24, 2012. Applications via email are welcome.

Bielefeld University is an equal opportunity employer. Women and members of minority groups including disabled persons are strongly encouraged to apply.

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Prof. Ellen Baake, Technische Fakultaet, Uni-33501 versitaet Bielefeld, Postfach 100131. Bielefeld, Germany phone (+49) 521 106 4896 email: ebaake@techfak.uni-bielefeld.de URL: http://www.TechFak.Uni-Bielefeld.DE/ags/bm/ ebaake@techfak.uni-bielefeld.de

## Bretagne EvolBiol

Dear all

[please forward as appropriate, sorry for cross posting] Postdoc:

The French regional funding board of Region Bretagne is lancing a call for postdoctoral funding for 12 to 24 months - provided that the candidate is foreigner (i.e. 12 months outside France during the last 3 years) and that 25% of the salary is provided from other sources. Please see https://xnet1.regionbretagne.fr/Recherche/fichiers\_accueil\_extranet/-

Reglement\_dispo\_SAD\_2012.pdf for details (in French, regrettably). Internal preinscript is (theoretically) next week, deadline is August 15.

Invited foreign PhDs:

>= 3 months, between (theoretically) January and August 2013; please see >below for details

Invited Docent positions at University Rennes 1:

Calls should appear in autumn, but with usually a very short notice. This is for multiple months stays at Rennes for docents profs who have a permanent position at their home institution. The only teaching load that is expected here in Rennes is to give one or a few seminars.

All:

Should you fit the criteria and be interested in research at the interface of ecological coexistence and evolutionary diversification (profiting for instance from exceptional databases or field settings on ecosystem and microevolutionary consequences of macroevolutionary niche conservatism) please feel free to contact me at andreas.prinzing@univ-rennes1.fr. We can then discuss possibilities to demand either of these fundings. Please do so as soon as possible, in particular for the postdoc funding. Obviously you are also free to contact any other lab in Bretagne.

Best regards Andreas Prinzing

Andreas Prinzing, Prof. Ecology of Diversification

Team "Structure and Dynamics of Diversity" Research Unit "Ecobio" : Ecosystems - Biodiversity - Evolution Université Rennes 1 / Centre National de la Recherche Scientifique Campus de Beaulieu, BĂtiment 14 A 35042 Rennes, France Tel : +33 2 23 23 67 12; fax: +33 2 23 23 50 26 andreas.prinzing@univ-rennes1.fr http://ecobio.univrennes1.fr/Fiches\_perso/Fiche.asp?pseudo=APrinzing http://ecobio.univ-rennes1.fr/Fiches\_perso/Banque/publi1\_APrinzing.doc RENNES METROPOLE MOBILITY GRANTS FOR âINCOMING' FOREIGN PhD STUDENTS

Call for Proposals For foreign PhD students starting a program in Rennes area between January and August 2013

Objective: Increase the number of foreign PhD students in institutions in the Rennes Urban Area.

Description: Grants of 800 euro per month paid directly to the awardees. An allocation document will give details of the conditions for payment of the grant. The grant may be awarded for up to 6 months per candidate. The Rennes Metropole grant must be used by the PhD student to cover the costs incurred when away from his/her usual place of residence. The grant will be paid to the candidate upon his/her arrival in Rennes. The grant can not be combined with similar awards from other institutions.

Eligibility criteria: - Enrolment on a PhD program in a foreign research institution - Participation in a placement of at least 3 months in a research institution in the Rennes area as part of the thesis. - Holder of a letter of invitation from the welcome team - Arrival to begin placement in Rennes planned between January and August 2013 Supporting documents: Standard file including: - A CV and cover letter A letter from the Rennes welcome team setting out the placement conditions and duration - A partnership agreement, if necessary - A description of relationships between the two institutions - Copy of the candidate's bank details - Summary of exchange project - References from thesis supervisor(s)

The application must be completed in French

To be submitted no later than september 25, 2012 to the Secretarials offices of the Doctoral schools.: VAS, SDLM, MATISSE & SHOS

Applicants will be notified of the decision on November 2012.

Andreas Prinzing <andreas.prinzing@univ-rennes1.fr>

### **Dartmouth MicrobialEvolution**

\*Postdoctoral Position in Comparative Genomics and Microbial Evolution\*

A postdoctoral researcher position is available immediately in the lab of Olga Zhaxybayeva at the Biological Sciences Department of Dartmouth College in Hanover, NH. Zhaxybayeva's lab uses computational approaches to study how microbes evolve and adapt to their environments. Ongoing projects fall into the following broad areas: 1) Studying impact of horizontal gene transfer on microbial populations; 2) Characterization of microbial communities; and 3) Deciphering genomic signatures of microbial adaptations. More information about Zhaxybayeva's lab is available at http:/-/www.dartmouth.edu/~ecglab/. Qualified applicant must have a Ph.D. in bioinformatics, biology, microbiology, computer science, statistics or a related field with background and strong interest in molecular evolution. The ideal candidate will already have some experience working with large genomic data sets. Prior programming or scripting expertise is a plus. The responsibilities will include pipeline development for analyses of next-generation data sets and utilization of highperformance computing facilities.

The successful candidate should anticipate contributing to a variety of ongoing collaborative research projects with teams across the United States and Canada. The incumbent will also have the opportunity to establish his/her own independent projects and to collaborate with the faculty at Geisel School of Medicine, and the Institute of Quantitative Biomedical Sciences. In addition to becoming a part of a vibrant research and educational environment, the incumbent can take advantage of professional development programs offered by Dartmouth College's Postdoctoral Association.

The initial appointment is for one year with the possibility of renewal for up to two additional years contingent upon performance and funding. Review of applications will begin immediately and continue until the position is filled. Start date is negotiable. \*Interested applicants should send a single PDF file containing CV, one-page statement of research interests and contact information of three referees to Olga Zhaxybayeva at ECGLabJobs@gmail.com.\*

Founded in 1769, Dartmouth is a member of the Ivy League and consistently ranks among the world's greatest academic institutions. Dartmouth offers competitive salary and benefits along with the opportunity to live in a picturesque rural region that provides yearround recreational activities and is located near major cities such as Boston, Montreal, and New York.

Dartmouth College is an equal opportunity/affirmative action employer that has a strong commitment to diversity. Women, minorities, persons with disabilities, and veterans are encouraged to apply.

– Olga Zhaxybayeva, Ph.D. Assistant Professor Department of Biological Sciences Dartmouth College 025 LSC 78 College Street Hanover, NH 03755 USA

Office: (603) 646-8616 Email: olgazh@dartmouth.edu Web: http://www.dartmouth.edu/ ~ ecglab/ Olga.Zhaxybayeva@dartmouth.edu

## ETH Zurich ComputationalBiol

Two Postdoc Fellowships

#### Profile requirement:

Successful candidates will have a strong background in bioinformatics, computer science, statistics, and/or computational biology. Candidates should be highly motivated and have the ability to work independently. As the research will involve a mix of disciplines, candidates with experience in several fields will be preferred (bioinformatics, genetics, protein structure, computational science, mathematics, physics, statistics). Fluency in a major scripting language, and experience in software development is a must. Some background in biology is desirable, but interest in biology and bioinformatics is required.

Besides the research activities, the postdoc fellows will have the opportunity to assist or teach one course per semester and mentor students.

ETH Zurich boasts excellent facilities for studying and recreation. The working language in the group is English, which is also widely used in Switzerland. CBRG is a member of the Swiss Bioinformatics Institute (SIB) and benefits from SIB training courses and networking. Zurich is located less than one hour from the Alps, and is a small but vibrant city offering one of the best living standards in the world. Zurich is well connected to major European cities and has a large international community.

Salary and social benefits are very competitive. Contracts will be 12-month renewable, with a 3-month probatory period.

To apply please send a single PDF to madeleine.bernard@inf.ethz.ch containing: - CV with publication list - The name of at least two references, preferably more - A short statement of research interests, mentioning past and future research activities (not exceeding two pages) - Reprints of up to 3 representative publications

The positions are open until filled (quick response is recommended).

cdessimoz@inf.ethz.ch

# Finland EvolutionaryConservationGenetics

[This is a reminder (due to holidays and fieldwork) for a position announcement sent out several weeks ago. Applications submitted thus far are still taken into consideration]

A post-doctoral position is available in Craig Primmer's research group (see http://users.utu.fi/primmer for more details) at the University of Turku, Finland.

The successful applicant will be expected to have the skill and enthusiasm to contribute to evolutionary and conservation genetic aspects of a project aimed at identifying the genetic basis of ecologically relevant traits in wild Atlantic salmon populations using approaches including hitch-hiking, association and linkage mapping in wild population pedigrees (see background publications below). Suitable candidates will have a strong background in evolutionary or conservation genetics (in any species) and a good knowledge of quantitative genetic and genetic mapping methodologies. Experience in analysis of SNP and next-generation sequencing data is also an advantage.

Informal inquires and applications (preferably as a single pdf file) should be addressed to Prof. Craig Primmer (craig.primmer@utu.fi). Applications should include a full academic CV, a statement of previous research and supervision experience as well as current research interests and names and contact details of at least two referees. Review of applications will commence on September 3rd with the preferred starting date being January 2013 or earlier. The position is available until the end of 2015. The salary range is 3000 - 4100 EUR per month, depending on the previous post-doctoral experience of the candidate.

Turku, Finland's 5th largest city (178 000 people), is located in the southwestern Finland. It has a rich 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 5% of universities in the world.

Vähä et al. (2011) Temporally stable populationspecific differences in run timing of one-sea-winter Atlantic salmon returning to a large river system. Evolutionary Applications 4:39-53

McGinnity et al. (2009) Impact of naturally spawning captive-bred Atlantic salmon on wild populations: depressed recruitment and increased risk of climatemediated extinction. Proc. R. Soc. Lond. B. Biol. Sci. 276: 3601-3610

Vähä et al. (2008) Retrospective genetic monitoring of Atlantic salmon populations within a river system over two decades "implications for management. Evolutionary Applications 1: 137-154.

Vähä et al. (2007) Life-history and habitat features influence the within-river genetic structure of Atlantic salmon. Molecular Ecology 16: 2638-2654

craig.primmer@utu.fi

# HarvardMedSchool 2 EvolutionaryGenomics

# EVOLUTIONARY GENOMICS AT THE REICH LABORATORY AT HARVARD MEDICAL SCHOOL

Open post-doctoral position #1: Learning about history using genetic data

We are searching for a highly motivated post-doctoral researcher to join our group.

The successful candidate will have exceedingly strong statistical / mathematical / computational skills, and an interest in history. While a background in population genetics, bioinformatics or experimental biology is advantageous, it is not necessary. Our lab has the resources to not only analyze large public data sets, but also has access to some of the world's best new genetic data, whether generated by collaborators or in our own laboratory. Possible projects are: . Studying human history using data from present-day populations. . Studying human history using ancient DNA . Studying the process of speciation using genetic data

Description of projects in our lab, as well as papers we have recently published, is provided at http:/-/genetics.med.harvard.edu/reichlab/Reich\_Lab/-

Welcome.html. The position will be jointly supervised by Drs. David Reich and Nick Patterson, and will involve work at both Harvard Medical School and the Broad Institute of Harvard and MIT.

Please write to reich@genetics.med.harvard.edu by October 31 2012 if you are interested.

\*Open post-doctoral position #2: Ancient DNA

We are building an ancient DNA laboratory focusing on studying human population movements since the end of the last ice age, and are looking for a post-doctoral researcher with appropriate experience and interests to work in this area.

The successful candidate will have previous experience in a world class ancient DNA laboratory, as well as analytical and computer skills that allow exploration of large and complex genetic data sets.

Description of additional projects in our lab, as well as papers we have recently published, is provided at http://genetics.med.harvard.edu/reichlab/-Reich\_Lab/Welcome.html . The position will be supervised by Dr. David Reich and will involve work at both Harvard Medical School and the Broad Institute of Harvard and MIT.

Please write to reich@genetics.med.harvard.edu by October 31 2012 if you are interested.

David Reich <reich@genetics.med.harvard.edu>

## KansasU InvertBiodiversity

The Division of Invertebrate Paleontology in the KU Biodiversity Institute seeks a 2-year, full time, postdoctoral associate with experience and interest in invertebrate paleontology and bioinformatics to work on an Advancing the Digitization of Biological Collections grant covering invertebrate fossils. Required qualifications include a PhD in geology, systematics, paleontology or closely related field, working knowledge of the taxonomy and identification of invertebrate fossils, experience databasing natural history collections, experience managing projects, and demonstrated communication skills. For additional information and complete application instructions visit https://jobs.ku.edu, position # 00209886 or contact Bruce S. Lieberman blieber@ku.edu. To apply complete the online application and attach cover letter, curriculum vitae, and contact information for 3 professional references. Review begins 1 Nov. 2012. Equal Opportunity Employer M/F/D/V.

"Lieberman, Bruce S" <blieber@ku.edu>

#### Munich EvolutionTheory

# PARMENIDES FELLOWSHIPS IN THEORETICAL BIOLOGY - CALL FOR APPLICATIONS

Two thematic Parmenides fellowships are open in the Parmenides Center for the Conceptual Foundations of Science (Münich, Germany) under the supervision of Prof. Eörs Szathmáry.

Successful candidates will carry out their own research agenda in the fields described below. The positions are for a minimum of 1 year to a maximum of 3 years. Successful applicants will receive a stipend of 2500 EUR per month (net). The proposed projects can start as soon as a suitable candidate is identified, but not later than the 15th October, 2012.

Origin of life: Theory of the emergence and development of the RNA world. The major evolutionary transitions, of which at least the first 3 is bound to this period in the evolution of life on Earth, should be in the focus of the proposed research project.

Replicator evolution in the brain: Population biology of replicators as proposed in Darwinian neurodynamics, with special emphasis on the application to Fluid Construction Grammar.

We seek applicants with an interest in theoretical evolutionary biology and experience in using a range of computational, bioinformatic and mathematical techniques to answer evolutionary questions. Furthermore, candidates should have a few years of postdoctoral experience, a track record in publishing in international scholarly journals and fluency in English.

Candidates interested in either of the positions should submit an application consisting of a CV with full list of publications, a motivation letter (1 page) and a detailed workplan (max 5 pages). The deadline for applications is 14th, September, 2012. Applications should be sent by email to Eörs Szathmáry, szathmary.eors@gmail.com.

szathmary.eors@gmail.com

#### **Munich StatisticalGenetics**

The Statistical Genetics group in the evolutionary biology section of the Ludwig-Maximilians-Universitaet Muenchen (Munich, Germany) offers an

Assistant Position (Akademischer Rat/Akademische Raetin, A13, auf Zeit)

as from December 2012. Applicants should should provide expertise in one or more of the following fields: theoretical population genetics, evolutionary bioinformatics, stochastic processes with applications in evolutionary biology or ecology, quantitative genetics, or MCMC and other methods to analyze data in complex models. The assistant will be involved in the research projects of our group, which are mainly focussed on the development of mathematical models and methods for the statistical data analysis in population genetics, evolutionary ecology and phylogenetics. He or she will have to teach 5 hours per week. Prerequisites for the application are a doctoral degree in Mathematics, Statistics, Bioinformatics, Biology or a related field. Of advantage is experience in teaching in English and German, in the analysis of biological data (preferably in R), in interdisciplinary projects, in programming (preferably in C/C++), and in fundraising.

The position will be assigned for 3 years with the possibility of an extension by 3 more years.

The University of Munich is interested in increasing the number of female employees and encourages women to apply. The university is an equal opportunity employer and handicapped candidates with equal qualifications will be given preference.

Please send your application documents until September 23, 2012 to metzler@bio.lmu.de See also http:/-/www.uni-muenchen.de/aktuelles/stellenangebote/wissenschaft/20120821135330.html Prof. Dr. Dirk Metzler Biozentrum der LMU Department Biologie II Großhaderner Str. 2 82152 Planegg-Martinsried metzler@bio.lmu.de, http://evol.bio.lmu.de/\_statgen/ metzler@bio.lmu.de

#### NewYork ZoonoticDiseases

POSITION SUMMARY Postdoctoral Research Fellow to study the evolution and ecology of zoonotic diseases from bats and other hosts.

PRIMARY RESPONSIBILITIES The position is funded by a National Institutes of Health NIAID award to discover, characterize, and model the risk of new potential zoonoses from bats. The primary focus of the Research Fellow will be to model the risk of spillover, patterns of infection, co-phylogenetic and phylogenetic relationships, and phylodynamics of emerging zoonotic diseases from bats. Research will be focused on viruses and applying phylogenetic and comparative analyses to existing models and data, including a large number of newly discovered viruses. The position may involve some fieldwork with bats or other mammals internationally, but this will not be the primary focus of the position. Some light administrative duties, including drafting of the annual report and other paperwork, will be required. The position is based at EcoHealth Alliance headquarters in New York. There will be ample opportunity to brainstorm and interact with the Eco-Health Alliance scientific team during weekly meetings and informal discussions. Supervisory Responsibilities: The Research Fellow may be expected to supervise interns and potentially other junior staff at EcoHealth Alliance HQ to assist with the project.

QUALIFICATIONS A completed Ph.D. in Ecology, Evolutionary Biology, Virology, or a related field; postdoctoral research experience a plus. SKILLS A strong sense of team spirit and diplomacy is a requirement. Proficiency with statistical analysis in R and phylogenetic analyses is a must. Ability to think at a macro- or ecological scale, and experience with ecological modeling is a plus. Software skills should include, but not be limited to, most of the following: proficiency in general statistical analysis and plotting in R (GLMs, model testing, etc.); phylogenetic and evolutionary analysis in R (e.g. ape, picante, etc.); software for building phylogenetic trees (including Geneious, and other programs for alignment and building likelihood and Bayesian trees); and molecular evolution (esp. BEAST). Additionally, experience with spatial analysis or GIS would be a valuable asset, but not required. Excellent written and verbal communication skills in English and a proven track record in writing and publishing manuscripts are required. Experience capturing, identifying, and handling bats or other wildlife is a plus, but not required.

START DATE: There is a proposed start date of September 15, 2012. This is a one-year position unless additional grant money is secured. Salary is commensurate with experience.

How to Apply: In order to be considered all eligible candidates must email the following three items: (a) one page cover letter, (b) CV, and (c) three references to jobs@ecohealthalliance.org as well as enter "Post Doc NIAID Bat" in the subject line of the email.

EcoHealth Alliance is an equal opportunity employer

Thank you, Ashling

Ashling Patten <Patten@ecohealthalliance.org>

# NewcastleU PlantEvolutionaryGenet

Deadline for applications: 31st August

Postdoc position in Plant Evolutionary Genetics at Newcastle University, UK. We are looking for an enthusiastic postdoc for a 3-year NERC-funded research project entitled: 'Inter-genomic conflict in gynodioecy and its effects on molecular evolution of mitochondrial genomes in the genus Plantago'.

The applicant will be based in Kirsten Wolff's group in the School of Biology, Newcastle University, and will collaborate closely with Deborah Charlesworth's group at the Institute of Evolutionary Biology, University of
Edinburgh, where an additional postdoc will be part of the same project.

This project will use molecular evolutionary approaches to investigate the maintenance of cytonuclear polymorphisms in gynodioecious plants in the genus Plantago, to test whether an 'arms race' situation prevails, versus long-term balancing selection. In the project we will be obtaining and analysing DNA sequences of multiple nuclear and mitochondrial genes, to compare diversity, and test for long-term balancing selection. Nongynodioecious species will be studied, as well as gynodioecious ones, to provide outgroups for sequence analvses and to test whether the high diversity expected under long-term balancing selection is confined to the gynodioecious species. The project also includes testing for paternal inheritance/leakage by testing for heteroplasmy in natural populations of P. lanceolata, using analyses of mitochondrial DNA sequence haplotypes and studies of offspring of reciprocal crosses to assess the possibility that within-species polymorphism could explain the highly elevated mutation rates estimated in Plantago lineages.

The work will be divided between Edinburgh and Newcastle. For example, the Edinburgh group will concentrate on the nuclear genes, while the Newcastle group will obtain the mitochondrial genes, while other work is shared. Field work and greenhouse work will predominantly be done by the Newcastle postdoc.

Applicants must have completed their PhD before starting the position. Applicants should have some experience with molecular genetic techniques, and an interest in population genetics.

Further information can be obtained through vacancy information available on the Newcastle University web site, reference number D1082R. On the web site <a href="http://www.ncl.ac.uk/vacancies/">http://www.ncl.ac.uk/vacancies/</a> use this reference number in your vacancy search and when applying for the job.

Applications must be submitted through this electronic system. The closing date is: 31st August. Short listing will take place in the week of 3rd September and interviews are planned for the end of the week of 10th September.

The start date is 1 October 2012 or as soon as possible thereafter.

For informal enquiries contact Kirsten Wolff by email at Kirsten.wolff@ncl.ac.uk or by phone on 0191 222 5626 or 0191 246 4852 (note that Kirsten will be absent from 9th August)

Dr Kirsten Wolff Reader in Evolutionary Genetics Newcastle University, School of Biology Ridley Building, room 573 and Devonshire Building 5th floor Newcastle NE1 7RU, UK Phone: 0191 222 5626/0191 246 4852 email: kirsten.wolff@ncl.ac.uk www.staff.ncl.ac.uk/kirsten.wolff/ Kirsten Wolff <kirsten.wolff@newcastle.ac.uk>

# NorthCarolinaStateU MothMalePheromoneEvol

\*Position: Post-Doctoral Researcher V Evolution of male pheromones in moths\*

\*Date:\* Position available immediately

\*Salary: \*Commensurate with training and experience

\*Term:\* 3 years

\*Position Description: \*The \*Post-Doctoral Researcher\* will work with C. Schal (NCSU) and A. Groot (NCSU & University of Amsterdam, The Netherlands) on an NSF-funded project. In many moth species, male pheromone is important for species-recognition and female acceptance of males. However, despite the recognition that males invest disproportionately in the tissues that produce these pheromones, their roles in advertising male quality and guiding female mate choice have not been considered. This project addresses two major questions: (a) How does natural variation in close-range sexual signals affect female choice in moth species where the male pheromone resembles the female pheromone? and (b) Is the production of male sexual signals linked to production of female signals in these species? Specifically, the postdoc and a graduate student will: (1) chemically identify the close-range male pheromones in two moth species (fall armyworm \*Spodoptera frugiperda\*, and tobacco budworm \*Heliothis virescens\*), (2) quantify the magnitude of between-strain intraspecific variation in the male pheromones, and (3) evaluate what variable features of the male pheromone contribute to female choice.

Portions of this project will be conducted at the University of Amsterdam, providing a unique opportunity to be trained and conduct research in an international collaborative setting.

\*Qualifications: \*Ph.D. trained in evolutionary biology, entomology, behavior, biology, chemistry, or related fields. Experience in chemical ecology, including behavioral assays and purification and identification of semiochemicals. \*Application: \*Submit CV, relevant reprints and manuscripts, and a letter describing background, skills and interests. Also submit names, e-mail addresses and phone numbers of three references to:

Coby Schal Department of Entomology, Campus Box 7613 North Carolina State University Raleigh, North Carolina 27695-7613 coby\_schal@ncsu.edu

http://www.cals.ncsu.edu/entomology/schal\_lab/

Closing date when a successful candidate is found NORTH CAROLINA STATE UNIVERSITY IS AN EQUAL OPPORTUNITY EMPLOYER AND OPERATES UNDER AFFIRMATIVE ACTION POLICY

Coby Schal, Ph.D Blanton J. Whitmire Distinguished Professor Department of Entomology, 3107 Gardner Hall Campus Box 7613, 100 Derieux Place North Carolina State University Raleigh, NC 27695-7613 office: 919.515.1821 lab: 919.515.1820 fax: 919.515.7746 skype: coby.schal email: coby@ncsu.edu WWW: http://www.cals.ncsu.edu/entomology/schal Coby Schal <coby@ncsu.edu>

### **OhioStateU EvolutionPlants**

Post-doctoral position on the impact of plant domestication on the evolution of plant-associated organisms.

We seek a postdoctoral researcher to join an interdisciplinary project studying the impacts of plant domestication on the evolution of plant-associated organisms. The genetic bottlenecks that accompany selective sweeps profoundly affect the levels of genetic diversity found in domesticated plant species, while also affecting loci underlying important morphological, physiological, ecological, and biochemical characteristics. The dramatic change in the genetic diversity of plant hosts can also have cascading effects on genome evolution in the community of associated organisms. In the long term, this project seeks to identify the genes that led to domestication-induced adaptive divergence and speciation in both plant and plant-associated organisms.

Our project focuses on chile pepper (Capsicum annuum) as a model system to understand the molecular basis of coevolution at multiple scales from the genome to the organism, and, eventually, the community. C. annuum, one of the most diverse species within its genus and cultivated world-wide, includes nearly 50 recognized types that range from the mildest bell pepper to the hottest cayenne. The focus region of the study will be Mexico, which is C. annuum's center of domestication, where its progenitor (Capsicum annuum ssp. glabriusculum) grows in wild and semi-cultivated settings. Research questions will relate to: C. annuum population genetic diversity along environmental and domestication gradients; adaptation, population genomics and ecological speciation of insect host races, fungi and oomycetes; and tri-trophic interactions.

We seek applicants with an interest in evolutionary biology and experience using a range of techniques from quantitative and molecular genetics, genomics, and/or bioinformatics to answer ecological and evolutionary questions. Skills related to genome annotation, detection of genomic loci and/or regions under artificial or natural selection, or other ecological genomic techniques are a plus. The successful candidate will hold this position for two years with the possibility of an extension pending funding. Applicants should be interested in spending significant time in Mexico on collecting trips in conjunction with Mexican collaborators. Command of the Spanish language is also a plus. This postdoctoral position will be part of a cluster hire by the Center for Applied Plant Sciences (CAPS; caps.osu.edu/).

Candidates interested in this position should refer to the search website (caps.osu.edu/caps-postdoctoral-researcher-search) or contact Donnalyn Roxey (roxey.3@osu.edu) for further information about the search and how to apply. For specific information about the research, contact Esther van der Knaap (vanderknaap.1@osu.edu), Andy Michel (michel.70@osu.edu), Kristin Mercer (mercer.97@osu.edu), Leah McHale (mchale.21@osu.edu), or Tom Mitchell (mitchell.815@osu.edu).

michel.70@osu.edu

# OhioStateU PlantAssociatedEvolution

Post-doctoral position Impact of plant domestication on the evolution of plant-associated organisms

#### Ohio State University

We seek a postdoctoral researcher to join an interdisciplinary project studying the impacts of plant domestication on the evolution of plant-associated organisms. The genetic bottlenecks that accompany selective sweeps profoundly affect the levels of genetic diversity found in domesticated plant species, while also affecting loci underlying important morphological, physiological, ecological, and biochemical characteristics. The dramatic change in the genetic diversity of plant hosts can also have cascading effects on genome evolution in the community of associated organisms. In the long term, this project seeks to identify the genes that led to domestication-induced adaptive divergence and speciation in both plant and plant-associated organisms.

Our project focuses on chile pepper (Capsicum annuum) as a model system to understand the molecular basis of coevolution at multiple scales-from the genome to the organism, and, eventually, the community. C. annuum, one of the most diverse species within its genus and cultivated world-wide, includes nearly 50 recognized types that range from the mildest bell pepper to the hottest cavenne. The focus region of the study will be Mexico, which is C. annuum's center of domestication, where its progenitor (Capsicum annuum ssp. glabriusculum) grows in wild and semi-cultivated settings. Research questions will relate to: C. annuum population genetic diversity along environmental and domestication gradients; adaptation, population genomics and ecological speciation of insect host races, fungi and oomycetes; and tri-trophic interactions.

We seek applicants with an interest in evolutionary biology and experience using a range of techniques from quantitative and molecular genetics, genomics, and/or bioinformatics to answer ecological and evolutionary questions. Skills related to genome annotation, detection of genomic loci and/or regions under artificial or natural selection, or other ecological genomic techniques are a plus. The successful candidate will hold this position for two years with the possibility of an extension pending funding. Applicants should be interested in spending significant time in Mexico on collecting trips in conjunction with Mexican collaborators. Command of the Spanish language is also a plus. This postdoctoral position will be part of a cluster hire by the Center for Applied Plant Sciences (CAPS; caps.osu.edu/).

Candidates interested in this position should refer to the search website (caps.osu.edu/caps-postdoctoral-researcher-search) or contact Donnalyn Roxey (roxey.3@osu.edu) for further information about the search and how to apply. For specific information about the research, contact Esther van der Knaap (vanderknaap.1@osu.edu), Andrew Michel (michel.70@osu.edu), Kristin Mercer (mercer.97@osu.edu), Leah McHale (mchale.21@osu.edu), or Tom Mitchell (mitchell.815@osu.edu). Kristin L. Mercer, Assistant Professor Department of Horticulture and Crop Science The Ohio State University www.hcs.osu.edu/mercerlab 310D Kottman Hall 2021 Coffey Rd. Columbus, Ohio 43210

mercer. 97@<br/>osu.edu phone: 614-247-6394 fax: 614-292-7162

"Mercer, Kristin" <mercer.97@osu.edu>

#### **Oxford VertebrateEvolution**

Postdoctoral fellowship in vertebrate evolutionary biology

A position is available within the vertebrate palaeobiology group which is led by Dr M Friedman. The post is funded by a NERC standard grant and is for 3 years, and will be led by Dr Friedman in coordination with Dr Z Johanson (The Natural History Museum, London), with project partners Prof T Near (Yale) and Dr M Brazeau (NCB Naturalis). The postdoctoral Research Assistant will focus on the impact of palaeontological data on inferences concerning the rate and mode of morphological evolution during a putative adaptive radiation; contrasts between evolutionary rate as a function of environment (freshwater versus marine); and probabilistic approaches to generating empirically informed priors for molecular clock analysis. Carangimorphs, a morphologically diverse assemblage of teleost fishes with an excellent fossil record, will be used as a model system.

For informal enquiries about the project, please contact Matt Friedman, email: matt.friedman@earth.ox.ac.uk.

Applicants require a PhD in the biological or earth sciences and should have experience in evolutionary biology, palaeontology or comparative anatomy. You should have current and relevant analytical skills, as well as experience in phylogenetic comparative methods, phylogenetic inference using morphological and/or molecular data, computer programming and a demonstrated record of research and innovation.

The successful applicant will have an option to engage in teaching. This may include lectures and smallgroup teaching of undergraduates and graduate students. There is also scope for the PDRA to supervise Masters projects.

The post is fixed-term for 3 years.

The deadline for applications is midday on Friday 14

September 2012.

Full application details can be found at:

https://www.recruit.ox.ac.uk/pls/hrislivedoc/docs/-0000255670.pdf Matt.Friedman@earth.ox.ac.uk

#### **PrincetonU EvolutionaryBiol**

PrincetonU.EcologicalGenetics

POSTDOC RESEARCH ASSOCIATE Princeton University | Princeton NJ United States

The Department of Ecology and Evolutionary Biology at Princeton University (http://www.princeton.edu/eeb) seeks a post-doctoral or more senior research associate to work in Robert Pringle's lab on studies of plantherbivore interactions in African savannas. Specifically, we aim to understand how plant communities are influenced by large herbivores, resource availability, and landscape history. To do this, we employ field experiments, analyses of plant phylogeny and functional traits, and molecular approaches. A particular area of interest is the use of DNA-based methods to analyze the diets of different large-herbivore species, and the application of this information in the context of ongoing herbivore-exclusion experiments and large-scale restoration efforts in Kenya and Mozambique.

The ideal candidate should have training in genetic, genomic, or other applicable molecular techniques. A strong interest in community and/or plant ecology is required, and prior experience is a plus. The appointment is for one year with the possibility of renewal based on satisfactory performance.

Candidates should apply online at https://jobs.princeton.edu to Req#1200383, with curriculum vitae, a one-page statement of research interests and experience, and a cover letter that includes names and contact information of three references. For specific queries, please contact Dr. Pringle directly (rpringle "at" princeton.edu).

Candidates should have a Ph.D. in biology or a related field. âPrinceton University is an equal opportunity employer and complies with applicable EEO and affirmative action regulations.

Robert M. Pringle Assistant Professor Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ 08544, USA Robert Pringle <rob.pringle@gmail.com>

# **RutgersU ViralEvolution**

Rutgers University, Phage Experimental Evolution

A full-time postdoctoral position is available immediately in the Duffy lab (http://www.rci.rutgers.edu/-~siobain/) at Rutgers University (New Brunswick, New Jersey, USA) to carry out experimental evolution research with phage model systems. Potential areas of research include the influence of genomic architecture on viral emergence in novel hosts, the role of coinfection for successful emergence in novel hosts, and role of molecular mechanism and selection pressures on mutation and substitution biases.

The postdoctoral associate will be responsible for developing hypotheses, designing experiments, conducting wet lab research, analyzing results, preparing/presenting data at national and international conferences, generating high quality journal publications and assisting in grant preparation. Additionally, the postdoc is expected to participate in our highly collaborative laboratory environment, and assist in supervision of graduate and undergraduate student projects. The position is funded for a minimum of 12 months with the possibility of extension, and the expectation of applying for additional grant funding as mutual interests dictate.

Ideal candidates will have a strong background in molecular evolution, population genetics and microbiology, and have previously worked and published in either experimental evolution or molecular phage/virology research. The successful applicant will be highly organized, have strong interpersonal skills, and have a demonstrated ability to write clearly in English. Applicants must have a PhD in a relevant biological science.

The Duffy lab combines computational and wet lab approaches to understand short-term and long-term viral evolution. Various individuals in the lab focus on viruses of mammals, plants and microbes, though most of us work with single-stranded DNA microvirid phages and on ssDNA plant-pathogenic geminiviruses. Our work is currently funded by the NSF and NIH.

Rutgers, The State University of New Jersey, is a leading national public research university with many active labs studying evolutionary biology. New Brunswick is within a half hour's drive of beaches on the Atlantic

#### September 1, 2012 EvolDir

Ocean and parks along the Delaware River, an hour's drive or train ride to New York City, and within a 90 minute drive of Philadelphia and the Appalachian Trail. New Jersey is one of the most ethnically diverse states, with over 20% of the population having immigrated to the US.

APPLICATION DEADLINE: Sept 15th, 2012, but applications will be reviewed until the position is filled.

SALARY is offered based on qualification and experience. Any queries should be addressed directly to Siobain Duffy (duffy@aesop.rutgers.edu).

To apply, please send the following items to duffy@aesop.rutgers.edu: (1) a cover letter stating preferred start date (2) a curriculum vitae, including contact information for three references, and (3) a brief statement of research interest and career goals.

Rutgers is an equal opportunity/affirmative action employer, and candidates from all backgrounds are encouraged to apply.

Siobain Duffy Assistant Professor Department of Ecology, Evolution and Natural Resources School of Environmental and Biological Sciences Rutgers, The State University of New Jersey

duffy@AESOP.Rutgers.edu

#### **SangerInst ComparativeGenomics**

#### THREE-YEAR POST-DOCTORAL FELLOWSHIP IN COMPARATIVE INSIGHTS INTO TRANSCRIP-TION AND EXPRESSION IN SCHISTOSOMA, A NON-MODEL METAZOAN PARASITE

Applications are invited for a three-year post-doctoral fellowship held jointly at the Sanger Institute and EMBL-European Bioinformatics Institute under these institutes' "ESPOD" fellowship programme (http://www.ebi.ac.uk/training/postdoc/ESPOD).

The above webpage includes a link to an abstract of this project (and others in the programme). Full project details are available at http://tinyurl.com/-3g27op9. The successful candidate will work in the Goldman Group at EMBL-European Bioinformatics Institute (http://www.ebi.ac.uk/goldman) and Matt Berriman's Parasite Genomics group at the Sanger Institute (http://www.sanger.ac.uk/research/projects/parasitegenomics). Applications should be sumitted by e-mail to Tracey Andrew <tandrew@ebi.ac.uk> by 15 August 2011.

James Cotton Senior Scientist Wellcome Trust Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge. CB10 1SA UK

james.cotton@sanger.ac.uk 01223 494864

jc17@sanger.ac.uk

#### SangerInst ParasitePopGenomics

Postdoctoral Fellow - Parasite population genomics

Salary range is  $\pounds 28,563$  to  $\pounds 35,795$  per annum dependent on experience. Closing Date: 31st August 2012

The Wellcome Trust Sanger Institute is a world leader in genomic research, with an expanding scientific programme dedicated to understanding gene function in health & disease.

The Parasite Genomics group uses large-scale sequencing approaches to study parasites associated with diseases of global importance to humans and animals, with a particular emphasis on diseases of developing countries.

Existing projects within the group build on genome sequence data to address scientific questions from population genomics to functional genomics and immunology, and include working on a range of helminth and protozoan parasites in collaboration with experts in particular systems. Specific examples include in-depth comparative genomics of schistosome species, transcriptomic analysis using RNA-seq of the life cycle of a number of nematode parasites as well as a number of de novo genome sequencing projects.

We are seeking to recruit an enthusiastic and ambitious postdoctoral fellow to contribute to projects involving the application of high-throughput sequencing technologies to understand the population structure, evolution and epidemiology of a range of eukaryotic parasites. A key aspect of this role will include the analysis of 'next generation sequencing' data in a population genetic framework. The successful candidate will be encouraged to both get involved in existing projects and develop their own interests in related areas, taking advantage of the unparalleled resources and expertise available within the Institute.

Please see:

https://jobs.sanger.ac.uk/wd/-

#### plsql/wd\_portal.show\_job?p\_web\_site\_id=-

3D1764&p\_web\_page\_id=153728 for more information and details of how to apply

James Cotton Senior Scientist Wellcome Trust Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge. CB10 1SA UK

james.cotton@sanger.ac.uk 01223 494864

jc17@sanger.ac.uk

# The post is available for up to 3 years with a start date of 1 January 2013. The starting salary is i;28,401 - i;33,884 per annum, depending on experience. The post will shortly be formally advertised on the Sheffield University website (http://www.shef.ac.uk/jobs) where further information about the post and how to apply will be provided.

Informal enquiries are welcomed and should be sent to k.zeng@sheffield.ac.uk.

k.zeng@sheffield.ac.uk

# SheffieldUniversity PopulationGenetics

A postdoctoral research assistant position is available to work with Dr Kai Zeng in the Department of Animal and Plant Sciences at the University of Sheffield. The position is funded by the Biotechnology and Biological Sciences Research Council (BBSRC) to study the joint effects of natural selection and genetic linkage on genome-wide patterns of diversity. A variety of projects can be pursued under this general theme, from more theoretical to more data-oriented. The overall aim is to develop a better understanding of the relative importance of various forms of selection, as well as their interactions with other evolutionary forces, in evolution. This project involves close collaboration with the groups of Professor Brian Charlesworth and Professor Peter Keightley at the University of Edinburgh.

We are seeking a highly-motivated researcher with a PhD in evolutionary genetics, population genetics or bioinformatics who has a strong interest in developing new methods and applying them to large-scale DNA sequence data. Applications from those who have a PhD in related disciplines (statistics, computer science, mathematics, physics, etc) and pre-existing experience in evolutionary research are also welcomed. Expertise in statistics and computer programming (e.g., C, C++, Java) is essential. Experience in modelling, conducting computer simulations and handling large-scale datasets would be an advantage.

The Department of Animal and Plant Sciences at the University of Sheffield houses a vibrant team of leading evolutionary biologists (http://www.sheffield.ac.uk/aps). In the latest Research Assessment Exercise (RAE 2008), Biological Sciences at Sheffield was ranked 3rd in the UK. Sheffield is a fantastic place to live, situated on the edge of the Peak District National Park. It is also one of the most affordable cities in the UK.

# UCalifornia Berkeley EvolutionaryBiol

Postdoctoral Scholar V Employee \*\*(Job # 12-9P) \*

\*Closing date:\* Monday, August 20, 2012.

\*Position length\*: 1 year (possibility of renewal for 1 year) \*Start date:\* Start date is flexible, but no later than January 2013

The University of California, Berkeley has launched a cross-campus initiative in Global Change Biology (BiGCB), with the goal of leveraging Berkeleys exceptional intellectual potential across the fields of ecology, evolution, and computational biology, and building on our natural history collections and informatics infrastructure, to advance the study of global change. As an integral part of this initiative, we are accepting applications from outstanding research scientists for a postdoctoral research position. The ideal candidate will help lead the BiGCB in its effort to pioneer new approaches to global change biology. We anticipate that the research undertaken by the postdoctoral scholar will transcend traditional disciplinary boundaries and take advantage of the diverse strengths of the Berkeley campus. More specifically, the postdoctoral scholar will help develop the research potential of an \*Informatics Engine for Understanding Biotic Response to Global Change<sup>\*</sup> being built with funding from the W.M Keck Foundation.

A central goal of the Keck \*Informatics Engine \*is to meet the challenge of incorporating diverse primary data resources (e.g., natural history collections, field station data, regional climate data, data on past and present vegetation cover, etc.) to examine the effects of complex interactions among organisms, climate, and their physical and biotic environments. A great variety of data types, including those at varying spatial and temporal scale and resolution, will be integrated to meet this challenge. The primary role of the postdoctoral scholar is to help realize the power of such an integrated resource through novel, multidisciplinary, cutting edge research, and he or she will be an integral part of the development of the informatics engine. An ideal candidate will address the study of global change with a diversity of data such as but not necessarily limited to, current and past species distributions across all major biological groups (both modeled and observed), genotypic and phenotypic data and how these have changed in space and time, as well as empirical and modeled data of environmental change.

Please see \*http://ib.berkeley.edu/labs/globalchange/keck.html\* for more information.

\*Qualifications\*:

1. PhD in a relevant discipline, such as: ecology, evolutionary biology, or computer science. Candidates should have no more than four years of research experience since receipt of Ph.D. at start of appointment. 2. Demonstrated record of writing and/or publishing of manuscripts and reports. 3. Demonstrated experience collaborating with other researchers. 4. Experience and knowledge of biodiversity, ecology, conservation and/or bioinformatics and a keen interest in natural history data and collections. 5. Capacity for innovation and an ability to think outside current paradigms.

\*Salary: \*Salary commensurate with experience. The University of California offers a competitive benefits package including medical, dental, vision, life insurance, accidental death and dismemberment insurance, and short and long term disability insurance.

\*To apply: \*Please submit a copy of your curriculum vitae, a research statement, and three letters of reference in Adobe PDF format to Sandra Richmond, HR Manager, Research Enterprise Services at sandyjbr@berkeley.edu, with the subject line: \*BIGCB KECK Postdoc - [Applicant Name].\* Applicants should refer referees to the UC Berkeley Statement of Confidentiality found at http://apo.chance.berkeley.edu/evalltr.html . Candidates who have already applied for this position need not reapply.

#### \*See official posting here:\* http://academicemployment.chance.berkeley.edu/-

DetailsJobSearch.cfm?recordID=1267 \*The University of California is an Equal Opportunity/Affirmative Action Employer and encourages qualified women and minority candidates to apply. \*

Michelle Koo <mkoo@berkeley.edu>

#### UCanberra InvasiveSpeciesEvolution

Postdoctoral Fellow in Molecular Ecology (eDNA)

Institute for Applied Ecology

Academic Level B Salary Range: \$83,564 V \$98,972 pa, plus Super

This is a fixed term, full time position for 3 years (an additional 2 years contingent on funding and project needs)

#### Vacancy Reference No: 120093

The University of Canberra is a partner in the Cooperative Research Centre for Invasive Animals. The CRC creates new technologies and integrated strategies to reduce the impact of invasive animals on Australias economy, environment and people. We are seeking an innovative person to conduct research and develop tools based next generation DNA technologies for the detection and identification of invasive species in our natural waterways and in shipments across our borders

Copies of the relevant research proposal leading to the funding of this project are available on request.

The position will be offered for 3 years initially, with a further 2 years contingent on availability of funding and project needs and directions. The appointee will work within a team of highly motivated academics, postdoctoral fellows and lab technicians in the collegiate and productive working environment of the wildlife genetics laboratory of the Institute for Applied Ecology at the University of Canberra. Duties: This is a full time research position. The appointee will be expected to drive a research program to develop tools based next generation DNA technologies for the detection and identification of invasive species in shipments across our borders and in our natural waterways. The appointee will be expected to engage with higher level activities within the CRC program, including liaison with government and industry stakeholders, participation and leadership in professional workshops, and representing the CRC publicly and in the media as appropriate.

Specific duties required may include: P Conduct research to meet the objectives of the CRC project that aims to use environmental DNA (eDNA) techniques in the detection of invasive fish species in shipments, aquaria and natural waterways. A project proposal is available on request. P Contribute to the publication of the results of the research including, where appropriate, taking a lead in those publications.

P Engage as appropriate with end users of the technologies developed by the project, in the early phases of species selection and problem definition through to final delivery of outcomes.

P Prepare, under the guidance and with the support of the Chief Investigator, interim reports and presentations, and the final report to the CRC and stakeholders on the outcomes of the project.

P Work with staff of the CRC to ensure that the project is promoted through the media and other avenues and ensure its strong visibility within Australia and internationally.

P Supervision and/or co-supervise postgraduate students and junior technical staff engaged in the research.

P Participate in laboratory meetings, journal meetings and departmental seminar programs of the CRC and Institute for Applied Ecology.

P Other duties as required.

Selection Criteria:

1. PhD qualification in a relevant discipline.

2. Demonstrated laboratory experience with using traditional approaches and next generation sequencing for development of markers of relevance to population genetics, species identification, and/or determination of provenance.

3. Demonstrated track record in collaborative research, including refereed publication in leading journals.

4. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines.

5. Demonstrated capacity to take a problem-solving approach to laboratory work and conduct research under limited supervision.

6. Experience in the co-supervision of student research projects.

7. Excellent written, verbal and interpersonal communication skills, including the ability to contribute productively to teams and work in a collegiate manner with other staff in the workplace.

8. Demonstrated high level of computer literacy, with the capability and willingness to learn new software packages. 9. Demonstrated understanding of, and commitment to, implementation of equity and workplacehealth and safety principles. For more information on this position please contact Professor Arthur Georges at

recruit@canberra.edu.au

Closing Date: 16 September 2012

The University is an EO employer offering excellent conditions and benefits including generous superannuation.

Indigenous and Torres Strait Islander people are encouraged to apply.

For more information on this position and how to apply please go to our website at

http://www.canberra.edu.au/hr/jobs "Clare.Holleley" << lare.Holleley@canberra.edu.au>

# UCollegeLondon StatisticalGenomics

Research Associate in Statistical Genomics and Phylogeography in University College London - Ref: 1274654

UCL Department / Division: Genetics, Evolution & Environment Grade: 7 Hours: Full Time Salary: Grade 7, UK£32,055 - £38,744 per annum including London allowance

Duties and Responsibilities

A postdoctoral researcher position is available in the group of Professor Ziheng Yang FRS in University College London to work on statistical genomics and phylogeography. The project aims to develop statistical methods and computer software for analysing genomic sequence data from closely related species. This is at the interface of phylogenetics and population genetics, as one has to deal with the species/population phylogeny as well as coalescent and lineage sorting (See Burgess & Yang 2008 Mol. Biol. Evol. 25:1979-1994; Yang 2010 Genom. Biol. Evol. 2:200-211; Yang & Rannala 2010 PNAS 107:9264-9269; Zhang, et al. 2011 Syst. Biol. 60:747-761).

The post is funded by the BBSRC for up to three years. It is available immediately.

#### Key Requirements

We seek a highly-motivated research scientist with expertise in computational statistics (MCMC, rjMCMC and other advanced Monte Carlo algorithms) and in computer programming (C/C++, R, and PERL). Ex-

perience of UNIX/Linux is essential.

A PhD in one of the following areas is essential: computational statistics, computer science, theoretical population genetics, and statistical phylogenetics. Individuals with PhDs in other areas of biology are invited to apply if they can demonstrate a strong statistical/computational background. Knowledge and expertise in statistical inference and in Bayesian computation and the ability to work in a collaborative environment is also essential. A proven track record of effective research in the field is highly desirable.

#### Further Details

If you have any formal enquiries please contact Professor Ziheng Yang FRS at z.yang@ucl.ac.uk. For enquiries about the application process please contact Ms Tracy Pearmain at tracy.pearmain@ucl.ac.uk.

Your application should include a brief personal statement, explaining how your qualifications and experience make you a good candidate for this job, a CV and the names and email addresses for two references. Apply at the UCL website: https://atsv7.wcn.co.uk/-search\_engine/jobs.cgi?owner=5041178&ownertype=-fair&jcode=1274654 UCL Taking Action for Equality

Closing Date: 4pm, 21 September 2012

Ziheng Yang <z.yang@ucl.ac.uk>

states require a holistic view that considers host and the pathogen as a single system.

This project will concentrate on the interaction of Burkholderia pseudomallei and Francisella tularensis with human macrophages. Utilizing metabolic modeling together with phenotypic profiling and flux measurements, we will achieve a better understanding of how these parasites manipulate their host and cause disease. The ultimate aim is to develop better strategies of combating intracellular parasites and developing robust analysis approaches at the host-parasite systems level.

To apply, please send your CV, covering letter (detailing your motivation) and the details of three referees to Orkun S. Soyer by 1st of October quoting the job reference P43554 in any correspondence.

For more information, see group web site at; http://osslab.ex.ac.uk/ Orkun S. Soyer, PhD Senior Lecturer in Systems Biology Engineering, Mathematics and Physical Sciences University of Exeter

URL: http://osslab.ex.ac.uk/ Tel: +44 (0)1392 723615

"Soyer, Orkun" <O.S.Soyer@exeter.ac.uk>

# UGeneva ProtistMolEvol

#### **UExeter AntagonisticCoevolution**

We are looking to hire a postdoctoral research associate on a 3-year project on parasite modulation of metabolism.

An astonishing outcome of the antagonistic coevolutionary dynamics between host and parasite is the evolution of parasite ability to interfere with host physiology. The molecular details of such interference is poorly understood, limiting our ability to decipher parasite virulence and its evolution.

A major component of parasite mediated 'host reprogramming' targets host metabolism and thereby results in improved parasite growth. A particularly striking example of this is the ability of several viruses to increase the rate of glycolysis in infected cells by up to 370%. More elaborate modulations include, for example, the alteration of lipid and GTP biosynthesis. These findings strongly indicate that a full understanding of host-pathogen interaction and pathogen-caused disease Postdoctoral Fellowship in Bioinformatic Analysis of Next-Generation Sequence Data to Study Molecular Evolution and Ecology of Protists

A postdoc position is available in the group of Prof. Jan Pawlowski, Department of Genetics and Evolution, University of Geneva http://genev.unige.ch/ The research of our group focuses on molecular evolution and ecology of Foraminifera and related protists. The organisms we are studying play major role in functioning of marine ecosystem, but our knowledge of their genomes and species diversity is very limited. Our group is using NGS technology to generate the metagenetic and transcriptomic data that are used to explore the environmental diversity and reconstruct the evolutionary history of Foraminifera and other Rhizaria.

To analyze these data, we are seeking a motivated candidate with a strong background in computer science and computational biology/bioinformatics, and an experience in analysis of high-throughput sequence data. The candidates should be fluent in programming in a scripting language (Perl/Python) and a data analysis environment (R/Matlab), and be familiar with server administration. She/he should have basic knowledge of molecular biology and ecology, and should be interested in application of NGS tools in environmental and evolutionary sciences.

The successful candidate will participate in development of pipelines for analysis of metagenetic data and for discovery of new phylogenomic markers. She/he is expected to actively interact with other postdocs and postgraduate students in the lab, providing support in bioinformatics and contributing to common publications.

The position is for 2 years with a highly competitive salary in the range of 80K CHF per year. The position will be filled as soon as an ideal candidate is found.

Please submit your application letter, a statement of research interests, CV, and the contact information of at least two references to:

Dr. Jan Pawlowski Department of Genetics and Evolution University of Geneva, Sciences III 30, Quai Ernest Ansermet CH 1211 Genève 4, Switzerland

Phone: 00 41 22 379 30 69 Fax: 00 41 22 379 33 40 E-mail: jan.pawlowski@unige.ch

Jan Pawlowski <Jan.Pawlowski@unige.ch>

analyzing next-generation sequence data. We are also looking for someone who is personable and enthusiastic about working in a collaborative environment. A PhD in a related field (e.g., biology, evolution, genetics, genomics, etc.) is required.

Interested candidates should send a letter describing research interests and experience, a full CV, and contact information for three references. Applications and all queries should be sent to catherine.linnen@uky.edu. Applications will be accepted until a suitable candidate is found. Start date is flexible and funding is guaranteed for 1 year, with subsequent years renewable depending on progress.

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Catherine R. Linnen, Ph.D. Assistant Professor Department of Biology University of Kentucky 200A Thomas Hunt Morgan Building Lexington, KY 40506 website: http://www.uky.edu/~cli242/Linnen\_Lab/-Home.html Phone (lab): 859-323-3160 Phone (cell): 617-970-7717

clinnen@gmail.com

#### **UKentucky EvolGenomics**

Postdoc in Evolutionary Genomics at the University of Kentucky

The Linnen lab at the University of Kentucky is seeking a full-time postdoctoral researcher to contribute to ongoing work on the genetics, ecology, and demography of adaptation and speciation in pine sawflies (genus \*Neodiprion\*). Depending on the skills and expertise of the successful applicant, this research position will involve some combination of the following: fieldwork, behavioral studies, genetic crosses, population genetics, phylogenetics, and genomics. For additional details about current research in the lab, please visit our website: http://www.uky.edu/~cli242/Linnen\_Lab/-Home.html. We encourage applications from independent and creative individuals who are motivated by a desire to address fundamental questions in evolutionary biology. The ideal candidate will have a strong background in phylogenetics and/or population genetics and demonstrated experience with generating and UMontpellier EvolutionCancer

\*Postdoctoral research opportunity - "Evolutionary models of cancerprogression and the rapies" V University of Montpellier, France \*

We are looking for a motivated postdoctoral research to employ mathematical and/or computer models to better understand the evolutionary dynamics of cancer progression and chemotherapeutic treatments. We are especially interested in applications of ecology, evolution, and population genetics towards more general descriptions and ultimately predictive theories. We work closely with cell biology laboratories, and so specific project-oriented collaborations will be encouraged during the project.

The contract is initially for one year, and can be extended annually for up to three years, with a starting date on or before December 1st, 2012. This contract is part of an initiative by the CNRS to support interdisciplinary research involving the ecological and health sciences. Possibility for the researcher to apply for a permanent CNRS position after 1 year of contract.

Selection criteria:

(1) PhD.

(2) Considerable experience in mathematical or computer modeling in the context of cell biology, population ecology and/or evolutionary biology.

(3) Command of written scientific English.

(4) Demonstrated track record of refereed publications in leading journals.

(5) Demonstrated capacity to work under limited supervision.

Interested candidates should send (1) a letter of motivation, (2) a CV, and (3) the names, institutional addresses, and emails of 3 persons who can be contacted for references, on or before SEPTEMBER 30, 2012 to Michael Hochberg (mhochber@univ-montp2.fr). Information about our interdisciplinary research group can be found at http://www.eec.univ-montp2.fr/people/mike-hochberg/ Michael Hochberg <mhochber@univmontp2.fr>

#### **UNewMexico EvolutionaryGenomics**

University of New Mexico | C. elegans Evolutionary Genetics and Genomics

POSTDOCTORAL RESEARCH ASSOCIATE Department of Biology | University of New Mexico | Albuquerque NM | United States

Applications are invited for a postdoctoral research position in the laboratory of Vaishali Katju in the Department of Biology at the University of New Mexico. Our lab employs molecular and bioinformatic tools to study evolutionary processes at the level of genomes and populations (both experimental and natural). Our bioinformatic work has historically focused on elucidating the genomic characteristics and structural features of evolutionarily recent gene duplicates in the C. elegans and S. cerevisiae genomes. We recently expanded our studies to assay long-term C. elegans mutation accumulation lines for the frequency of copy-number variants using oligonucleotide array comparative genomic hybridization (oaCGH) to provide the first direct estimate of the spontaneous rate of gene duplication in a multicellular eukarvote (Lipinski et al. 2011, Current Biology). We have conducted a long-term mutation accumulation experiment at varying effective population sizes in C. elegans. Specifically, we aim to understand the molecular and phenotypic consequences of mutation under varying intensities of natural selection. Our aims, among others, include (i) characterizing the dis83

tribution of fitness effects of different classes of mutation, (ii) their fitness impacts via phenotypic assays and (iii) quantifying the spontaneous rate of ectopic gene conversion. The project details are flexible, but will focus on annotation of whole-genome sequences of these experimental C. elegans populations and characterization of the mutations in different genomic backgrounds and their frequencies. The ideal candidate should have demonstrable expertise in population genetics, molecular evolutionary analyses and computational biology. Familiarity with experimental use of C. elegans, analysis of high-throughput sequencing data or quantitative/statistical genetics is a plus.

Additional information:

Please visit our lab website (http://biology.unm.edu/katju/Katju\_Lab\_Website/Home.html) or contact me directly (vkatju@unm.edu) to discuss research options in greater detail.

Application Instructions: Email your application to vkatju@unm.edu as a single pdf file containing your CV with publications, contact details of 3-5 referees, a letter describing your research interests and why you would be an exceptional candidate.

Salary: A competitive salary commensurate with experience and full benefits is guaranteed for one year with subsequent years renewable depending on performance.

Environment: The Department of Biology at UNM is located in Castetter Hall on the main campus, which includes modern lab and computational facilities. The Department has an exceptionally strong concentration in ecology and evolutionary research. Our research team also benefits from a close collaboration with Dr. Ulfar Bergthorsson, an evolutionary geneticist at UNM, and access to next-generation sequencing and microarray facilities through Dr. Don Moerman, Professor and Director of the C. elegans Reverse Genetics Core Facility at the University of British Columbia and Dr. Robert Waterston, Professor and Chair of the Department of Genome Sciences at the University of Washington.

— Vaishali Katju Assistant Professor Department of Biology MSC03 2020 1 University of New Mexico Albuquerque, NM 87131

Tel: 505.277.3711 Fax: 505.277.0304 vkatju@unm.edu Department Web-Page URL: http://biology.unm.edu/core-faculty/katju.shtml Lab Web-Page URL: http://biology.unm.edu/katju/Katju\_Lab\_Website/-Home.html —

vkatju@unm.edu

### **UOxford EvolEcoMorphology**

Postdoctoral fellowship in evolutionary ecomorphology: Department of Earth Sciences, University of Oxford

A position is available within the vertebrate palaeobiology group which is led by Dr Matt Friedman. The post is funded by a Leverhulme Foundation grant and is for 3 years, and will be led by Dr Friedman in coordination with Prof P Wainwright (University of California, Davis), Prof N MacLeod and Dr Z Johanson (The Natural History Museum, London). The Postdoctoral Research Assistant will focus on quantitative tests of the relationship between functional and anatomical diversity in the fossil record, using a model system in ecomorphology: the teleost skull.

For informal enquiries about the project, please contact Matt Friedman, email: matt.friedman@earth.ox.ac.uk.

Applicants require a PhD in the biological or earth sciences and should have experience in evolutionary biology, vertebrate palaeobiology or comparative anatomy. You should have current and relevant analytical skills, as well as experience in computer programming and a demonstrated record of research and innovation.

The successful applicant will have an option to engage in teaching. This may include lectures and smallgroup teaching of undergraduates and graduate students. There is also scope for the PDRA to supervise Masters projects.

The post is fixed-term for 3 years.

The deadline for applications is midday on Friday 14 September 2012.

Full application details can be found at:

https://www.recruit.ox.ac.uk/pls/hrislivedoc/docs/-0000255765.pdf Matt.Friedman@earth.ox.ac.uk

sition, to work on seafood genetic identification in Dr Mariani's lab at the University of Salford, Manchester. The project is primarily funded by the EU Interreg Atlantic area and offers the opportunity to interact with collaborators in Spain, Portugal, France, Ireland and Germany.

The ideal candidate will hold a PhD in Evolutionary Biology, Genetics, Ecology, Marine Biology, or other relevant subjects, and will have a proven track-record in publishing in international peer-reviewed journals. He/she will also exhibit strong skills in molecular genetics techniques and bioinformatics, and will have a positive, communicative, dynamic personality, suited to work as part of a team.

Dr Mariani's lab at Salford University - still twinned with its previous base at University College Dublin contributes to a broad range of investigations in population and conservation genetics and fisheries biology (for details: http://www.els.salford.ac.uk/staff/profile.php?staffid=3D151).

Applications should be submitted through the central electronic system at the link: https://atsv7.wcn.co.uk/search\_engine/jobs.cgi?SID=3DamNvZGU9MT I2MTcwOSZ2dF90ZW1wbGF0ZT05MTkmb3d uZXI9NTAzNjMyOCZvd25lcnR5cGU9Z mFpciZicmFuZF9pZD0wJnZhY3R5cGU9M T11MCZwb3N0aW5nX2NvZGU9MjIzJnJl cXNpZz0xMzQxNTA0OTkxLWRjNTE1NjE xN-TkzOWNmMzFjYTFjMzkxNmNkNWY4YmY wNzQ4MWIwYWE Please ensure that your ap-

plication is submitted by July 19th. Please also be advised that the interviews will take place between the 6th and the 10th of August (exact date yet to be decided).

Start date: September 2012. Gross salary: >28,000  $\pounds$ 

Dr Stefano Mariani Reader in Wildlife Biology School of Environment & Life Sciences Peel Building, Room 316 The University of Salford M5 4WT, UK Tel. +44.161.2956913 http://www.els.salford.ac.uk/staff/profile.php?staffid=3D151 S.Mariani@salford.ac.uk

### **USalford SeafoodIdentification**

# PLEASE NOTE APPLICATION CHANGES FOR THIS PREVIOUSLY ADVERTISED POSITION:

We invite applications for a 2-year post-doctoral po-

# **USheffield GreatTitEvolution**

Postdoctoral Research Associate - University of Sheffield

A postdoctoral position, funded by the European Research Council (ERC), is available in Prof. Jon Slate's research group (http://www.jonslate.staff.shef.ac.uk/) at the University of Sheffield. This is an outstanding opportunity to apply cutting edge genomics technologies (ultra-high throughput sequencing and SNP genotyping) to study microevolution in a classic long-term, individualbased study system - the great tit population at Wytham Woods Oxford (http://www.zoo.ox.ac.uk/egi/research/studysites.htm).

I am looking for somebody with a track record of publishing in leading journals and skills in one or more of the following areas: molecular ecology, evolutionary quantitative genetics, QTL mapping, genomewide association studies, molecular evolution or statistical genetics. The postdoc will work as part of a team of six (with the PI, two independent research fellows, one other postdoc and one PhD student) investigating the genetic basis of adaptive variation in a system which has been the focus of intensive evolutionary ecology and quantitative genetics studies (e.g. Garant \*et al\*. 2005 \*Nature\* 433: 60-65; Charmantier \*et al\* 2008 \*Science\*320: 800-803) but where genomics resources were, until recently, lacking. In this project we have used high-throughput sequencing (Roche 454) to sequence the great tit transcriptome (Santure \*et al\* 2011 BMC Genomics 12: 283) and mine many thousands of SNPs. We have subsequently developed an ~8k SNP chip (van Bers \*et al \*2012 \*Mol. Ecol. Resources\*. 12: 753-770) which we have been using to build a linkage map and map QTL. Over the next year we intend to dramatically increase marker density and applications from people interested in RAD-Seq, genotypingby-sequencing or similar approaches are strongly welcomed. For example publications from our laboratory see http://www.jon-slate.staff.shef.ac.uk/html/publications.html. The project involves close collaboration with Professor Ben Sheldon (Oxford University) and his research group (http://www.zoo.ox.ac.uk/egi/index.htm) as well as a group in the Netherlands working on a similar project.

Professor Slate's group is based within the vibrant Department of Animal & Plant Sciences at the University of Sheffield. In the latest Research Assessment Exercise (RAE 2008), Biological Sciences at Sheffield was ranked joint 3rd in the UK based on average quality score and 3rd in the UK based on the proportion of 'world-leading' (4\*) and 'internationally excellent' (3\*) research activity (Source: Times Higher Education< http://www.timeshighereducation.co.uk/story.asp?storycode=3D404786 >) It was recently ranked 7th best Environment/Ecology research institution in the world by Thomson Scientific. Sheffield is a fantastic place to live, situated on the edge of the Peak District National Park ( http://www.visitpeakdistrict.com/). It is also one of the most affordable cities in the UK and has a good music, arts and culture scene.

The position is available as soon as possible and is funded until 30thSeptember 2013. I realise this is a relatively short term position, but opportunities for continued employment can be pursued by the PI and successful applicant. For example, I can mentor fellowship applications, or help develop research proposals that build on the work done by the successful applicant. The closing date is 29th August 2012. For further details and online applications see http:/-/www.sheffield.ac.uk/jobs/index.html, quoting job reference number UOS004979. The salary is in the range  $\pounds 28,401 - \pounds 30,122$  per annum.

I welcome informal enquiries (j.slate@sheffield.ac.uk)

j.slate@sheffield.ac.uk j.slate@sheffield.ac.uk

#### UTexas EvolutionaryBiol

Please post:

Postdoctoral Fellow in Integrative Biology. The Section of Integrative Biology at the University of Texas at Austin invites applications for a Postdoctoral Fellow in Integrative Biology. This subject area is broadly defined to include evolution, ecology, and behavior. The Fellow will be expected to conduct an independent high-quality research program in collaboration with at least two faculty in the Section. For information about the Section of Integrative Biology at UT and its faculty, visit http://www.biosci.utexas.edu/ib/ . In addition, one semester per year the Fellow will co-teach an undergraduate course on Research Methods, as part of the UTeach program for training K-12 science teachers. For information about the UTeach program, visit http://www.uteach.utexas.edu/ The position is for two years, subject to annual review. The Fellow is requested to start work at the University of Texas no later than August 2013. There is an annual salary of \$40,000 with an additional \$10,000 per year in research support for travel, equipment, or supplies.

Applicants should electronically submit a single pdf file containing the following, in order:

1) Coverletter, including mention of the proposed faculty sponsors (max 1 page). Candidates are advised contact potential faculty sponsors prior to applying, to gauge the level of mutual interest. 2) CV 3) Statement of research accomplishments (maximum 2 pages). 4) Statement describing the candidate's proposed research for the duration of this postdoctoral position (maximum 2 pages). 5) Statement describing the candidate's teaching experience and philosophy (maximum 2 pages) 6) Copies of 2 publications 7) List of three references, with contact information (email, telephone, and mailing address). We will request letters directly from these references, after identifying top candidates.

The application pdf file should be emailed to ibjob@austin.utexas.edu, with a subject line "IB Postdoc Application: <YOUR NAME>". Applications must be received by January 11, 2013. For questions about this position, please send an email to ibjob@austin.utexas.edu, or contact a prospective faculty mentor in the department.

We encourage applications from candidates that have recently completed, or will soon complete, their Ph.D.

The University of Texas is an Equal Opportunity Employer.

danbolnick@austin.utexas.edu

ing variation in diet, courtship traits, and immune function. More information on research in the lab can be found at https://webspace.utexas.edu/dib73/-Bolnicklab/Bolnicklab.htm?uniq=3D5ptsas More information on the Section of Integrative Biology can be found at http://www.biosci.utexas.edu/ib/.

To apply for the postdoctoral position, please send a cv, two letters of recommendation, and pdfs of at least 2 relevant papers, to Dr. Bolnick (contact information below), along with a coverletter succinctly summarizing your qualifications. The position will remain open until filled by a suitable candidate, but all applications submitted before October 1 2012 will be considered.

The successful candidate will have to be available to begin no later than May 2013. The position will run for two years and three months, with opportunities to extend depending on funding availability. The salary is approximately US\$40,000 per year.

The University of Texas is an Affirmative Action/Equal Opportunity Employer

Dr. Daniel Bolnick Section of Integrative Biology University of Texas at Austin Austin, TX 78712 USA danbolnick@austin.utexas.edu 512-471-2824 (work) 512-471-3878 (fax)

danbolnick@austin.utexas.edu

# UTexasAustin MatePreferenceEvolution

A postdoctoral position is available in the laboratory of Dr. Daniel Bolnick, in the Section of Integrative Biology at the University of Texas at Austin. The postdoctoral researcher will be responsible for overseeing field and laboratory research, data analysis and manuscript preparation as part of an NSF-funded project on the evolution of assortative mating within populations, using the threespine stickleback as a model organism. This position requires experience with the logistics and operations of field research, data analysis, and graduate training in evolutionary biology or animal behavior. Candidates should have a proven record of successful publishing in scientific journals. Candidates may benefit from experience with molecular genetics for parentage analysis, geometric morphometrics, or isotopic analyses of feeding ecology. Excellent analytical and communication skills are essential. Please contact Dr. Daniel Bolnick (danbolnick@austin.utexas.edu) for inquiries.

The Bolnick lab's research focuses on evolutionary ecology of trait variation within populations, includ-

# **UUtah NGS Analysis**

Postdoctoral Fellowship in Bioinformatic Analysis of Next-Generation Sequence Data

The Department of Human Genetics in the University of Utah School of Medicine, in cooperation with the laboratories of Drs. Mark Yandell and Lynn Jorde, is seeking post-doctoral fellows interested in the use of next generation-sequencing data for identification, diagnosis and prognosis of genetic diseases. Also underway is a related project to develop means to search the genomes of plant cultivars, animal breeds, and wild populations of flora and fauna for the genes and variants that underlie phenotypic variation.

The ideal candidate should have strong programming skills (Perl/Python OOP; knowledge of C would be a plus), training in statistical genetics, and experience with exome and whole genome sequencing datasets and commonly used analytic tools. Candidates will be expected to develop novel analysis tools, contribute to ongoing algorithmic and software development efforts in the Yandell and Jorde labs, and to collaborate with clinical colleagues engaged in disease-gene identification. Candidates will be also expected to help mentor graduate students, work with technical staff, and author scientific publications.

Requirements. We are looking for an enthusiastic, communicative team player with:

\* a PhD in a relevant scientific discipline \* strong background in bioinformatics \* experience with the analysis of next generation sequence data \* core knowledge of statistical genetics \* excellent programming skills (e.g. OOP Perl or Python) \* good English language and communicative skills

This is an excellent chance for a highly motivated and skilled individual to join a cutting-edge group that is actively engaged in all aspects of next-generation sequencing and analysis. Salary is flexible and will be commensurate with skills and training.

Qualified candidates are encouraged to email curriculum vitae and statement of interest to myandell@genetics.utah.edu attention: Dr. Mark Yandell, with "Postdoc" in the subject line.

> UWisconsinMadison PopulationGenomics

Postdoctoral Researcher in Population Genomics / Drosophila Evolutionary Genomics

A postdoctoral position is available in the research group of John Pool at the University of Wisconsin-Madison. The focus of our research group is on: (1) Analyzing population genomic data, including the development of new statistical methods, to understand the evolutionary forces that shape genomic variation, and (2) Integrating Drosophila population genomic data with other information sources - such as mapping, expression, and phenotypic data - to investigate the genetic basis of adaptive evolution (especially with regard to phenotypic differences between closely-related populations from contrasting environments). Applicants proposing to work on either or both of these areas will be considered for this position. Potential projects could include: \* Using population genomic data and mapping approaches to identify genes underlying the parallel evolution of melanism within D. melanogaster (Pool et al. 2007 Mol Ecol; Rebeiz et al 2009 Science). \* Developing new stastical methods for population genomic data. Examples could include: separating the influence of population history and natural selection on genetic variation; more effective use of haplotype information in the inference of demography and selection; integration of population genetic selection signals with evidence of genotype-phenotype association; population genetic interpretation of regulatory differences between populations based on RNAseq data. See also: http://johnpool.net/projects.html This draft manuscript provides some background on the African populations of Drosophila melanogaster that many of our projects focus on: http://arxiv.org/abs/1208.4864 Our research group was founded one year ago and currently consists of the PI, two postdocs, one visiting PhD student, and four undergraduate researchers: http://www.johnpool.net/people.html I can offer a new postdoc plenty of individual interaction, broadly applicable training in population genomics, and a first-hand understanding of the current faculty job market. I encourage postdocs to develop as independent scientists, and I will support you in putting together a research program that you can carry beyond this appointment.

UW-Madison provides a superb scientific environment, with colleagues in population genetics and evolutionary genomics including David Baum, Sean Carroll, Cameron Currie, Colin Dewey, John Doebley, Audrey Gasch, John Hawks, Chris Hittinger, Carol Lee, Lawrence Loewe, Bret Payseur, and Nicole Perna. A more complete list of evolution-oriented labs can be found on the James F. Crow Institute web site: http:/-/www.evolution.wisc.edu/view\_faculty There are more than a dozen Drosophila groups on campus, including the labs of Bill Engels and Barry Ganetzky in our building. A partial list of fly groups can be found at: http:/-/www.genetics.wisc.edu/node/59?q=fields11 Madison offers an exceptional quality of life in a beautiful natural setting. Downtown and campus are bordered by lakes, and the area includes a number of long distance bike trails. Madison features diverse art, music, and cultural offerings. A great farmers market and a focus on local food are complemented by a wide range of international restaurants. Madison has been ranked the best city in America for young adults - http://www.kiplinger.com/slideshow/best-cities-for-every-life-stage-kpfm/2.html and has appeared on a slew of "top cities" lists, including lists for: families, dogs, biking, walking, nature, green-ness, safety, public schools and educated population, health and fitness, vegetarians, friendliness, arts, biotech, careers, quality of life, and so on: http://www.downtowncondos.com/madison-rankings.asp Applicants should send a CV and contact information for three references to jpool@wisc.edu. In addition, applicants should send a statement of research interests, addressing both long term scientific interests and specific overlap with the Pool lab's research. This statement should also address the applicant's background with regard to the following points (note that the successful candidate may not have every skill that I inquire about): \* Intellectual background and interests. \* Computer programming (language, experience level) and other bioinformatic skills. \* Statistical experience (analysis of population genetic and other data). \* Molecular lab skills. \* Experience with and knowledge of Drosophila.

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# UWisconsin Madison EvolutionaryGenomics

Postdoctoral Position in Evolutionary Genetics/Genomics (Microbial Metagenomics)

A postdoctoral position is available immediately in the Laboratory of Professor Carol Lee in the Center of Rapid Evolution (CORE) at the University of Wisconsin, Madison to work on a project in collaboration with Professor Joana Silva at the Institute for Genome Sciences (IGS).

The research focuses on the evolutionary genetics and genomics of invasive populations. We are exploring the systematic and functional composition of microbial communities associated with an invading host, the copepod Eurytemora affinis, and how microbial-host interactions shift following habitat invasions. The project will make extensive use of microbiome and metagenome methodologies to study the microbiota, and of transcriptome sequencing and analyses to characterize functional and metabolic shifts within the copepod host.

Requirements for this position include a Ph.D., a strong background in molecular biology/genomics and/or strong analytical and quantitative skills. Relevant training and experience might include research in genomic data analysis, evolutionary genetics, molecular genetics, metagenomics, microbiology, or transcriptomics. Applicants should email a CV, a list of referees, and up to three representative publications to: carollee@wisc.edu. Any questions regarding this position are most welcome.

The University of Wisconsin, Madison provides an intellectually vibrant research environment, with ~37 biology departments and ~800 biology faculty, including a strong community of evolutionary biologists and geneticists. The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer.

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

https://mywebspace.wisc.edu/carollee/web/Lee/-Lee.html Carol Eunmi Lee <carollee@wisc.edu>

# **UWyoming MolecularEvolution**

Postdoctoral Research Associate: Molecular Evolution of Protein-Protein Interaction Sites in Chordates

An NIH-funded 2 year postdoctoral research position is available immediately for a collaborative project between the research groups of Dietlind Gerloff (UCSC; http://users.soe.ucsc.edu/~gerloff/-), David Liberles (University of Wyoming; http://www.wyomingbioinformatics.org/LiberlesGroup/) and Seth Rubin (UCSC; http://www.chem.ucsc.edu/~srubin). The position is ideally suited for researchers with interests and experience in studying protein function computationally and experimentally, from structural and evolutionary perspectives.

Our collaboration aims to cast new light on the adaptability of protein interaction networks through detailed consideration of individual protein families and interactions. The project will initially involve large-scale computational comparative analysis of sequences in a protein structural context using novel phylogenetic methods. The resulting data will serve to predict evolutionary interesting changes in protein-protein interactions between closely related species that will be validated computationally and experimentally.

The successful candidate will have a Ph.D. degree (preferably in computational or experimental biology, biochemistry, or chemistry) and demonstrated expertise in several of the relevant disciplines and skills below. The field of molecular evolution, including statistical and modeling approaches Protein sequence analysis and structural bioinformatics, including force fields Strong programming skills (perl, Python, C++) Experimental molecular biology (preferably protein biochemistry) Strong oral and written communication skills

The salary is negotiable in the range \$45,000-\$60,000 plus benefits, depending upon experience. Prior post-doctoral experience is a plus and will result in salaries towards the upper end of the indicated range.

The researcher will be based at UCSC (Santa Cruz, CA), but s/he will be expected to spend part of the 2 year research period at the University of Wyoming (Laramie, WY). Evaluation of applications will begin immediately and the candidate will be available to start as soon as possible (no later than within 3 months). The position may be extended beyond 2 years if additional funding is available.

To apply, send a cover letter that describes your background, motivation, and interests accompanied by a full CV to gerloff@soe.ucsc.edu and liberles@uwyo.edu (applications should be sent to both email addresses). Please also arrange to have 3 letters of recommendation sent directly by the letter writer to the above email addresses. Minority, female, and international applicants are encouraged to apply and will be given full consideration.

David Liberles liberles@uwyo.edu>

#### **UmeaU 2 TreeGenomics**

The Department of Ecology and Environmental Science and Umeå Plant Science Center (UPSC) welcome applications for two postdoctoral positions in forest genomics. The positions are funded through ProCo-Gen, an EU FP7 project that aims at developing tools for functional and comparative genomics in conifers. More information regarding ProCoGen can be found at http://bfw.ac.at/rz/bfwcms.web?dok=9020. The chosen candidates will perform high-quality research and be exceptionally mentored. UPSC is a centre of Excellence for Plant and Forest Biology and Biotechnology, located in northern Sweden. Our ca. 200 employees (including about 40 faculty members) perform worldleading research and have access to outstanding infrastructure with many shared resources and platforms, including advanced facilities for growing, transforming and manipulating our main model systems. UPSC is consistently ranked as one of the top places in the world for post-doctoral studies. About half of the staff at UPSC are non-Swedes, and the composition of employed staff and students at UPSC is highly dynamic, representing on average 35 nationalities.

Project 1: De novo sequencing of the Pinus sylvestris genome, Ref. No. 315-697-12 The goal of this project is de novo genome sequencing of two species of pines (Pinus) where UPSC is the lead institution for the Pinus sylvestris (Scot's pine) genome project. Building on our earlier experiences with conifer genome sequencing in the Norway spruce genome project, the post doc will be working with the sequencing project. Work tasks will include coordinating sampling and library preparations, managing next generation sequencing data (NGS) and working on genome assembly and annotation. Previous experiences with handling and analyzing NGS data and/or genome assembly is highly desired.

Project 2: Comparative conifer genome analyses, Ref. No. 315-698-12 This project is aimed at comparative analyses of genomics data from conifers. The project will involve targeted BAC sequencing and large-scale genome computational comparisons from a number of conifer species. Previous experiences with handling and analyzing NGS data is highly desirable as well as experience working with comparative, computational and/or evolutionary genomics data.

To qualify for a position you must have a PhD degree, or equivalent, in a relevant field. The degree should preferably not be older than three years. Candidates ideally should possess a background in high-throughput genotyping, bioinformatics, and statistical genetics. We are looking for team-oriented persons with documented capabilities of conducting autonomous scientific research, as well as skills in writing scientific publications. The working language of UPSC is English and thus high competencies in this language are required.

A full application should contain: a cover letter, a CV, a publication list, copies of relevant exam certificates and publications, a description of your research interests, a statement about why you are interested in the project, and contact information for three referees.

The application can be submitted either electronically or in hard-copy form. All documents submitted in hardcopy form should be in duplicate, and all electronically submitted material should be in MS Word or PDF format. Please observe that, if you wish to apply for both positions, two separate applications are needed.

For more information about the positions, please contact professor Pär K. Ingvarsson par.ingvarsson@emg.umu.se.

Union information is available from SACO, +46-(0)90-786 53 65, SEKO, +46-(0)90-786 52 96 and ST, +46-

(0)90-7865431.

Your complete application, marked with the relevant reference number, should be sent to jobb@umu.se (state the reference number as subject) or to the Registrar, Umeå University, SE-901 87 Umeå, Sweden to arrive September 7, 2012 at the latest. Pär K. Ingvarsson Professor, Evolutionary Genetics Umeå Plant Science Centre Department of Ecology and Environmental Science Linneaus väg 6 Umeå University, SE-901 87 Umeå, Sweden tel. +46-(0)90-786-7414, fax. +46-(0)90-786-6705

"\"Pär K. <par.ingvarsson@emg.umu.se> Ingvarsson\""

# **WorkshopsCourses**

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### Erice Italy Phylogenetics Mar10-17

Dear Colleagues, we are happy to announce the First Erice's EMBO Practical Course on Postgenomic phylogenetics (March 10 to 17 2013). The course is founded by EMBO and will be held at the Ettore Majorana Foundation and Centre for Scientific Culture, which is based in the ancient, and astonishingly beautiful village of Erice (Sicily - Italy).

Deadline for receiving applications is: 1st November 2012.

The course has been developed over the past number of years and it consists of lectures, practical sessions and seminars on a diversity of issues in the area of phylogenetics, with a focus on how we deal with data in an era of thousands of genomes.

The course will provide a complete introduction to molecular phylogenetics, from multiple sequence alignment to phylogenomic analyses based on complete genomes. In addition, it will cover the use and analyses of Next Generation Sequencing Data in evolutionary biology, and the integration of genomic and other data (mostly palaeontological data) within the newly

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emerging framework of "Molecular Palaeobiology".

The course is open to everyone but it is explicitly aimed at early stage researchers (PhD students and young postdoctoral researcher) with an interest in phylogenetics and the need to develop their skills into modern phylogenetics and the realm of genome-scale data analyses. Note that placements on the course will not be allocated on a first come first served base. All applications will be reviewed and precedence will be given to applicants clearly illustrating how the course will help their career development.

To apply please visit the course website: http://phylocourse.org/, and email us (1) a short CV (two pages max) and (2) a letter of intent (one page max) explaining why you would like to participate to our practical course. Please send the application material to the following address: Erice.EMBO2013@gmail.com.

Fees: A fee will be applied to all participants. This will cover accommodation, lectures, meals and coffee breaks.

Fees are as follow: Students: 250; Postdoctoral Researchers: 300; Principal Investigators: 400; Industry participants: 1000.

Travel funds are available (see website for details) but you must meet some special circumstances. Course teachers: Dr Davide Pisani (University of Bristol, UK); Prof James McInerney (The National University of Ireland, Maynooth, Ireland - Currently at Harvard School of Public Health); Dr David Fitzpatrick (The National University of Ireland, Maynooth, Ireland); Dr Mary O'Connell (Dublin City University, Ireland - Currently at Harvard University); Dr Chris Creevey (Teagasc Research Centre, Ireland); Dr James Cotton (Wellcome Trust Sanger Institute, UK); Dr Julia Day (University College London, UK); Omar Rota-Stabelli (Foundation Edmund Mach, Italy).

Dr Davide Pisani Reader of Phylogenomics School of Biological Sciences and School of Earth Sciences University of Bristol Woodland Road Bristol, BS8 1UG Email: davide.pisani@bristol.ac.uk Phone: +44-(0)117 928 7490

davide.pisani@bristol.ac.uk

#### Manchester Morphmetrics Nov5-Dec14

#### Dear colleagues

I am pleased to announce this year's morphometrics course from the University of Manchester. This year's course will run in the six weeks from 5 November to 14 December 2012.

The course information can be found on the following we site: http://www.flywings.org.uk/MorphoCourse Course content: \* Data acquisition: the kinds of data and the equipment used to collect them. \* Definitions of size and shape \* Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) \* Statistics of variation, scatter plots, basic multivariate statistics \* Principal component analysis \* Measurement error and outliers \* Shape transformations and 'warping' – the thin plate spline \* Analysis of outline shapes \* Distinguishing between groups (taxonomy, clinical diagnosis, etc.) \* Allometry and size correction \* Influence of external factors on shape (ecomorphology, dose-response studies) \* Symmetric forms and measurement of asymmetry. \* Morphometric inferences on developmental processes \* Morphological integration and modularity \* Genetics of shape: analyses of resemblance between relatives, QTL analyses. \* Phylogeny: reconstructing the evolution of shape

Practice examples: As far as possible, practical exer-

cises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software (http://www.flywings.org.uk/-MorphoJ\_page.htm). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (blogs or wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

The fee for the course is GBP 300.00 (I'm afraid it's gone up again from last year – this is out of my control).

All prospective participants need to pre-register for the course. The deadline for this is the \*14 September 2012\*.

For further details and the pre-registration form, see the course web page: http://www.flywings.org.uk/-MorphoCourse Best wishes, Chris

Christian Peter Klingenberg Faculty of Life Sciences The University of Manchester Michael Smith Building Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275 5082 E-mail: cpk@manchester.ac.uk Web: http://-www.flywings.org.uk Skype: chris\_klingenberg

cpk@manchester.ac.uk

# Marine biodiversity NGS

Workshop on "Next-Generation Sequencing technologies and Informatics tools for studying Marine Biodiversity and Adaptation"

1-3 October 2012, Institute of Marine Biology and Genetics (IMBG) - HCMR, Heraklion, Crete, Greece.

https://sites.google.com/site/workshopimbg/

DNA sequencing and genotyping technologies are advancing very fast, with the development of novel methodologies and machinery and the utilization of new types of molecular markers, giving insights into genomes rapidly, thus changing both the scale and the mode of genetic analysis. This offers a unique opportunity to get better insights into marine genetic biodiversity and to study adaptive genetic variation, developmental and molecular physiology mechanisms that allow organisms to adapt to new environments (e.g. climatic changes, invasions, new pathogens).

This workshop aims to: a) present key concepts on Next-Generation DNA sequencing and genotyping techniques b) provide a comprehensive overview of available bioinformatics tools for analyzing whole genomes, discovering molecular markers, genes and annotation, c) present the advantages and caveats of new approaches for studying genetic biodiversity, d) integrate these new approaches into population and conservation genomics, phylogenomics and adaptation.

The workshop will consist of a series of lectures that cover various aspects of marine biodiversity and adaptation. Invited speakers are chosen based on their effectiveness in teaching theory and practice in genetic diversity, genomics, phylogenomics, and adaptation. Included among the faculty are developers and other experts in the use of computer programs and packages for the analysis of high-throughput data.

Who can attend: The workshop targets mainly PhD students and post-docs, but also researchers interested in high-throughput DNA analysis methods.

Registration is free.

The workshop is organized within the frame of the MARBIGEN project (FP7-REGPOT-2010-1) www.marbigen.org For more information and registration, please go to https://sites.google.com/site/workshopimbg/

The organizing committee

Hellenic Center for Marine Research

kasapidi@hcmr.gr

# **Oslo SpeciationResearch Feb6-8**

Behaviour and speciation FroSpects Workshop Time: Feb 6, 2013 - Feb 8, 2013 Program outline Oral presentations and discus

Oral presentations and discussions focusing on key

questions on behavioural aspects in speciation research.

#### Summary

Many populations are thought to be reproductively isolated from other such populations (i.e. they are different species) by choice. That is, individuals from the differentiated populations are capable of mating with each other and produce fertile offspring but they do not do so due to a lack of sexual attraction; the populations are reproductively isolated by pre-mating barriers. This is but one example of the potential importance of behavioural mechanisms in hindering gene flow and hence in speciation. In this workshop we intend to explore behavioural interactions between differentiated populations in secondary contact and sympatry and address their importance in population divergence, convergence and speciation, focusing on both empirical and theoretical approaches. Relevant topics include: learning, genes and species recognition; the behavioural ecology of reinforcement; intra- and intersexual signalling and communication in hybrid zones; behavior and hybrid speciation.

Application procedure

Prospective participants should send an application by email to the organizers (see addresses below) containing a brief CV with a list of publications (if any) together with a one-paragraph statement of motivation. The application should also include a one-paragraph (no more than 100 words) suggestion of a proposition within the scope of the workshop. The organizers will look at these suggestions and give as many proponents as possible the chance to 'sell' their idea to the participants as short talks during the workshop.

Applications will be accepted between six and two months before the workshop. Later applications can be considered if places are available.

Expected number of participants

7 invited speakers; 40 participants incl. students.

Confirmed invited speakers

Lee Dugatkin

Chris Jiggins

Karen Pfennig

Anna Qvarnström

Ole Seehausen

Maria Servedio

Erik Svensson General info

The workshop will be held at Rica Holberg Hotel lo-

cated in the center of Oslo.

https://www.rica-hotels.com/hotels/norway/easternnorway/oslo/rica-holberg-hotel/ All participants should organize their own travel. Meals and accommodation will be organized by the committee. A significant part of the accommodation costs will be covered by the European Science Foundation. More information will continuously be posted to this website.

If you have questions regarding the organization of the workshop, please contact Glenn-Peter Sætre (g.p.satre@bio.uio.no) and Jo Skeie Hermansen (j.s.hermansen@bio.uio.no).

#### Organizers

Glenn-Peter Sætre (g.p.satre@bio.uio.no) and Jo Skeie Hermansen (j.s.hermansen@bio.uio.no). Other organizers: Åke Brännström and Ulf Dieckmann.

#### Other FroSpects Workshops

Read more at the FroSpects website. http://www.mn.uio.no/cees/english/research/news/events/research/others/2012/frospects.html Jo Skeie Hermansen <j.s.hermansen@bio.uio.no>

# Turku ConservationGenomics Sep30-Oct5

#### Autumn school 'AN INTRODUCTION TO CONSER-VATION GENOMICS'

Sept 30 - Oct 5 2012, Turku, Finland

#### http://www.ru.nl/congenomics/activities/autumn-

school/ Conservation genomics is an exciting new field that is developing out of the merging of conservation genetics with ecological and evolutionary genomics. By using the latest genomic technologies conservation genomics can now concentrate for example on the application of genome-wide markers to reliably estimate demographic and genetic parameters in a conservation context and use gene-expression tools to study the mechanisms behind important conservation genetic processes, such as inbreeding depression.

During this autumn school we specifically focus on the application and technical aspects of genomic techniques and how these genomic techniques can be used to address topical questions in conservation biology. Our goal is to focus on the use of genomics techniques, in particular next-generation sequencing (NGS) methodologies, in conservation biology specifically for nonmodel species. The autumn school is aimed at earlycareer researchers who have some background knowledge in basic genetics and conservation biology but who have an interest in learning more about topics that are related to the application of genomic technologies in conservation biology.

Held in an informal but stimulating scientific atmosphere, with a limited number of participants (ca 30) and teachers (ca 5), we hope that this autumn school will provide an excellent opportunity to introduce young scientists (PhD students and postdocs) to the complex field of conservation genomics and familiarise them with the application of genomic techniques in conservation biology.

#### PRELIMINARY PROGRAMME:

SUNDAY SEPT 30 (late afternoon/evening) – Arrival plus introductory lecture

MONDAY OCT 1 – Introduction to Conservation Genomics

Session 1: Overview of current and future NGS technologies

Session 2: Experimental design

TUESDAY OCT 2 – From NGS data to molecular markers

Session 1:

In part 1 we focus on the conditions of NGS use. We will discuss topics such as data cleaning, pre-processing data, software issues and data quality.

In part 2 we will focus on the pro's and con's of genome complexity reduction methods and data analysis.

Session 2: In session 2 we will discuss methods such as SNP analysis and SNP chips, targeted re-sequencing, genotyping by sequencing and allelotyping by sequencing.

WEDNESDAY OCT 3 – From single reads to annotated sequences

During this session we aim to discuss aspects of data cleaning, assembly, quality control, ortholog identification (establishing a likely sequence function), and, if there is time, associated data analyses (e.g. functional enrichment).

THURSDAY OCT 4 – Examples of conservation genomic studies

During this last session, we will connect questions of Sunday evening via the technical explanations given during the course, to the actual conservational interpretation.

#### THURSDAY OCT 4 – Workshop dinner

FRIDAY OCT 5 morning – Departure

The sessions on Tuesday and Wednesday in particular will include practical sessions with data analysis. Since we have only a limited number of computers available at the locations, we strongly advise participants to bring their own wifi capable laptop. Software to be used can be downloaded and installed during the autumn school from a local server.

#### LOCATION:

The autumn school will be held at Hostel Tuorla (http://www.tuorlanmajatalo.fi/lang/english) situated on the Baltic Sea coast in southwest Finland, from Sunday afternoon/evening 30 Sept 2012 - Thursday evening 4 Oct / Friday morning 5 Oct 2012. Held in this informal environment, there will plenty of time for further discussion and social interaction, in between sessions, during dinner or in the traditional Finnish sauna! Nearby forests also offer opportunities for sampling fungal biodiversity in the form of various edible mushrooms.

#### **REGISTRATION:**

The autumn school is limited to ca 30 participants. PARTICIPANTS FROM CONTRIBUTING MEM-BER COUNTRIES OF THIS ESF NETWORK ARE PRIORITISED. Only those who are registered for the autumn school are eligible to participate. Contributing member countries are: Belgium, Denmark, Finland, Germany, Greece, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland. Note that only a few participants from noncontributing member countries of this ESF network can be accepted.

Prospective participants should send an application by email to the organizers (see address at our website: http://www.ru.nl/congenomics/activities/autumn-school/) containing a brief CV with a list of publications (if any) together with a one-paragraph statement of scientific interests and motivation (up to 250 words). Until



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#### UArizona PlantBreeding Jan7-11

The BIO5 Institute at the University of Arizona is pleased to announce the 2013 Tucson Winter Institute in Plant Breeding, to be held the week of January 7th-11th, 2013. The goal of the Institute is to offer stateof-the-art instruction and training in modern tools in plant breeding, be they statistical, molecular, or computational.

This year's Institute is comprised of the following four Modules:

Monday - Wednesday (12:00pm) January 7th - 9th, 2013 Module 1: Introduction to Plant Quantitative Genetics (Walsh/Gore/Gutierrez) Module 2: Introduction to Plant Genomics (Wing)

Wednesday (1:30pm) - Friday January 9th - 11th, 2013 Module 3: Advanced statistical plant breeding (Walsh/Gore/Gutierrez) Module 4: Bioinformatics for breeders (Goff/Ragot)

Additional details, including a more detailed description of each module, can be found at www.PlantBreedingInstitute.bio5.org "Walsh, James Bruce - (jbwalsh)" <jbwalsh@email.arizona.edu>

# UAzores MarineDNABarcoding Sep3-7

The Workshop on Marine DNA Barcoding will be held on the campus of the University of the Azores, Department of Biology on 3rd-7th September 2012. Speakers: Dr. Dirk Erpenbek (DEES-GeoBioCenterLMU), Dr. Dirk Steinke (BIO-UG), Dr. Filipe O. Costa (CBMA-UM), Dr. Joana Micael (CIBIO-Acores), Dr. Joana R. Xavier (CIBIO-Acores), Dr. Manuela I. Parente (CIBIO-Açores), Dr. Sergio Stefanni (DOP/UAç). The workshop was designed for graduate/undergraduate students and researchers that would like to employ the DNA Barcoding approach in their studies. The focus will be on the concepts underlying the DNA Barcoding through theoretical and practical sessions. All the stages of this approach, from sample collection to data analyses, will be addressed. Discussions will cover data management and selected case studies. The workshop will include:- Specimen handling and data capture in the field;- Tissue sampling, preservation and archiving;- BOLD submission of sample spreadsheets and images;- DNA extraction;- PCR amplification;- Sequence edition and BOLD sequence submission;- Sequence analyses. Theoretical sessions are free. Practical sessions are limited to a maximum of 15 participants, selected in the basis of their CV. The application form and CV should be sent to Manuela Parente (mparente@uac.pt).The deadline for submission of applicant's CVs is the 25th August 2012. For more information, please visit: http://marinebarcodingazores.webs.com We hope to see you soon.

manuela parente <nelaparente@hotmail.com>

# Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly 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 LATEX files, Excel files, etc. ...plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

# Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by IATEX do not try to embed IATEX or TEX in your message (or other formats) since my program will strip these from the message.