# E v o l D i r

September 1, 2008

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

## Forward

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



## BrownU GenomicsEnvChange June8-11

Mark your calendar for the 2009 American Genetic Association Symposium:

"The Genetics and Genomics of Environmental Change" June 8 - 11, 2009 Brown University Providence, RI

Topics include –

Environmental Genomics Clinal Variation Evolutionary Genetics of Climate Change Genetic Polymorphisms and Environmental Stress Genotype, Environment and Epistasis: GxGxE

Further details and a link to the Symposium website will be announced soon.

agajoh@oregonstate.edu agajoh@oregonstate.edu

## Christchurch BioEd2009 Feb12-15

The 2009 BioEd Conference will be held in Christchurch, New Zealand from 12-15 February 2009.

The Allan Wilson Centre for Molecular Ecology and Evolution, a New Zealand Centre of Research Excellence, is pleased to host BioEd2009 - one of six coordinated international events celebrating the birth of Charles Darwin. These meetings are being run under the auspices of the International Union of Biological Sciences (IUBS) and the United Nations Educational Scientific and Cultural Organization (UNESCO). Our aim is to celebrate the impact of Darwin's ideas on current scientific knowledge, and in so doing bring together an international community of individuals interested in science, secondary and tertiary education.

Symposia themes are: * On the origins of life and species * Lessons from Darwin's laboratory * The descent of man: what we have learnt about ourselves 200 years on * Towards Biology 2020: addressing calls for mathematics and computer science in educating biologists * Informal public education: museums, media, marine sanctuaries and national parks * Conservation education in a time of global climate change * Emerging infectious diseases and public health * Sustainability, bioprotection and agricultural education * Darwinian medicine * Preparing teachers for evolution education * The future of biological education

Confirmed speakers can be found on the BioED2009 web site. We invite you to register for BioEd 2009 at http://awcmee.massey.ac.nz/IUBS_BioEd_2009/-index.htm. Expressions of interest for those who wish to present a paper or a poster are open until 24 October 2008. Abstracts will be considered by 14 November 2008 and you will be advised soon thereafter whether your paper/poster has been accepted. Earlybird registration rates apply until 30 November 2008.

Thank you Susan Adams –

Susan Adams Executive Officer/Business Manager Allan Wilson Centre for Molecular Ecology and Evolution Massey University Private Bag 11-222 Palmerston North New Zealand

Tel: +64 6 350 5448 Fax: +64 6 350 5626 Mobile: 021 379 427

Susan Adams <s.i.adams@massey.ac.nz>

## London e-Bioshpere Jun1-5

The e-Biosphere 09: International Conference on Biodiversity Informatics will be held on 1-5 June 2009 in London.

The Conference website is now open at www.e-biosphere09.org. There you will find:

* The Second Conference Announcement (http://www.e-biosphere09.org/assets/files/-2ndAnnouncement07.09.08.pdf) * The Scientific Programme of the Conference * Calls for Participation by co-sponsors, software/database demonstrators, exhibitors, break-out discussion organizers, and sponsors of side-events * Information for software/database demonstration booths and exhibits (http://www.e-biosphere09.org/assets/files/Exhibitors07Jul08.pdf)

The Call for Abstracts and Applications for Travel Bursaries will be released on the Conference website in the coming weeks. The deadline for submission of abstracts and applications is 15 December 2008.

We hope you'll be interested in participating and we look forward to seeing you in London.

On behalf of the Conference Steering Committee,

David E. Schindel, Executive Secretary

Consortium for the Barcode of Life

202/633-0812; fax 202/633-2938; portable 202/557-1149

Email: SchindelD@si.edu <blocked::mailto:SchindelD@si.edu>

CBOL WEBSITE: http://www.barcoding.si.edu <blocked::http://www.barcoding.si.edu/>

Office and overnight delivery address:

National Museum of Natural History Room CE-119 10th & Constitution Avenue, NW Washington, DC 20560 Postal mailing address National Museum of Natural History Smithsonian Institution P.O. Box 37012, MRC-105 Washington, DC 20013-7012

"Schindel, David" <schindeld@si.edu>

## Melbourne DarwinAnniversary Feb12

Come Share in a Unique Experience

You are invited to come to Melbourne, Australia to share in a unique conference experience, celebrating the 200th anniversary of Darwin's birth (February 12, 1809) and the 150th anniversary of the publication of the Origin of the Species

When Charles Darwin came to Australia on the voyage of HMS Beagle in 1836 he was an obscure English naturalist.

23 years later the publication of Darwin's book, Origin of the Species, sparked an intellectual, social and spiritual revolution. "It radically transformed our understanding of life on this planet" the origins of life, our relationship to other species and the way life can adapt or fail to do so in the face of environmental change.

Evolution - the Experience will explore the breadth and depth of Darwin's ongoing impact in basic biology, agriculture, medicine, psychology, sociology, politics, history and religion.

Evolution - the Experience will be embedded in rich menu of public events, each in their own way touching the Darwinian theme - theatre, film, forums, debates and exhibitions involving theatre companies, orchestras, cinemas, museums, art galleries, libraries, botanic gardens, zoos, herbaria, schools, universities and the media. And on February 12, 2009 there will be a unique birthday celebration < http://-www.evolution09.com.au/social.php > for Charles Darwin.

Register your interest in being part of this extraordinary experience so that we can keep you updated of all key information - www.evolution09.com.au Regards

Kim

Kim Stevenson

Think Business Events Suite 6, 19-23 Hoddle Street Richmond, VIC 3121

Ph: +61 3 9417 1350 Fax: +61 3 8610 2170 Email: kims@thinkbusinessevents.com.au

Kim Stevenson <kims@thinkbusinessevents.com.au>

## Minnesota TheFirstHumans Oct7-8

Each fall since the 1960's, Gustavus has hosted the Nobel Conference which has a twofold vision, to bring cutting-edge science issues to the attention of an audience of students and interested adults; and to engage the panelists and the audience in a discussion of the moral and societal impact of these issues. The topic for the conference is always based in science and we endeavor to bring world-class speakers to campus for this two-day event. At least sixty Nobel laureates have served as speakers, five of whom were awarded the prize after speaking at our conference, attesting to its timeliness. True to the second part of our mission, these conferences have also asked questions like: What does it mean? What good is it? Could it be potentially harmful? In some cases, the questions of impact on society are very obvious, as at the 2007 conference whose theme was title was /Heating Up: The Energy Debate./ Even though the audience can be quite large 5,000 or more, there are a number of opportunities for the audience to interact with the speakers, including the question and answer period following each of the talks.

On Tuesday and Wednesday, October 7 and 8, we will convene Nobel Conference XLIV, /The First Humans/, featuring Robin I. M. Dunbar, Marcus W. Feldman, J. Wentzel van Huyssteen, Curtis W. Marean, Svante Pääbo, and Dennis Stanford. This panel hopes to address questions such as: Who were the first humans? Where did they come from? How did they live? Questions that have traditionally been the domain of anthropologists and paleontologists, but have more recently received input from molecular biologists, population geneticists, cognitive archaeologists, and even paleoclimatologists. Using new techniques and state-of-the-art technologies, they have both aided the painstaking work of extracting skeletal remains and artifacts from ancient sites around the world and bolstered the physical findings. Together, these scientists have produced a host of exciting, far-reaching discoveries. While they are still debating the exact relationships among the species of hominids, the genus from which modern humans arose, they are getting closer and closer to finding the very first of our kind with research that is rewriting our history and informing us in dramatic ways.

For more information on the fall's conference, past conferences, and our link the Nobel Foundation, please visit our website: http://gustavus.edu/events/-nobelconference/2008/ We hope that you, your colleagues, and your students will be able to join us for this year's conference and the unique opportunity it affords. Please share this invitation with others who might be interested.

Thank you for your consideration.

Chuck

– Chuck Niederriter Internet: chuck@gustavus.edu Professor of Physics and http://physics.gac.edu/ ~ chuck/ Director of the Nobel Conference Telephone: (507)933-7315 Gustavus Adolphus College FAX: (507)933-6104 St. Peter, MN 56082

Chuck Niederriter <chuck@gac.edu>

## Munich SocialInsectEvolution Oct9-11

Invitation to the 1ˆst Central European Meeting*

*of the IUSSI (International Union for the Study of Social Insects)*

*from 9.10.2009 â 11.10.2009*

*Abbey Frauenwörth, Fraueninsel Chiemsee*

* *

* AG Behavioral Ecology*

*LMU Munich*

*Großhaderner Str. 2*

*82152 Planegg-Martinsried*

*foitzik@biologie.uni-muenchen.de <mailto:foitzik@biologie.uni-muenchen.de>*

* *

The Organizing Committee is happy to invite all social insect researchers to participate in the *1ˆst Central European Meeting of the IUSSI*, which will be held at the Abbey Frauenwörth on the Fraueninsel at the Lake Chiemsee, Bavaria, Germany, from the 9ˆth to 11ˆth of October, 2009. The 3ˆrd Myrmecological meeting will be held at the same location from October 8ˆth to 10ˆth and participants are invited to attend both meetings.

*Program*

The scientific program for the Myrmecological Meeting

will start on Thursday afternoon and end on Saturday, the IUSSI Meeting will commence on Friday afternoon and will end Sunday afternoon. Planned arrival days are October 8ˆth or 9ˆth , departure can take place October 10ˆth to 12ˆth . However, early arrival / late departure is possible. We will offer the possibility to visit the palace Herrenchiemsee on Sunday afternoon.

* *

*Main Speakers*

Â Abraham Hefetz, Tel Aviv, Israel

Â Tom Wenseleers, Leuven, Belgium

* *

*Meeting place*

The idyllic Abbey Frauenwörth is located on the island Fraueninsel in Lake Chiemsee, 70 km southeast of Munich. Beside its prime location, the Abbey Frauenwörth maintains a state-of-the art convention centre, which offers excellent, but inexpensive meeting facilities, including a lecture hall, the restaurant âKlosterwirt“ and single and double rooms starting from 22 per night. The island can be reached easily by ship (every 30min-1h, 25 min ride). We plan to organize a bus to facilitate transport from Munich airport / Central railway station to Prien, where the ships start.**

*Participation*

We would appreciate early registration per e-mail without obligation. You will receive additional information by e-mail or mail. For provisional registration, please send us the following information:

Name, address, email, IUSSI-Member/Non-Member/Student, length of stay and whether or not you plan to present results in an oral, poster or film presentation

To facilitate the participation of Eastern European and student researchers, we will offer reduced registration fees for these groups. **

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– Prof. Dr. Susanne Foitzik Department Biologie II Verhaltensökologie Ludwig-Maximilians-Universität München Großhaderner Str. 2 D - 82152 Planegg / Martinsried Germany

Phone: + 49 89 / 2180 74 209 Fax: + 49 89 / 2180 74 221 e-mail: foitzik@zi.biologie.uni-muenchen.de

Susanne Foitzik <foitzik@zi.biologie.uni-muenchen.de>

## Paris Recomb ComparativeGenomics Oct13-15 Posters

CALL FOR POSTERS AND REGISTRATION

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UPDATES:

- Registration is open

https://igm.univ-mlv.fr/RCG08/?lang=en&cat=-registration - The list of accepted papers is available here

http://igm.univ-mlv.fr/RCG08/?lang=en&cat=-program ——

Sixth Annual RECOMB Satellite Meeting on Comparative Genomics

October 13-15, 2008

Ecole Normale Supérieure, Paris, France

http://igm.univ-mlv.fr/RCG08 THEME AND SCOPE

Rapid DNA sequencing technologies have fueled an explosion in genome level data. RECOMB-CG is devoted to the development and utilization of computational methods for the comparative exploration of genome structure, function, and evolution. Both theoretical and applied contributions are welcome, and papers that combine new techniques with new knowledge derived from their application are highly encouraged.

Submissions should include genome wide analyses informed by comparative data. Topics of interest include but are not limited to:

Algorithms for comparative genomics Genome rearrangements Ancestral genome reconstruction Multiple genome alignment Genome sequence comparison Modeling genome evolution Identification, classification, and evolution of non-coding motifs Comparative genomics for genome annotation Gene and genome duplication Evolution of gene families Identification of highly conserved and rapidly evolving sequences Gene tree reconciliation Comparative genomics and epigenetics Comparative genomics and proteomics Comparative genomics and gene expression Comparative genomics and adaptation

CALL FOR POSTER PRESENTATIONS

We invite you to apply for poster presentations on topics of relevance to the workshop. Each poster presentation should be described in a 1 page summary and be submitted by September 22, 2008 via the Easychair submission system: http://www.easychair.org/conferences/?conf=recombcg08 PROGRAM

The lists of invited speakers and accepted papers are available here

https://igm.univ-mlv.fr/RCG08/?lang=en&cat=program KEY DATES

June 18, 2008 Paper submission deadline

July 14, 2008 Notification of paper acceptance

July 24, 2008 Final manuscript due

Early registration is through September 15, 2008

Late registration will begin September 16, 2008

September 22, 2008 Poster submission deadline

October 13-15, 2008 Workshop

INVITED SPEAKERS

Olga Troyanskaya (Princeton University) Aviv Regev (Broad Institute) Trisha Wittkop (University of Michigan) Chris Ponting (University of Oxford) Laurent Duret (Université Claude Bernard)

CONFERENCE CHAIRS

Craig E. Nelson (Molecular & Cell Biology - Univ. of Connecticut, USA) Stephane Vialette (IGM - Univ. Paris-Est, France)

STEERING COMMITTEE

Jens Lagergren (Stockholm Bioinformatics Centre and CSC, KTH, Sweden) Aoife McLysaght (University of Dublin, Ireland) David Sankoff (University of Ottawa, Canada)

PROGRAM COMMITTEE

Lars Arvestad (Royal Institute of Technology, Sweden) Veronique Barriel (Museum national d'histoire naturelle, France) Anne Bergeron (Universite du Quebec a Montreal, Canada) Guillaume Blin (Universite Paris-Est, France) Guillaume Bourque (Genome Institute of Singapore, Singapore) Jeremy Buhler (Washington University in Saint Louis, USA) Pierre Capy (Universite Paris-Sud, France) Cedric Chauve (Simon Fraser University, Canada) Avril Coghlan (Sanger Institute, UK) Miklos Csuros (Universite de Montreal, Canada) Aaron Darling (University of Queensland, Australia) Bernard Dujon (Institut Pasteur, France) Dannie Durand (Carnegie Mellon University, USA) Nadia El-Mabrouk (Universite de Montreal, Canada) Niklas Eriksen (Goteborg University, Sweden) Guillaume Fertin (Universite de Nantes, France) Olivier Gascuel (Universite de Montpellier II, France) Henri Grosjean (Universite Paris-Sud, France) Matthew Hahn (Indiana University, USA) Tao Jiang (University of California - Riverside, USA) Jens Lagergren (Stockholm Bioinformatics Centre and CSC, KTH, Sweden) Emmanuelle Lerat (Universite Claude Bernard, France) Aoife McLysaght (University of Dublin, Ireland) Bernard Moret (Ecole Polytechnique Federale de Lausanne, Switzerland) Craig Nelson (Co-Chair, University of Connecticut, USA) Michal Ozery-Flato (University of Tel-Aviv, Israel) Pierre Pontarotti (Universite de Provence, France) Eduardo Rocha (Universite Paris 6 et Institut Pasteur, France) Hugues Roest-Crollius (Ecole Normale Superieure, France) Antonis Rokas (Vanderbilt University, USA) Marie-France Sagot (INRIA Rhône-Alpes, France) David Sankoff (University of Ottawa, Canada)

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## Tucson EvolutionaryEpidemiology Sep14-16

2008 American College of Epidemiology Meeting Program "The Dawn of Evolutionary Epidemiology: Applying Evolutionary Theory in an Epidemiologic Context" September 14-16, 2008 The meeting is at The Westin LaPaloma Resort & Spa 3800 East Sunrise Drive, Tucson, AZ 85718

Full meeting info is at: http://www.acepidemiology2.org/meetings/2008Tuscon/08Tusconamprogram.html The main hotel is full, but housing is available at:

Embassy Suites Paloma Village - 6350 North Campbell Avenue, Tucson, AZ 85718 (2 miles about 5 minutes)

Hacienda Del Sol Guest Ranch Resort - www.haciendadelsol.com - 5601 North Hacienda del Sol Road, Tucson, AZ 85718 (520) 299-1501 (0.7 miles about 2 minutes)

Loews Ventana Canyon Resort - www.loewshotels.com - 7000 North Resort Drive, Tucson, AZ 85750 (520) 299-2020 (5.9 miles about 10 minutes)

Canyon Ranch - 8600 East Rockcliff Road, Tucson, AZ 85750 (7.8 miles about 14 minutes)

Lodge at Ventana Canyon - 6200 North Club House, Tucson, AZ 85750 Phone: 520-577-1400; (5.3 miles about 9 minutes)

Windmill Suites at St Philips Plaza - 4250 North Campbell Avenue, Tucson, AZ 85718 (3.6 miles about 9 minutes)

Westward Look Resort - 245 East Ina Road, Tucson, AZ 85704 (4.3 miles about 7 minutes)

La Posada Lodge & Casitas - 5900 North Oracle Road, Tucson, AZ 85704 (6.7 miles about 12 minutes)

Hampton Inn & Suites - 5950 North Oracle Road, Tucson, AZ 85704 (6.8 miles about 12 minutes)

rmnesse@gmail.com

## UBath Sex and asex Sep5

THE EVOLUTION OF SEX AND ASEXUAL REPRODUCTION

Genetics Society Autumn Meeting, University of Bath, UK, Sept. 5th 2008

Scientific organisers: Laurence Hurst (Bath) and Roger Butlin (Sheffield)

To accompany the presentation of 2008 Mendel Lecture by Professor Matthew Meselson and the 2008 Balfour Lecture by Daven Presgraves, The Genetics Society is organizing a one day conference on THE EVOLUTION OF SEX AND ASEXUAL REPRODUCTION. This will be held at the University of Bath, UK on Friday 5th September.

While the maintenance of sex and recombination remains an intellectual challenge, the long term persistence of some asexuals is equally puzzling. What if anything can be learnt about the former issues by studying the latter and vice versa? There are multiple contrasting approaches to these problems: theoretical versus empirical approaches, genetical verses ecological explanations, field versus laboratory systems. This meeting will bring together all of these strands in current research.

For more details and registration go to: http://-www.genetics.org.uk/ autumn_2008,_one_day_meeting

Speakers:

Christina Burch (North Carolina, USA)

Jukka Jokela (Zurich, Switzerland)

Peter Keightley (Edinburgh, UK)

Ryszard Korona (Krakow, Poland)

Dunja Lamatsch (Mondsee, Austria)

Thomas Lenormand (Montpellier, France)

Mike Lynch (Indiana, USA)

Stefan Scheu (Darmstadt, Germany)

Featuring:

2008 Mendel Medal winner, Matthew Meselson (Harvard, USA)

2008 Balfour Lecture by Daven Presgraves (Rochester, New York)

Laurence D. Hurst Royal Society Wolfson Research Merit Award Holder Professor of Evolutionary Genetics Department of Biology and Biochemistry University of Bath Bath Somerset, UK BA2 7AY

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Laurence Hurst <l.d.hurst@bath.ac.uk>

## UBath Sex and asex Sep5 posters

ADDITIONAL INFORMATION:

THERE WILL BE A POSTER SESSION, SO ANYONE WISHING TO PRESENT A POSTER IS WELCOME TO BRING IT ALONE. THERE IS NO NEED TO CONTACT THE ORGANISERS IN ADVANCE.

THE EVOLUTION OF SEX AND ASEXUAL REPRODUCTION

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Laurence D. Hurst Royal Society Wolfson Research Merit Award Holder Professor of Evolutionary Genetics Department of Biology and Biochemistry University of Bath Bath Somerset, UK BA2 7AY

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Laurence Hurst <l.d.hurst@bath.ac.uk>

## UCIrvine MEEGID IX Oct30-Nov1 DNABarcoding

MEEGID IX, University of California at Irvine, 30 October - 1 November 2008 http://www.th.ird.fr/-site_meegid/menu.htm SYMPOSIUM ON DNA BARCODING

Speakers interested in presenting on applications of DNA barcoding (hosts, pathogens, vectors) in molecular epidemiology and infectious disease research at the 9th International Meeting "Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases" (MEEGID IX), held at UC Irvine, California, should contact the convenor, Sergios-Orestis Kolokotronis (koloko@amnh.org) with a CC to the principal organizer, Michel Tibayrenc (Michel.Tibayrenc@ird.fr) by 15 September.

Sergios-Orestis Kolokotronis, PhD Coordinator, DNA Barcoding Initiative for Conservation Sackler Institute for Comparative Genomics American Museum of Natural History Central Park West at 79th Street New York, NY 10024 -USA- tel +1 212 313 7648 koloko@amnh.org http://softlinks.amnh.org http://-koloko.net — MEEGID IX is co-organized by the University of California at Irvine (http://www.uci.edu ) and the Institut de Recherche pour le Developpement (IRD; http://www.ird.fr ) in France. Principal organizers are Francisco J. Ayala (Dept of Ecology and Evolution, UC Irvine) and Michel Tibayrenc (IRD).

Communications on genetics, genomics, proteomics, phylogenetics, population biology, mathematical modeling, and bioinformatics are welcome. They can report on the host, the pathogen, or the vector for vector-borne diseases. Papers considering host + pathogen or pathogen + vector (co-evolution) are particularly encouraged. All pathogens are within the scope of MEEGID: viruses, parasitic protozoa, helminths, fungal organisms, and prions. All infectious models can be explored, including those of veterinary or agronomical relevance.

Confirmed Speakers

Francisco J. Ayala (Dept Ecology and Evolution, UC Irvine): (i) Evolution of malaria; (ii) Darwin's Revolution

Robin Bush (Dept Ecology and Evolution, UC Irvine, California): Influenza Evolution

Koussay Dellagi (Centre for Research and Surveillance of Emerging Diseases in the Indian Ocean). Chikungunya epidemics

Appolinaire Djikeng (J. Craig Venter Institute, Rockville, Maryland, USA) Viral genomics

Sunetra Gupta (University of Oxford, UK) The role of immune selection on pathogen population structure

Henry Harpending (University of Salt Lake City): Infectious Diseases and Human Evolution

Austin Hugues (University of South Carolina, Columbia) The Importance of Purifying Selection in Pathogen Evolution

Tovi Lehmann (NIAID, NIH). Vector population genetics and genomics

James Musser (Cornell University, New York) Molecular Genetic Basis of Group A Streptococcus Epidemics

Martine Peeters (IRD Montpellier, France). HIV molecular evolution

Anne Rimoin (UC Los Angeles) : implementing active surveillance of human monkeypox in the democratic republic of Congo

Michel Tibayrenc (IRD, Bangkok, Thailand): Integrated evolutionary epidemiology: where are we now?

Nathan Wolfe (UC Los Angeles): Viral forecasting

The MEEGID meetings are organized in synergy with the new journal Infection, Genetics and Evolution (Elsevier; http://www.elsevier.com/locate/meegid) , covering the same scientific topic. Launched only 6 years ago, Infection, Genetics and Evolution is now published with six issues per year, and has been indexed by Medline and Index Medicus, starting from the first issue. It has been quoted 3.5/5.0 ("very good") by the US National Library of Medicine. It is now covered by ISI and the official impact factor for 2007 is 2.407 (ISI Web of knowledge).

The papers communicated for MEEGID IX will be published in a special issue of Infection, Genetics and Evolution, as already done for MEEGID VI (Paris, July 2002) and MEEGID VIII (Bangkok, Thailand, November 2006). MEEGID IX will include 10-15 plenary lectures, about 20 specialized symposia, 12-15 "express-debates" (a 20-min presentation by a single speaker followed by 40 min of free discussion) and several poster sessions.

Special emphasis through plenary lectures and symposia will be given to health problems of particular interest to mediterranean and tropical countries: AIDS, malaria, tuberculosis (especially multidrug resistant TB), sleeping sickness, leishmanioses, Chagas disease, ebola, bird flu, Chikungunya, as well as cattle and crop pathogens. Plenary lectures and symposia will also deal with transversal topics such as population genetics or species concepts. The congress is open to proposals for conferences and symposia.

Awards will be attributed to the best oral communication, the best

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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

## UMass GeneticBasisPlantAdaptation Oct18

Dear colleagues:

We hope you can join us for our 6th Annual Symposium in Plant Biology at the University of Massachusetts Amherst:

ECOLOGICAL GENOMICS: THE GENETIC BASIS OF PLANT ADAPTATION

Saturday, October 18, 2008, 9 am to 6 pm, at the UMass Campus Center and Engineering Lab II auditorium.

The symposium is an initiative of the Plant Biology graduate program designed to highlight an exciting area of plant biology by featuring a daylong program of speakers, along with a poster session with contributions from attendees. The symposium is FREE and includes lunch, breaks and a final reception. We strongly encourage interested graduate and undergraduate students to attend and present posters.

Please register by Friday, October 4, 2008 for the symposium and poster session. Online registration is available through the symposium webpage: http://-www.bio.umass.edu/plantbio/symposium08.html For more information or questions, send an email to: pb@bio.umass.edu

Best Regards,

Ana Caicedo (caicedo@bio.umass.edu) Lynn Adler (lsadler@ent.umass.edu)

2008 PB SYMPOSIUM PRESENTERS:

EDWARD BUCKLER USDA-ARS Research Geneticist and Department of Plant Breeding and Genetics Cornell University "Complex Trait Genetics in Diverse Maize"

SCOTT HODGES Ecology, Evolution & Marine Biology University of California, Santa Barbara "Speciation and adaptation in Aquilegia: from field to genomic studies."

THOMAS MITCHELL-OLDS Department of Biology, Duke University "Nucleotide polymorphisms and their ecological consequences in natural plant populations"

ROBERT THORNBURG Department of Biochemistry, Biophysics and Molecular Biology Iowa State University "Molecules of nectar: The food of the gods and the

pilfering pollinators"

CYNTHIA WEINIG Department of Botany & Program in Ecology University of Wyoming "Quantitative variation in circadian rhythms and plant adaptation to heterogeneous environments"

STEPHEN WRIGHT Department of Ecology and Evolutionary Biology University of Toronto "Population genomics of plant adaptation in Arabidopsis and Capsella"

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Ana L. Caicedo, Ph.D. Assistant Professor 221 Morrill Science Center phone: (413) 545-0975 Biology Department fax: (413) 545-3243 University of Massachusetts email: caicedo@bio.umass.edu Amherst, MA 01003 http://www.bio.umass.edu/biology/caicedo Ana Caicedo <caicedo@bio.umass.edu>

## UZurich PaulWardSpermCompetition Oct25

Dear colleagues interested in sexual selection and sperm competition

This is the 2nd announcement of our

Symposium on sexual selection, sperm competition & cryptic female choice

in honor of our friend and colleague Paul Ward, who died prematurely of cancer earlier this year,

Saturday 25 October 2008 (the day of his 50th birthday) at the University of Zurich-Irchel, Switzerland.

The symposium will be a whole-day affair, with talks approximately from 9:00 - ca. 18:00 h. In the evening we are planning dinner together in a local restaurant. There will be no registration fee, but attendants other than the invitees will have to pay for their travel, lodging and dinner themselves. Please arrange this yourself via the available web sites (http://www.zuerich.com/-en/welcome.cfm). (Invited speakers will stay at the Hotel Coronado close to the Irchel campus.)

Everybody is welcome to attend, and more information will follow in due time. If you plan to attend, we would appreciate a brief e-mail to the address given below (Wolf Blanckenhorn), so we can judge attendance. Please include whether you want to have dinner with us for reservation purposes.

A tentative list of speakers with tentative titles include:

8.30 - 9.00 h Zurich people etc. INTRODUCTION 9 - 9.30 h Geoff Parker, Liverpool, UK Sperm competition in dung flies 9.30 - 10 h Tim Birkhead, Sheffield, UK Cryptic Female Choice 10 - 10.30 h David Hosken, Exeter, UK Aspects of sperm competition in yellow dung flies 10.30 - 11 h Coffee Break 11 - 11.30 h Leigh Simmons, Perth, AUS Sexually selected sperm and competitive fertilization success in dung beetles 11.30 - 12 h Matt Gage, Norwich, UK Some things insects have taught us about sperm competition 12 - 12.30 h Luc Bussière, Stirling, UK The complexity of male-female interactions during mating 12.30 - 14 h Lunch Break 14 - 14.30 h Rhonda Snook, Sheffield, UK The evolutionary significance of dud sperm: sperm competition and female spermicide 14.30 - 15 h Nina Wedell, Exeter, UK Selfish genes and sperm competition 15 - 15.30 h Scott Pitnick, Syacuse, USA Ejaculate-female interactions 15.30 - 16 h Tim Karr, Bath, UK The molecular side of Paul: Big ideas from the big guy 16 - 16.30 h Tea Break 16.30 - 17 h Scott Sakaluk, Illinois, USA Cryptic female choice in crickets 17 - 17.20 h Introduction of Paul Ward's last PhD students 17.10 - 17.30 h Marco Demont TBA 17.30 - 17.50 h Karin Thueler Genetic and Condition-Dependent Variation in Sperm Storage Organ Investment of Female Yellow Dung Flies 17.50 - 18.10 h Sonja Sbilordo Sperm Use at Fertilization by Yellow Dung Fly Females 18.10 - 18.30 h Christian Wüst TBA

20 h - 24 h Symposium Dinner

Please forward this message to anybody interested, and reserve the date.

Best regards,

Dr. Wolf Blanckenhorn Zoological Museum University of Zurich-Irchel Winterthurerstrasse 190 CH-8057 Zurich

Phone: +41 44 635.47.55 Fax: +41 44 635.47.80 E-mail: wolf.blanckenhorn@zm.uzh.ch http://www.zm.uzh.ch/zmneu/forschung/-blanckenhorn_wolf.html http://www.esf.org/-thermadapt wolfman@zm.uzh.ch

# GradStudentPositions



## ArizonaStateU ParasiteMolEvolution

Graduate student position in molecular evolution/ecology of parasites

I have a position for a highly motivated PhD student interested in molecular evolution or molecular ecology of parasites. I am studying host switches as they may lead to molecular adaptations in parasites/pathogens and how the demographic history of parasite/pathogen populations affects the dynamic of adaptive variation. My ongoing research focuses on parasitic protozoa belonging to the genus Plasmodium, the causative agent of malaria. These parasites infect a variety of vertebrate hosts, including reptiles, birds, and mammals, including humans. Human malaria is a parasitic disease endemic in most of the tropical and subtropical ecosystems worldwide and exhibits great geographic diversity.

I am currently investigating: (i) the evolution of specific proteins in the parasite that are involved in the invasion of the host red blood cell, (ii) the phylogeography of human and macaque malarias, and (iii) the origin and dispersion of malaria drug resistance. I am also involved in a project on the dynamic of viruses between human populations and synantropic primates.

The PhD student is expected to learn both laboratory and computational/quantitative skills. Knowledge in evolutionary biology at the level of undergraduate courses and research experience are desirable. The specific subject of the research, however, is a matter that will be discussed with the candidate based on his/her own interests and skills. Please notice that a real interest in molecular evolution or molecular ecology of parasites/pathogens is absolutely required.

Applicants should comply with all ASU requirements. The school of Life Sciences in Arizona State University offers several graduate programs. Please check http://-/sols.asu.edu/grad/research_opp.php . I could provide specific information to those interested. Support in the form of assistantships is available.

The graduate students at ASU have the opportunity of interacting with faculties from several disciplines. In addition to our diverse community at the School of Life Sciences (http://sols.asu.edu/index.php), I maintain active collaborations with the Centers for Disease Control and Prevention (Atlanta, Georgia), the National Primate Research Center at the University of Washington, the U. of Maryland, other US institutions, as well as colleagues working in endemic countries worldwide. The student is expected to develop a real sense of how to build collaborative research in both domestic and international settings so good social skills are important.

Prospective Students please contact:

Ananias A. Escalante, PhD

Associate Professor School of Life Sciences Arizona State University PO Box 874501, Tempe AZ 85287-4501 E-mail: Ananias.Escalante@asu.edu http://-sols.asu.edu/faculty/aescalante.php

Ananias Escalante <Ananias.Escalante@asu.edu>

## Bremerhaven CrustaceanPopulationGenetics

PhD position:

Population genetics and evolution of crustacean diversity in Antarctic waters

A three year PhD position is available within the collaborative framework of a recently granted project by the Deutsche Forschungsgemeinschaft (DFG) on crustacean diversity in Antarctic waters. This project is associated with the ANTFLOCKS initiative coordinated by the Mus??um Nationale d???Histoire Naturelle (NMHN) in Paris, France. Freshly dredged specimens from different areas of the Antarctic shelf will be analysed with different genetic methods as well as morphologically. The goal is to reconstruct and understand evolutionary species radiations of different crustacean taxa on the Antarctic shelf. Genetic barcoding with mitochondrial DNA and microsatellite analyses, including the establishment of enriched genomic libraries using state of the art methodology, will be carried out at three different institutes involved in this project. Discovery and description of new species (morphospecies as well as genetically detected cryptic species) is expected. The candidate will be primarily based at the Alfred Wegener Institute for Polar and Marine Research (AWI) in Bremerhaven, where he will work under the guidance of Dr. Christoph Held. Furthermore he/she will carry out research for several months at the laboratories of Dr. Christoph Schubart at the University of Regensburg and of Dr. Florian Leese and Dr. Christoph Mayer at the Ruhr University of Bochum. It is planned to secure the opportunity for the candidate to participate in a research trip to Antarctica. In addition, visits to European zoological collections to study comparative material may be possible.

Currently, two years of Ph.D. salary according to BATIIa/E13 have been granted. An extension for a third year is likely, provided that first results will be evaluated favourably. The position should be filled by 1 October, 2008, but will remain open until a suitable candidate is found.

We are seeking a student with an MSc or equivalent degree (Diplom) in biology. The successful candidate should have experience with techniques in molecular systematics and/or population genetics and should have a strong interest in biogeography and evolutionary biology. Good communication skills, the ability to work independently are prerequisites. We offer an intellectually stimulating research environment and the possibility to gain experience in three well-equipped molecular laboratories with slightly different research focus.

To apply, please send an e-mail application in English or German including CV, personal scientific goals and a brief letter explaining why you are interested in this PhD position by September 1st to Dr. Christoph Held at <Christoph.Held@awi.de> and CC to <Christoph.Schubart@biologie.uni-regensburg.de> <Florian.Leese@rub.de> <cm@tp4.ruhr-uni-bochum.de>

Dr. Christoph Held Alfred Wegener Institute for Polar and Marine Research Marine Animal Ecology Building D, room D-2200 Am alten Hafen 26D-27568 Bremerhaven

Christoph Held <Christoph.Held@awi.de>

## Frankfurt PlantSystematicsEvolution

The Department of Botany and Molecular Evolution at the Senckenberg Research Institute in Frankfurt/Main (Germany) invites applications for a

PhD-Position in Phylogeny and Evolution (Ref. DGF ZI 557/7-1)

within the project “Cenozoic diversification in the Bromelioideae (Bromeliacae): character evolution and climate change”, funded by the German Science Foundation (DFG).

The candidate will investigate the phylogeny of Bromelioideae (Bromeliaceae) with molecular methods, specifically DNA-sequencing of nuclear markers. The phylogenies are intended to reconstruct 1) character evolution within the subfamily, 2) historical biogeography, 3) date evolutionary processes, and 4) analyse the data in relation to climate change.

The applicant must have a diploma or master degree in biology/botany and have experience with the standard methods of molecular systematics and reconstruction of phylogenies. Experience in the reconstruction of character evolution and in biogeographic analysis are highly desirable. In addition, the applicant should

be competent in written and spoken English and enjoy working in an international and interdisciplinary team. The applicant will also work together with the research field âEvolution and Climateâ of the research center âBiodiversity and climateâ. A participation in university teaching (max. 2 SWS) is expected.

Salary and benefits are according to a public service position in Germany (BAT IIa/2).

The Research Institute Senckenberg advocates gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference.

The contract shall start as soon as possible and will initially be restricted to 2 years. A prolongation for 1 year is possible. The duty station will be Frankfurt am Main, Germany.

Please apply by sending your application preferably digitally by e-mail or by mail, including a letter outlining your suitability for the post, and detailed CV, contact details of 2 referees, and a copy of your diploma-thesis and/or other exams until September 15, 2008 to

Prof. Dr. G. Zizka, Head of the Department Botany and Molecular Evolution, Research Institute Senckenberg and Goethe-University Frankfurt/Main Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mail: georg.zizka@senckenberg.de

For further enquiries please contact Dr. Katharina Schulte E-mail: Katharina.Schulte@senckenberg.de, phone: ++49 +69 970751184

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Dr. Katharina Schulte

Abt. Botanik & molekulare Evolutionsforschung Forschungsinstitut Senckenberg und J.W. Goethe-Universität Senckenberganlage 25 60325 Frankfurt/Main

Tel: 0049-(0)69-97075-1184 Fax: 0049-(0)69-97075-1137 Mail: katharina.schulte@senckenberg.de http://-www.senckenberg.de

Katharina Schulte <katharina.schulte@senckenberg.de>

## GoetheU Barcoding

*Biodiversity and Climate Research Centre, Project Area D “Laboratory Centre”*

Job Title: PhD Position [#D07] Reference Code: Ref. PG D 5.2 [#D07] Job Location: Frankfurt/Main Germany Status: Part-Time/Adjunct/Substitute Job Category: Biology/biotechnology/life sciences Application Closing Date: 8/19/2008

Job Description

* / Biodiversity and Climate Research Centre / *

The Biodiversity and Climate Research Centre has recently been founded by the Senckenbergische Naturforschende Gesellschaft, the Goethe-Universität Frankfurt am Main, and additional partners. It is funded by the Hessian State Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the Centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level. The Project Area D “Laboratory Centre” invites applications for a

*PhD Position - Ref. PG D 5.2 [#D07] BAT II a / 2 *

The applicant will develop a technique for the automated molecular identification (barcoding) of scientifically and economically important freshwater communities. To this end, a data bank with nuclear and mitochondrial DNA sequences has to be established based on specimens which have been identified taxonomically by experts in advance. With their aid quantitative and qualitative analyses of species compositions in mixed samples will be established using second generation sequencing techniques (pyro-sequencing).

Job Requirements

The applicant should hold an earned Diploma or Master degree in biology, preferably with a strong focus on transcriptome analysis using high throughput technologies. She or he should already have experiences with taxonomic concepts, data banks and should be interested to cooperate with taxonomists of the Research Institute and Natural Museum Senckenberg. Very good written and oral English language skills and an interest in joining a multidisciplinary research team are required. Knowledge of German would be an advantage, and at least the willingness to learn basic German is required.

Information and Application Process Instructions

Salary and benefits are according to a public service position in Germany (BAT IIa/2).

The Research Centre advocates gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference.

The contract shall start as soon as possible and will ini-

tially be restricted to 2 years with a possible extension being subject to personal performance and availability of funds. The duty station will be Frankfurt am Main, Germany. Official employer is SENCKENBERGISCHE NATURFORSCHENDE GESELLSCHAFT.

Please send your application by mail or e-mail, including a detailed CV, 3 references and a list of publications, until August 19, 2008 to

Prof. Dr. Dr. h.c. V. Mosbrugger, Scientific Coordinator Biodiversity and Climate Research Centre, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mail to Personal & Service: bernd.schleich@senckenberg.de

For enquiries about the position and the contract conditions please write to Prof. Dr. B. Stribrny (E-mail: bernhard.stribrny@senckenberg.de) and for scientific enquiries to PD Dr. M. Pfenninger (E-mail: pfenninger@bio.uni-frankfurt.de) or Prof. Dr. J. Oehlmann (E-mail: oehlmann@bio.uni-frankfurt.de)

When inquiring or applying for this position, please also reference /Academic Careers Online. /

To obtain more information or to submit your resume you can contact Bernd Schleich as shown below. If you apply for this position, please say you saw it first on www.AcademicCareers.com. Thank you.

Bernd Schleich

E-Mail: bernd.schleich@senckenberg.de <mailto:bernd.schleich@senckenberg.de>

– PD Dr. Markus Pfenninger Abt. Ökologie & Evolution J.W.Goethe-Universität BioCampus Siesmayerstraße D 60054 Frankfurt am Main Germany

Tel.: ++ 49 69 798 24714 Fax : ++ 49 69 798 24910 eMail: Pfenninger@bio.uni-frankfurt.de http:/-/user.uni-frankfurt.de/˜markusp Markus Pfenninger <Pfenninger@bio.uni-frankfurt.de>

## GoetheU ChironomusGeneAdaptation

*Biodiversity and Climate Research Centre, Project Area D "Laboratory Centre"*

Job Title: PhD Position [#D06] Reference Code: Ref. PG D 5.1 [#D06] Job Location: Frankfurt/Main Germany Status: Part-Time/Adjunct/Substitute Job Category: Biology/biotechnology/life sciences Application Closing Date: 8/19/2008

Job Description

* / Biodiversity and Climate Research Centre / *

The Biodiversity and Climate Research Centre has recently been founded by the Senckenbergische Naturforschende Gesellschaft, the Goethe-Universität Frankfurt am Main, and additional partners. It is funded by the Hessian State Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the Centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level. The Project Area D "Laboratory Centre" invites applications for a

*PhD Position – Ref. PG D 5.1 [#D06] BAT II a / 2 *

The applicant will be responsible for the identification of key genes for the ecological adaptation to climate change in the non-biting midge Chironomus riparius. In common garden experiments populations will be exposed to conditions along a climate gradient. Furthermore, genes have to be identified which play a role in the climate-driven niche partitioning of C. riparius and C. piger. These investigations will be conducted in cooperation with Profs. Hankeln and Schmidt (University Mainz).

Job Requirements

The applicant should hold an earned Diploma or Master degree in biology. She or he should already have experiences with modern molecular biological techniques, preferably transcriptome analyses, and should be familiar with experimental approaches in ecology. Very good written and oral English language skills and an interest in joining a multidisciplinary research team are required. Knowledge of German would be an advantage, and at least the willingness to learn basic German is required.

Information and Application Process Instructions

Salary and benefits are according to a public service position in Germany (BAT IIa/2).

The Research Centre advocates gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference.

The contract shall start as soon as possible and will initially be restricted to 2 years with a possible extension being subject to personal performance and availability of funds. The duty station will be Frankfurt am Main, Germany.

Please send your application by mail or e-mail, including a detailed CV, 3 references and a list of publications,

until August 19, 2008 to

Prof. Dr. Dr. h.c. V. Mosbrugger, Scientific Coordinator Biodiversity and Climate Research Centre, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mail to Personal & Service: bernd.schleich@senckenberg.de

For enquiries about the position and the contract conditions please write to Prof. Dr. B. Stribrny (E-mail: bernhard.stribrny@senckenberg.de) and for scientific enquiries to PD Dr. M. Pfenninger (E-mail: pfenninger@bio.uni-frankfurt.de) or Prof. Dr. J. Oehlmann (E-mail: oehlmann@bio.uni-frankfurt.de)

When inquiring or applying for this position, please also reference /Academic Careers Online. /

To obtain more information or to submit your resume you can contact Bernd Schleich as shown below. If you apply for this position, please say you saw it first on www.AcademicCareers.com. Thank you.

Bernd Schleich

E-Mail: bernd.schleich@senckenberg.de <mailto:bernd.schleich@senckenberg.de>

Send your resume for this job...

< http://www.academiccareers.com/cgi-win/jobsite/-$sendresume.exe/ACO/?21007 >

– PD Dr. Markus Pfenninger Abt. Ökologie & Evolution J.W.Goethe-Universität BioCampus Siesmayerstraße D 60054 Frankfurt am Main Germany

Tel.: ++ 49 69 798 24714 Fax : ++ 49 69 798 24910 eMail: Pfenninger@bio.uni-frankfurt.de http:/-/user.uni-frankfurt.de/ ˜ markusp Markus Pfenninger <Pfenninger@bio.uni-frankfurt.de>

## NorthwesternU PlantConservation

Addressing a growing need for expertise in plant science and conservation, Northwestern University and the Chicago Botanic Garden continue to jointly offer a Master's program in Plant Biology and Conservation and now also offer a doctoral degree! The graduate program provides students advanced training in plant ecology, evolution, and biology, and in applied plant conservation theory and methods. For more information, visit

http://www.plantbiology.northwestern.edu or contact Nyree Zerega Director of Graduate Program in Plant Biology and Conservation Northwestern University and the Chicago Botanic Garden n-zerega@northwestern.edu

nzerega@chicagobotanic.org

## OhioStateU PopGenSoybeanAphid

Ph.D. Position–Population Genetics of the Soybean Aphid

A Ph.D. position is open in the insect population genetics lab of Andrew Michel. Research will focus on the population genetic structure and migration of the soybean aphid across North America, genetic differentiation of soybean aphid biotypes and other ongoing projects. The successful candidate will be responsible for field collections, colony maintenance and molecular marker genotyping. Outstanding students in entomology, genetics/genomics, biology or insect evolution are encouraged to apply. A Master's degree in entomology, genetics, evolution or general biology is required. This position includes a yearly stipend of $23,724, including tuition waivers and benefits. This position has an immediate start date.

For further information please contact:

Andrew Michel Assistant Professor Dept. of Entomology Ohio Agricultural Research and Development Center The Ohio State University 1680 Madison Ave. Wooster, OH 44691 Ph: 330-263-3730 michel.70@osu.edu

michel.70@osu.edu michel.70@osu.edu

## StellenboschU CoevolvedPollination

A Master's or Doctoral position is available for a student interested in studying coevolution.

Coevolution - reciprocal evolutionary change in interacting species driven by natural selection - is one of the most important processes organizing the earth's biodiversity: most species survive and reproduce only by using a combination of their own genome and that of at least one other species. The idea of coevolution originated with Darwin's proposal that long-proboscid pollinators and long-tubed nectar plants are engaged in

a race for elongation. The interaction between plants and long-proboscid pollinators continues to be an ideal study system for advancing our understanding of coevolution. Such advances are important for the control of human infectious diseases, for agriculture and biocontrol.

The long-proboscid fly Moegistorhynchus longirostris has the longest proboscis relative to its body length of any know pollinator. It uses it to sip nectar from a guild of about twenty long-tubed nectar plants that grow in Fynbos vegetation along the West Coast of the Cape Region of South Africa, a global biodiversity hotspot. Proboscis and tube length varies two fold among population, and variability in the degree of trait matching suggests a Geographic Mosaic of Coevolution with hotspots and cold spots of reciprocal selection.

The successful applicant will be encouraged to develop a research proposal aimed at testing fundamental aspects of coevolutionary theory. An additional goal is to inform an action plan aimed at conserving the contemporary evolutionary processes. Ideally, the study will have a strong genetic and glasshouse component coupled with selection experiments in the field (Sept-Nov). Genetic analyses can be conducted in our new Plant Molecular Laboratory with co-supervision from Dr. Jaco Le Roux.

Project running expenses are covered and a NRF bursary is available, with priority given to South African students (R 30 000 p.a. for M. Sc., or R 45 000 p.a. for Ph.D.). There are avenues for obtaining supplementary funding, and funding for foreign students.

Requirements: Bachelor's (Honours) or, preferably, Master's degree in biology. Experience in the use and development of molecular markers and/or pollination biology preferred. Good quantitative skills necessary.

For primary consideration, applicants should apply by 15 September 2008. The starting date is flexible. Informal inquiries are welcomed, prior to formal application. To apply, please send the following by email: 1) a one-page letter explaining why you are interested in this position and why you are qualified for it; 2) your University transcripts; 3) your Curriculum Vitae; 4) the names and email addresses of three referees. The successful applicant will be informed by 30 September.

Anton Pauw Department of Botany and Zoology Stellenbosch University Private Bag 1X Matieland 7602 South Africa Tel +27 21 808 3314 Cell +27 83 682 4177 Fax +27 21 808 2405 http://academic.sun.ac.za/-botzoo/pauw/index.htm#cv "Pauw, Anton <apauw@sun.ac.za>" <apauw@sun.ac.za>

## UAdelaide AncientDNA

Developing new methods to retrieve and analyse preserved genetic information for forensics, archaeology and ancient DNA.

Technical Officer Australian Centre for Ancient DNA (ACAD) School of Earth and Environmental Sciences

Job Reference Number: 14105

For an Australian Research Council (ARC) funded project to research and develop revolutionary new methods to extract and characterise DNA from a range of unusual ancient samples including ancient bones and teeth, sunken ship timbers, stone tools, and sediments. The project is an ARC LINKAGE collaboration with the National Geographic Society, Australian Federal Police, and Forensics South Australia. The main aim of the project is to completely re-assess and re-design current approaches to ancient/damaged DNA characterisation from the ground up, and to develop and extend recent new approaches to PCR such as SPEX (Brotherton et al. NAR 2007), and genomic library construction.

We are looking for an experienced and efficient Technical Officer to provide support to the Senior Research Fellow working on this project. Your role will involve molecular biological work with ancient DNA from archaeological and forensic specimens, primarily using PCR, cloning, and sequencing. You will make use of the international quality ACAD facilities, and an extensive collection of >4,000 ancient samples from locations around the world covering the past 200,000 years. The research requires exacting standards of laboratory practice in order to minimise contamination, and work with irreplaceable samples.

You should have: o a PhD or equivalent work experience in general molecular biology o a strong background in nucleic acids research o the ability to work effectively as part of a multi-disciplinary team o experience with computer based analyses of DNA sequences

Salary: (HEO5) $50,070 - $55,874 per annum.

Plus an employer superannuation contribution of 17% applies.

This fixed-term position is available immediately for a period of 2 years in the first instance with a possible extension. Adelaide University is one of the 'Group of

8' leading Universities in Australia, in a cosmopolitan city offering an outstanding quality of life, with excellent food and wine and a low cost of living.

Further information may be obtained from Dr Jeremy Austin jeremy.austin@adelaide.edu.au, Prof. Alan Cooper, alan.cooper@adelaide.edu.au, Dr Wolfgang Haak (wolfgang.haak@adelaide.edu.au), or Dr Kefei Chen (kefei.Chen@adelaide.edu.au).

Deadline: 15 August 2008

Your application must o include your résumé/Curriculum Vitae o address the selection criteria o quote the relevant reference number o include the names, addresses and/or email details of three referees

Email applications to alan.cooper@adelaide.edu.au> or forward in duplicate to:

Maria Lekis School of Earth and Environmental Sciences The University of Adelaide South Australia 5005

–

Prof. Alan Cooper, Federation Fellow

Darling Blg (DP 418), Rm 209b University of Adelaide North Terrace Campus South Australia 5005 Australia

Email: alan.cooper@adelaide.edu.au Ph: 61-8 -8303-5950/3952 Fax: 61-8-8303 4364

http://www.ees.adelaide.edu.au/acad/
alan.cooper@adelaide.edu.au

## UAmsterdam CropPopulationGenetics

Within the ERGO program of the Netherlands Organization for Scientific Research (NWO), we are looking for an enthusiastic

PhD student in crop population genetics (vacancy number 08-1036).

to work on the project

Potential ecosystem effects of future GM crop introductions through establishment of crop/wild hybrids or feral populations.

One aspect of Environmental Risk Assessments (ERA) of transgenic crops involves the introduction of the transgene in natural environments through outcrossing with a wild relative or through the establishment of feral populations. In the current project the likelihood of an expansion of hybrid/feral plants as well as the associated and potentially adverse effects on the ecosystem will be studied. The experimental systems are (i) hybrids between crop and wild lettuce (Lactuca sativa and L. serriola, resp.) as a model for crop/wild hybridisation, and (ii) Brassica napus as a model feral system. We specifically focus on abiotic stress related to salinity and drought.

Tasks The project focuses on experiments using different types of manipulations: changes to the local densities of plants, establishing new populations within and outside the current range, and creating experimental populations in âoasesâ where they are not exposed to the stress of the surrounding environment (no transgenic plants will be introduced to the field). The work involves designing experiments, selecting and creating experimental plots, collecting data, specifically on the impact of the experiment on other species (pollinators, herbivores) and statistical analyses of the results. Results will be published in peer-reviewed journals.

Requirements - Master in biology, with emphasis on population genetics, evolutionary biology or plant physiology - Good training in the planning, execution and statistical analysis of (field) experiments - Ability to work together in a research team - Driving license is recommended

Further information For additional information and project description, please contact: Dr. Danny Hooftman, d.a.p.hooftman@.uva.nl, tel. +31 20 5257817, or Prof. dr. Peter van Tienderen, ph.vantienderen@uva.nl, tel. +31 20 5257896.

Appointment The appointment will be on a temporary basis for a maximum period of four years (18 months plus a further 30 months after a positive evaluation) and should lead to a dissertation (PhD thesis).

An educational plan will be drafted that includes attendance of courses and (international) meetings. PhD students are also expected to assist in teaching undergraduates. The salary is in accordance with the university regulations for academic personnel (Collective Labour Agreement) and will range from 2,000.- (first year) up to a maximum of 2,558.- (last year) gross per month (scale P).

Job application Applications should include a detailed CV including a list of publications, a motivation letter, and the names and contact addresses of two references from which information can be obtained. Please mark "strictly confidential" and quote the vacancy number (08-1036) in the upper left-hand corner of the envelope.

Applications should be sent before August 25th 2008 to:

Universiteit van Amsterdam, Faculty of Science dept. PZ, attn: Drs. S.H.M. Jongerius, Kruislaan 404, 1098 SM Amsterdam, The Netherlands.

Applications can also be e-mailed to: application-science@uva.nl. Please quote the vacancy number (08-1036) in the subject field.

Universiteit van Amsterdam

The Universiteit van Amsterdam (UvA) is a university with an internationally acclaimed profile, located at the heart of the Dutch capital. As well as a world centre for business and research, Amsterdam is a hub of cultural and media activities. The Universiteit van Amsterdam is a member of the League of European Research Universities.

The Faculty of Science at the UvA is one of Europe's foremost institutions of higher education and research in its chosen fields of specialization. It plays an active role in international science networks and collaborates with universities and industry. The Faculty has approximately 2,000 students and 1,500 staff members spread over four departments and ten research institutes. Each institute has its own research programme, a substantial part of which is externally funded by the Netherlands Organization for Scientific Research (NWO), the Dutch government, the EU and various private enterprises.

The Institute of Biodiversity and Ecosystem Dynamics (IBED) is one of the ten research institutes of the Faculty of Science. IBED covers a wide range of subjects, in both fundamental and applied research. Our scientific studies aim at a better understanding of the dynamics of ecosystems at all relevant levels, from genes to climate change, using a truly multidisciplinary approach.

– D.A.P. Hooftman, Ph.D. Institute for Biodiversity and Ecosystem Dynamics, Universiteit van Amsterdam D.A.P.Hooftman@uva.nl

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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

## UBasel EvoDevo EvoltuionaryGenomics

GRADUATE POSITION IN CICHLID EVOLUTIONARY GENOMICS/EVO-DEVO

A PhD position in evo-devo/evolutionary genomics is available in the group of Dr. Walter Salzburger at the University of Basel, Switzerland (http://-www.evolution.unibas.ch/salzburger/). The position is funded by a Starting Grant of the European Research Council (ERC), a new European funding body set up to support excellent investigator-driven research (http://-erc.europa.eu).

The ERC Starting Grant 'INTERGENADAPT' will run for a period of five years. It will focus on the identification of the molecular basis of adaptation, evolutionary innovation and diversification in one of the most exciting model systems for evolutionary research, the adaptive radiations of cichlid fishes in the East African Great Lakes Tanganyika, Malawi and Victoria. These lakes harbor ecologically and morphologically highly diverse species flocks counting hundreds of endemic cichlid species each. We are interested in the genetic and developmental basis of the morphogenesis of sexually and naturally selected traits that might be crucial to the cichlid's evolutionary success.

We are looking for a highly motivated, open-minded, creative and socially skilled young researcher that shares our enthusiasm in the study of evolution. Ideally, the candidate should have some background in evolutionary biology, developmental biology, evo-devo, molecular biology and/or bio-informatics.

The position is for three years, the salary is about CHF 35,000 (per year; after tax). The position is available from October 2008; the starting date is negotiable.

To apply, please send

(1) your CV, (2) a list of your publications, (3) a statement of your research interests, (4) a statement why you would like to join our team, and (5) the names of two persons who can be contacted for a reference letter

to the following email address:

salzburgerlab-dib@unibas.ch

Please also use this email address for informal enquiries.

Deadline for submission is September 17th, 2008.

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Note, that there is also a position open for a post-doctoral fellow.

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ADDITIONAL INFORMATION:

The Salzburger Lab (http://www.evolution.unibas.ch/-salzburger/) is a young, multinational, open-minded, enthusiastic and creative team. We are, at present,

about ten people. Our main model systems are East African cichlid fishes, although we also study the adaptive radiation of Antarctic notothenioid fishes and the diversification of Alpine taxa. We also develop our own software. Core of the Salzburger Lab is an excellently equipped molecular laboratory with an AB 3130xl genetic analyzer, an epMotion pipetting workstation, Veriti gradient PCR machines, research microscopes, etc.

The Salzburger group is based within the evolutionary biology group of the University of Basel's Zoological Institute (http://www.evolution.unibas.ch ). The evolutionary biology group promotes higher education and up-to- date research in organismic and evolutionary biology, thereby complementing existing strengths in life-sciences at the University of Basel. The evolutionary biology group is located in the Vesalianum in the historical part of Basel, in close proximity to other University institutes, the University hospital and the Biozentrum of the University of Basel.

The University of Basel (http://www.unibas.ch/) is Switzerland's oldest University with a strong focus on "Culture" and "Life Sciences". About 9'000 undergraduates and 2'000 postgraduate and doctoral students are enrolled in Basel. The University is regularly ranked among the best 100 Universities worldwide and top-ten in the German speaking countries.

Basel (http://www.basel.ch) is located in northwestern Switzerland on the river Rhine and borders Germany (Baden-Württemberg) and France (Alsace). Basel is an open and international cultural, educational, and economic metropolis and a major centre for the chemical and pharmaceutical industry. It is well connected by air transport (through the EuroAirport Basel), by train (through Swiss, German and French train stations) and by highway. Basel has nearly forty museums and a dozen of theaters and was host city of this years UEFA Euro tournament.

salzburgerlab-dib@unibas.ch salzburgerlab-dib@unibas.ch

## UBergen FishEvolution

A PhD position is available in research group "Evolutionary Fisheries Ecology" (EvoFish) at the Department of Biology, University of Bergen, Norway. The position is for 4 years, with the start preferably before the end of the year. We are a young and dynamic group, applying a broad range of tools (experiments, theory/ modelling, statistical methods) to study fisheries-induced evolution. The new position is flexibly defined, and we welcome applications from candidates keen on applying any of the aforementioned tools, ideally complementing the ongoing work in the group.

For more information on the research group EvoFish, see http://bio.uib.no/evofish/ . For information on how to apply, see https://secure.jobbnorge.no/-visstilling2.aspx?stillid=3D50454&lang=3DEN Mikko Heino

EvoFish - Evolutionary Fisheries Ecology University of Bergen Institute of Marine Research

Department of Biology Population Genetics and Ecology Box 7800, N-5020 Bergen, Norway tel. +47-55584544 http://bio.uib.no/evofish/ fax +47-55584450

mikko.heino@imr.no mikko.heino@imr.no

## UDuesseldorf Linguisitcs and Evolution

We are seeking to fill five positions in an interdisciplinary research project

"Evolution and Classification in the History of Science, Linguistics and Biology"

at the Heinrich-Heine-University Duesseldorf

(funded by the German Federal Ministry of Education and Research (BMBF) as part of the focus "Interaction between natural sciences and the humanities")

1.5 PhD positions in History and Theory of Science / Medicine (1 TV-L 13; 0,5 TV-L 13) 2 PhD positions in Comparative Linguistics / Linguistic typology / Theory of language change (2 * 0.5 TV-L 13) 2 PhD positions in Computational Linguistics / Bioinformatics / Molecular Evolution Genome evolution, language evolution and the evolution of knowledge have much in common. They entail evolving elements - genes, words, ideas - that are mostly inherited in a vertical manner from ancestors to descendants, but sometimes are inherited laterally. The present transdisciplinary project aims to study the evolutionary dynamics of science, languages and genomes using methods from the field of molecular evolution and incorporating network methods. Current applications for phylogenetic reconstruction operate mostly in the realm of bifurcating phylogenetic trees, which are used to model acquisition by inheritance only. However, genes in microbial genomes

can also be acquired laterally, while words can be borrowed between different languages and knowledge can be transferred across disciplinary or cultural boundaries. Phylogenetic trees cannot easily be used to model such lateral transfers, but network approaches can.

The project includes 1) the clarification of evolutionary concepts in the history of science, biology and linguistics, 2) the development of methods for coding and modelling lateral transfer in science, linguistics and biology, and 3) the analysis and characterization of evolution by lateral acquisition in general. The project is an interdisciplinary collaboration at the intersection of history of medicine, linguistics, and biology.

Applicants should have good English communication and writing skills. Basic computing skills and aptitude in interdisciplinary research are required. Payment will be according to German public service pay scale. The positions are funded by the BMBF for a minimum of two years and expected to be filled by the end of 2008, but the positions remain open until filled; reviewing of applications begins immediately.

Applicants should hold (either-or)

A. a doctoral degree in the history of science, medicine or biology (with an emphasis on the development of scientific theories or on network studies) or B. a master's degree or equivalent in Comparative Linguistics (with an emphasis on historical linguistics, preferred Indo-European and Romance languages) or C. a master's degree or equivalent in biology (with emphasis on Computational Linguistics, Bioinformatics, or Molecular Evolution. Basic computing skills in PERL/Matlab/C or other scripting language are required.) Interested candidates should send a CV and contact information of one potential referee as a single PDF file to

A. PD Dr. Heiner Fangerau, history of science (heiner.fangerau@uni-duesseldorf.de ) B. Prof. Dr. Hans Geisler, comparative linguistics (geisler@phil-fak.uni-duesseldorf.de ) C. Dr. Tal Dagan, molecular evolution (tal.dagan@uni-duesseldorf.de).

tal.dagan@uni-duesseldorf.de tal.dagan@uni-duesseldorf.de

## UGottingen EvolutionSymbioses

Ph.D.

The newly formed junior research group "Geomicrobiology and Biosignatures in the Deep Biosphere" in the Courant Research Centre Geobiology at the University of Göttingen invites applications for one Ph.D. position. The position is immediately available pending formal administrative approval.

Topic: Our research group focuses on the microbial ecology and evolution of chemoautotrophic ecosystems, with emphasis on symbioses between animals and chemoautotrophic microbes. Ecosystems sustained by chemoautotrophy are found at deep-sea hydrothermal vents, cold seeps and some sulfide-rich limestone caves. Terrestrial sulfide-rich caves are easier to access than deep-sea habitats and offer an excellent opportunity to study the interplay between geochemistry, microbes and macrofauna in chemoautotrophic ecosystems. Our primary research field site is the actively forming sulfide-rich Frasassi cave complex of central Italy that hosts an ecosystem sustained entirely by chemoautotrophy. We have recently discovered the first example of a terrestrial chemoautotrophic symbiosis between a Frasassi-endemic amphipod and filamentous sulfur-oxidizing bacteria. Future projects will address the potential benefits of the bacterial symbionts to the amphipod host, and examine the evolution of this symbiosis. We also plan to expand our research to other sulfide rich caves, such as Movile cave in Romania and Villa Luz caves in Mexico. For more information, please contact Dr. Sharmishtha Dattagupta (see below).

Requirements: Candidates should have a strong background in Molecular Biology and/ or Geomicrobiology (A Masters is required). Candidates should have fieldwork experience, an interest in cave exploration, and be fluent in English. International applicants are welcome. The University of Göttingen seeks to increase the participation of women in areas in which they are currently underrepresented and therefore explicitly urges women to apply. Disabled persons with equivalent aptitude will be favoured.

Employment: We offer two-year Ph.D. positions with the possibility of extension to three years. Ph.D. salary is approximately 50% of the German TV-L system, level 13.

Environment: Göttingen is a quaint and traditional German university town with an international student-based community. The Courant Research Centre is one of five interdisciplinary research centres (www.uni-goettingen.de/crc) recently established by the University of Göttingen as part of its institutional strategy "Tradition - Innovation - Autonomy". The Centre offers a wide range of state-of-the-art analytical facilities and an excellent environment for interdisciplinary research.

Application: Candidates should upload a curriculum

vita, a statement of research interests and a list of publications (if applicable) via the online form located at www.uni-goettingen.de/positions-exini by August 31, 2008. They should also arrange for two reference letters to be sent directly by email to Dr. Sharmishtha Dattagupta (sdattag@uni-goettingen.de) by the same date. Full contact information can be found within the portal link.

Sharmishtha Dattagupta Georg-August-Universität Göttingen Courant Research Centre Geobiology Goldschmidtstr. 3 37077 Göttingen, Gemany Phone (office): +49 551 39 12910 Mobile: +49 01577 5823206 Email: sdattag@uni-goettingen.de

Sharmishtha Dattagupta <sdattag@uni-goettingen.de>

## UGottingen MetazoanEvolution

The Courant Research Centre Geobiology at the University of Göttingen (Germany) offers:

1 post-doctoral position 1 PhD position

The Courant Research Centre Geobiology is one of five interdisciplinary research centres (www.uni-goettingen.de/crc) recently established by the University of Göttingen as part of its institutional strategy "Tradition - Innovation - Autonomy".

These positions will form part of the independent Junior Research Group "Evolution of the Metazoa" headed by Daniel Jackson.

The main focus of the Courant Research Centre is the development of early life and organic-matter-controlled rock- and mineral-forming processes (Coordinator: Prof. Reitner, Department of Geobiology, www.uni-goettingen.de/crc_c) .

Many details of the molecular events that drove the diversification of the Metazoa during the pre- and early Cambrian remain undiscovered. The relatively synchronous inception and subsequent radiation of body plans during this time are reflected in the fossil record by the ability of disparate taxa to secrete mineralized structures. By examining the way in which extant metazoan taxa biomineralize, we hope to better understand the evolutionary forces that nurtured the diversification of multi-cellular animal life. We are currently focusing on these processes in sponges and molluscs, but plan to expand this comparative dataset.

The positions require individuals with strong molecular biology skills and familiarity with the analysis of large computational datasets such as EST collections and unannotated whole genomes. Lab skills such as cDNA library construction, whole mount in situ hybridization, micro- injection and experience with spawning and rearing marine invertebrates are highly desirable.

Candidates for the post-doctoral position should hold a doctorate in evolution, developmental biology, molecular biology, or a related field. Candidates for the doctoral position should hold an excellent first degree in the same fields. In addition to their academic qualifications, candidates should have excellent communication and team-working skills, be committed to the topic and to working in a dedicated, interdisciplinary research environment. The working language of the group is English, and applicants from abroad are encouraged to apply. The University of Göttingen seeks to increase the participation of women in areas in which they are currently underrepresented and therefore explicitly urges women to apply. Disabled persons with equivalent aptitude will be favoured.

The positions are initially available for two years starting immediately, and can be extended following favorable reviews. Salaries are in accordance with the German state regulated public service salary scale (E 13 TV-L). For informal enquiries please contact djackso@uni-goettingen.de

Applications, in English, should include: a full academic CV, examples of published or unpublished academic work, a 1-2 page summary outlining the candidate's particular qualification for this position. Candidates should also arrange for two reference letters to be sent directly by email to Daniel Jackson (djackso@uni-goettingen.de). Application deadline is 31st August 2008. Please submit your application online under the given link: www.uni-goettingen.de/positions-exini

djackso@gwdg.de

## UKonstanz Speciation Neotropical Cichlids

PhD position in the Molecular Basis of Speciation in Neotropical Cichlids

Evolutionary Biology, Dept. of Biology, University of Konstanz, Germany

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A position is available for a PhD student to work on the molecular basis of speciation with KR Elmer in Axel Meyer's Evolutionary Biology working group, University of Konstanz. This position is funded for the first year by a Young Scholar's award from Univ. Konstanz and funding for future years is anticipated from other sources.

A variety of research topics are available relating to biodiversity and speciation in Nicaraguan cichlids using genetic and ecological approaches. At least one project will involve transcriptomic or genomic methods, facilitated by the up-coming release of four cichlid genomes. The cichlid fish species complex Amphilophus citrinellus offers unparalleled opportunities for evolutionary and ecological research because they are part of a system of young, isolated volcanic crater lakes and have demonstrated rapid ecological speciation in situ (e.g. see Barluenga et al. 2006 Sympatric speciation in Nicaragua crater lake cichlid fish. Nature 439: 719-723). Research will involve the extensive collections currently existing in our laboratory and may include opportunities for field research in Nicaragua.

Start date is flexible but ideally would begin autumn 2008 or January 2009. An aptitude for independent research, an excitement about biology, and some experience with bioinformatics are a must. Experience in laboratory work and/or field work would be a benefit but are not required.

University of Konstanz is one of nine excellent universities in Germany and has a strong focus in biology. The working group of Axel Meyer is a dynamic international laboratory with an impressive record in an array of evolutionary biology research. We have a well-equipped molecular laboratory, extensive fish aquaria facilities, and a genomics and proteomics facility (coming fall 2008). Konstanz is a scenic and historical small city located on the shores of Lake Constance and at the foot of the Swiss Alps.

Interested applicants should have a Bachelors and Master's in biology/ zoology. Under exceptional circumstances (i.e. extensive experience in bioinformatics) the position could be available as a 2-year Master's project. The working language of the lab is English. Please send a letter of interest, CV, and contact information for three references as a single PDF to kathryn.elmer@uni-konstanz.de. Review of applications will begin August 30 and continue until a suitable candidate is found. Please see our lab webpage for more information, current researchers, and publications: http://www.evolutionsbiologie.uni-konstanz.de/ Other student positions are also available in our lab, particularly in the field of Phylogenomics/Evo-Devo. For details, see http://www.evolutionsbiologie.uni-konstanz.de/index.php?section=116 Kathryn Elmer <kathryn.elmer@uni-konstanz.de>

## ULethbridge AvianPopGenet

Population Genetics of North American Forest Birds

A graduate assistantship (M.Sc.) is available in the laboratory of Dr. Theresa Burg at the University of Lethbridge in molecular ecology starting Jan 2009 or May 2009.

I am looking for a highly motivated graduate student to work with me on the study of large-scale population divergence of resident bird species. Projects involve both laboratory and field-based research and the use of high-throughput DNA-based methodologies. Students must be able to work independently and as part of a group. Please visit my website for further details: http://people.uleth.ca/ ~ theresa.burg . Candidates should have a strong undergraduate background in evolution, ecology and genetics. Prior research experience with molecular techniques and mistnetting are desirable but not required. For more information please contact Theresa Burg at theresa.burg@uleth.ca. The application deadline is Sept 15 or until positions are filled.

The Biology Graduate Program at the University of Lethbridge offers research-based M.Sc. and Ph.D. degrees in a collegial setting. Our faculty and students are engaged in a variety of research projects, many in collaboration with partners in government, non-profit agencies, or industry. Our mission is to train students to be leaders in identifying and addressing biological questions at multiple levels of investigation from the molecular to the ecosystem.

Lethbridge is an attractive city of 70,000 situated in Southern Alberta, close to National Parks and Wilderness areas of the Rocky Mountains and Cypress Hills.

Theresa Burg Biological Sciences University of Lethbridge 403 332 5299

"Burg, Theresa" <theresa.burg@uleth.ca>

## ULiverpool MalariaEvolution

A Ph.D. project "Understanding and predicting antimalarial drug effectiveness" is available for three years starting around September/October/November 2008 depending on the funding stream. It will be held in the Liverpool School of Tropical Medicine under the supervision of Dr Ian Hastings and another co-supervisor who will be chosen on the basis of the successful candidate's strengths and interests.

The ultimate goal is to understand how antimalarial drug resistance evolves and spreads through malaria populations. It has become clear that to achieve this we have to model and understand the effect on antimalarial drugs on parasites under a variety of real-life conditions such as people failing to take their whole drug course; this determines the ability of drug-resistant mutations to survive treatment and hence determines their selective advantage.

This would be an ideal opportunity for a numerate person wishing to train in infectious disease epidemiology.

The stipend will be at the British Research Councils standard rate (currently around 15,000 BGP per annum). Applicants should have a first degree in one of the Biological sciences, pharmacology or medicine.

NB>>>>>>Due to the PhD fee structure this position is only appropriate for UK and EU nationals.

**** Project summary ****

Antimalarial drugs are highly potent, killing >99.9% of parasites in each two-day disease cycle. However, a typical infection may contain several billion individual parasites so it takes several cycles to kill all the parasites and achieve a cure. The problem is that the human body eliminates the drugs at a rate given by the drug half-life so that, essentially, the outcome of therapy is a race: the drug must eliminate the parasites before the human body eliminates the drug.

Antimalarial drugs are generally tested on adults with 'mild' (i.e. non life-threatening) malaria and drug dosages are based on data from these trials. However:

People with severe (i.e. life-threatening) malaria, children and pregnant women all have very different drug elimination rates and parasite loads.

* Children's dosages are often based on age bands and their body weights will vary substantially: lighter children will get high concentrations of drugs (with associated concerns over toxicity) and larger children will get low, possibly ineffective, concentrations.

* It is known that people often fail to take the full course of drugs.

We need to know how effective drugs will be under these 'real life' circumstances but it would obviously be unethical to do the appropriate experiments e.g. to give an incomplete drug course to severely ill children and then measure drug failure (and probably death) rates. An obvious way forward is to assemble all the data we have available and use computer models and simulations to try and predict drug effectiveness in a range of scenarios.

Further details are available on http://pcwww.liv.ac.uk/hastings/-Antimalarial_drug_effectiveness_PhD_Project.pdf

Ian Hastings Liverpool School of Tropical Medicine Pembroke Place, Liverpool L3 5QA 0151 705 3183 (office) 0151 705 3147 (group secretary) Email: hastings@liverpool.ac.uk

"Hastings, Ian" <hastings@liverpool.ac.uk>

## UMunich EvolutionaryGenetics

Graduate positions: Evolutionary Genetics

Several PhD student positions in Evolutionary and Population Genetics are available to study natural selection in structured populations. The students will join a collaborative Research Center located at the University of Munich, the University of Freiburg and the University of Vienna. The specific (experimental and theoretical) projects are:

1) Selection on expression variation at the B4galnt2 gene in natural populations of house mice (John Baines, Munich; baines@bio.lmu.de)

2) Selection and the evolution of resistance in structured host populations (Susanne Foitzik and Pleuni Pennings, Munich; foitzik@zi.biologie.uni-muenchen.de; pennings@lmu.de)

3) The signature of selection in structured populations (Joachim Hermisson, Vienna, and Peter Pfaffelhuber, Freiburg; joachim.hermisson@univie.ac.at; peter.pfaffelhuber@stochastik.uni- freiburg.de)

4) Population genetic methods for inferring adaptation in populations with complex demography (Dirk Metzler and Laura Rose, Munich; metzler@cs.uni-frankfurt.de; rose@zi.biologie.uni-muenchen.de)

5) The evolutionary basis of alphaproteobacterial diversity (Jörg Overmann, Munich; j.overmann@LRZ.uni-muenchen.de)

6) Gene expression variation in natural populations of Drosophila (John Parsch, Munich; parsch@zi.biologie.uni-muenchen.de)

7) Selective sweeps in Drosophila melanogaster (Wolfgang Stephan, Munich; stephan@bio.lmu.de)

PhD positions are available in projects 1, 2, 3, 6, and 7.

PhD students will receive a salary according to the German pay scale (E13/2 TV-L). Applicants should have a master's degree or equivalent in biology or a related field. Interested candidates should send a CV, statement of interest, and contact information of two potential referees as a single PDF file to the principal investigators of the individual projects (mentioned above) or to stephan@bio.lmu.de

Applications will be reviewed beginning September 1, 2008. The positions are expected to start on November 1, 2008.

rose@zi.biologie.uni-muenchen.de rose@zi.biologie.uni-muenchen.de

## UOttawa EvolutionaryGenomics

Graduate positions: Evolutionary and Functional Genomics

Multiple PhD and MSc student positions are available in Evolutionary and Functional Genomics at my laboratory in Department of Biology, University of Ottawa, Canada. Minimum support is $18,500/year, but students with grade point average above A will get substantially more. The research areas covered include, but not limited to:

1. Short-term and long-term changes of gene expression and gene regulation in response to environmental hormone-like chemicals. The student will focus on developing statistical methods for microarray data analysis, e.g., Xiong, H., Zhang D., Martyniuk, C.J., Trudeau, V.L. Xia, X.. 2008. Using Generalized Procrustes Analysis (GPA) for normalization of cDNA microarray data. BMC Bioinformatics, 9(2008) 25

2. Molecular evolution and phylogenetics (see relevant publications at http://dambe.bio.uottawa.ca/-publications.asp). You may participate in the devleopment of DAMBE software:

(1) for building guide tree for mulptle alignment: I am currently replace the pair-wise global alignment by a FASTA-like algorithm which appears to work faster and obtain better guide trees. (2) for estimating synonymous and nonsynonymous substitutions: the conventional LPB (or PBL) method is not quite suitable for sliding window analysis because of the stochastic fluctuation of observed window-specific transitions and transversions. I am adding a simultaneous estimation method for all windows with a fixed substitution matrix for correcting multiple hits. (3) strand-biased substitution patterns and their impact on phylognetic reconstruction.

3. Evolutionary genomics of microbial pathogens, e.g., Xia, X. and G. Palidwor. 2005. Genomic Adaptation to Acidic Environment: Evidence from Helicobacter pylori. American Naturalist 166:776-784 4. Comparative genomics (see relevant publications at http:/-/dambe.bio.uottawa.ca/publications.asp)

5. Selection at the initiation, elongation and termination of transcription and translation (see relevant publications at http://dambe.bio.uottawa.ca/-publications.asp)

The positions are available immediately. The application procedures can be found by following the link at http://dambe.bio.uottawa.ca/grad.asp (or contact me directly if you found anything unclear).

Xuhua Xia University of Ottawa http://-dambe.bio.uottawa.ca Best Xuhua

Dr. Xuhua Xia CAREG and Biology Department University of Ottawa 30 Marie Curie, P.O. Box 450, Station A Ottawa, Ontario Canada K1N 6N5 Tel: (613) 562-5800 ext 6886 Fax: (613) 562-5486 URL: http://dambe.bio.uottawa.ca Xuhua.Xia@uottawa.ca Xuhua.Xia@uottawa.ca

## UZurich PlantHybridization

Ph.D. POSITION IN PLANT HYBRIDIZATION

(posted 21 August 2008)

DESCRIPTION: A Ph.D. position is available to join

an on-going study on hybridization between distylous species of primroses (Primula L.). The study focuses on how the variation of floral traits typical of distyly affects the formation and establishment of hybrids. The funded position is available for a minimum of three years, extendable to a fourth year upon satisfactory performance.

DEADLINE: Applications will be reviewed until a suitable candidate is selected. Candidates are invited to send in their application as soon as possible.

REQUIREMENTS: Bachelor's or, preferably, Master's degree in biology. Experience in the use and development of molecular markers and/or pollination biology strongly preferred. Good quantitative skills necessary.

LOCATION: The Ph.D. position is available at the Institute of Systematic Botany of the University of Zurich, Switzerland. Zurich is located on a lake within striking distance from the Alps, easily reachable by public transportation.

HOW TO APPLY: Send in the following documents: 1) a two-page letter explaining why you are interested in this position and why you are qualified for it; 2) your University transcripts; 3) your Curriculum Vitae; 4) the names and email addresses of three people who can comment on your qualifications for the position. If you apply by email, please (a) include the title "Ph.D. position Zurich 08" in the Subject line; (b) send in your application as a single pdf file.

CONTACT: Prof. Elena Conti, University of Zuerich, Institute for Systematic Botany, Zollikerstrasse 107, 8008 Zuerich, SWITZERLAND

Ph: 0041 44 634 8424; Fax: 0041 44 634 84 03

email: ContiElena@access.unizh.ch

Prof. Elena Conti, Ph.D. University of Zuerich, Institute for Systematic Botany Zollikerstrasse 107, 8008 Zuerich, SWITZERLAND Ph: 0041 44 634 8424 Fax: 0041 44 634 84 03 email: ContiElena@access.unizh.ch http://www.systbot.unizh.ch/institut/personen/person.php?l=3Dd&id=3D24 http://www.systbot.unizh.ch/mediterranean/index.htm ContiElena@access.uzh.ch

## YaleU EvoDevo

I am looking forward to recruiting a graduate student next academic year who has an interest in pursuing evo-devo research on butterfly wing pattern evolution. Unanswered questions in the field include the origin and evolution of the eyespot developmental network, the evolution of eyespot number, whether eyespots evolved from the co- option of a network deployed in basal moth lineages, the plastic control of eyespot size, and many others...

My group at Yale uses multidisciplinary approaches that complement each other and provide for an exciting integrative intellectual environment. We tackle the ecological function of butterfly wings patterns as well as their origins and evolutionary diversification. See some ongoing research projects at: http://www.arachnology.org/monteiro/ The Department of Ecology and Evolutionary Biology at Yale is a small, interactive, and very dynamic department, and New Haven is a pleasant town at the human scale, where one can walk to work. Interested applicants should contact me directly, or apply to our graduate program at: http://www.eeb.yale.edu/ Antonia Monteiro Assistant Professor OML 326A Department of Ecology and Evolutionary Biology Yale University P.O. Box 208106, New Haven, CT 06520-8106, USA

tel: +1 (203) 432-3109 fax +1 (203) 432-5176 e-mail: antonia.monteiro@yale.edu web page: http://www.arachnology.org/monteiro/ Antónia Monteiro <antonia.monteiro@yale.edu>

# Jobs

## BrownU ComputationalBiol

Brown University seeks highly qualified candidates for one open rank, tenure-track or tenured faculty position with a preference for assistant professor in the Center for Computational Molecular Biology (CCMB). The growing CCMB currently has four full-time faculty members, two in Computer Science, one in Applied Mathematics and one in Biology. Candidates are sought in all areas of computational biology and bioinformatics, particularly those who specialize in research areas complementary to and synergistic with those of current faculty. The research areas of the current center faculty are: algorithmic methods and statistical inference in genomics, comparative genomics and evolution, gene regulatory networks, regulatory genomics, mathematical models of genetic variation, and cancer genomics.

The successful applicant will be expected to have a demonstrated potential for excellence in research and have outstanding teaching skills. Junior faculty applicants should show the potential to establish an externally funded research program; senior faculty applicants should have established such a program. The appointee will participate in the continuing development of Brown's established undergraduate Computational Biology curriculum and a newer graduate curriculum built upon the foundation of Brown's widely recognized record in teaching innovation and academic excellence. The appointee will have the opportunity to participate in several interdisciplinary projects, including collaborations with faculty in the Center for Genomics and Proteomics, the Center for Cardiovascular Research and other multidisciplinary programs at Brown and affiliated hospitals. The appointment will be in one of the following top-ranked departments: Division of Applied Mathematics, Department of Computer Science, or Division of Biology and Medicine.

Applicants should submit curriculum vitae, representative preprints or reprints, their research plan and teaching plan with emphasis on their interdisciplinary expertise. Additionally, candidates for Assistant Professorship should arrange to have at least three letters of recommendation sent directly to the contact address. Candidates for Associate or Full Professor should provide names and contact information for at least five references, who will be contacted for letters of recommendation by the search committee at an appropriate time. All applications will be treated confidentially. Application review will commence on November 1, 2008 and continue until the position is filled.

All documents should be sent electronically in PDF to: ccmbfs@cs.brown.edu <mailto:ccmbfs@cs.brown.edu>

In addition, please send the cover letter and letters of recommendation to:

Sorin Istrail ˜ Chair, CCMB Search Committee Center for Computational Molecular Biology Brown University, Box 1910

115 Waterman Street Providence, RI 02912

Brown University is an affirmative action/equal opportunity employer.

Women and minorities are encouraged to apply.

For further information, see http://www.brown.edu/-Research/CCMB < http://www.brown.edu/-Research/CCMB/ >

Daniel_Weinreich@brown.edu
Daniel_Weinreich@brown.edu

## CostaRica ConservationBiology ProgramCoordinator

Position: The Organization for Tropical Studies (OTS) is currently seeking applicants for two Faculty Coordinator positions with the Native American and Pacific Islander Research Experiences for Undergraduates (NAPIRE) Program at the Las Cruces Biological Station in Costa Rica. The NAPIRE Program provides research opportunities for 18 students from the colleges and universities that are part of the Louis Stokes Alliances for Minority Participation. Each student works under the close supervision of an individual research mentor. Successful applicants will work closely with each other, as well as with research mentors, the Director of the Undergraduate Programs, and other OTS staff in the design and implementation of the 2009 NAPIRE Program. NAPIRE Coordinators will oversee student recruitment and selection, and will be responsible for on-site supervision and coordination of program activities.

Qualifications:

* Ph.D. or M.Sc. in biology, ecology, conservation biology or a related field. * Professional experience in teaching field biology * Professional experience in supervision of undergraduate field research. * Excellent communication and organizational skills. * Experience in teaching Native American and Pacific Island students a plus * Bilingual (Spanish/English) desirable * Native American and Pacific Island faculty are strongly encouraged to apply

The position is a 9-month contract with an anticipated start date of November 8, 2008, and an anticipated end date of August 8, 2009. The position is based in Costa Rica at the OTS Las Cruces Biological Station from June 8, 2009 through August 3, 2009. The contract is renewable for up to two years, depending on funding and performance.

Application deadline: October 1, 2008

To apply: send résumé or CV with cover letter, statement of teaching philosophy, mentoring philosophy, and research interests, and list of references to the Coordinator of Undergraduate Programs, Organization for Tropical Studies, Box 90630, Durham, NC 27708-0630.

Applications may also be sent electronically to vmendez @ ots.ac.cr

OTS is an equal opportunity employer.

Regards

vivian

M.Sc. Vivian Méndez Álvarez Coordinator Undergraduate Study Abroad Program in Costa Rica Organización para Estudios Tropicales Apartado 676-2050 San Pedro, Costa Rica Tel: (506) 5240607 (ext. 1520) Fax: (506) 5240608 vmendez@ots.ac.cr

Vivian Mendez <vmendez@ots.ac.cr>

## Edinburgh ResAssist Drosophila

— Job: Research assistant, Institute of Evolutionary Biology, Edinburgh —

I am looking for a Research Assistant to work on the evolution of Drosophila viruses

The work will involve maintaining Drosophila stocks and cell culture, with responsibility for routine viral isolation, RNA extraction, RT-PCR and DNA sequencing (training will be provided as required). However, depending on the candidate's interests and skills there will be the opportunity for fieldwork, both in the UK and elsewhere.

An undergraduate degree in an appropriate discipline is required, along with relevant laboratory experience, either through a previously held post or a good undergraduate project. Any experience of insect cell culture, insect virology, or basic molecular biology (PCR/sequencing) would be a strong advantage. For anyone interested in undertaking fieldwork, a driver's license or access to independent means of transport is essential, and some experience of fieldwork outside of the UK would be advantageous.

The role is grade UE06 and attracts an annual salary of GBP 23692 to 27466 per annum for full-time hours (35 hours per week), dependent on age and experience, and is offered for 1 year in the first instance, extendable up to five years.

Informal inquiries should be made to darren.obbard@ed.ac.uk

Formal applications should be made through the University Of Edinburgh jobs website: http://-www.jobs.ed.ac.uk/vacancies/index.cfm?fuseaction=-

vacancies.index (job reference 3009662) http://-www.jobs.ed.ac.uk/vacancies/index.cfm?fuseaction=-vacancies.detail&vacancy_ref=3009662&go=GO —- Further information About Edinburgh —-

Edinburgh http://en.wikipedia.org/wiki/Edinburgh University of Edinburgh http://www.ed.ac.uk/-about/ School of Biological Sciences http://-www.biology.ed.ac.uk Institute of Evolutionary Biology http://www.biology.ed.ac.uk/research/institutes/-evolution/ The School of Biological Sciences (SBS) is located at The King's Buildings campus. It includes about 110 academic staff and independently-funded senior research fellows, around 200 research assistants, most of whom are postdoctoral, 170 technicians and more than 200 PhD students. Research grant expenditure is currently about £17m per year. The School comprises six research-focused Institutes with a strong inter-disciplinary remit: Structural and Molecular Biology, Cell Biology, including the Wellcome Trust Centre for Cell Biology, Stem Cell Research , Immunology and Infection Research, Evolutionary Biology, and Molecular Plant Science. Research of the highest international standard is conducted over a wide range of pure and applied biological science

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Darren Obbard Institute of Evolutionary Biology Ashworth Labs Kings Buildings University of Edinburgh, UK darren.obbard@ed.ac.uk

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

darren.obbard@ed.ac.uk darren.obbard@ed.ac.uk

## FiS-Dresden Palaeozoologist

Position available at the Forschungsinstitut Senckenberg (Senckenberg Research Institute), Museum of Mineralogy and Geology Dresden, pending appropriation of governmental funding:

1 Palaeozoologist (Salary TV-L Ost E 13), beginning 1st January 2009

We are looking for a man or woman with a doctorate and extensive knowledge about the macrofauna throughout the Phanerozoic eon. The appointee is expected to assume professional custodial responsibility for the large collections of the Museum of Mineralogy and Geology Dresden, focused on Upper Palaeozoic to Cretaceous specimens. A prerequisite is the integrative interlinking of palaeozoological research along several lines, including questions regarding palaeoecology, palaeofacies analysis and the palaeozoological environment. Applicants should be receptive to research approaches involving isotope geochemistry. International publication activity and very good command of the English language are essential.

A capacity for teamwork and willingness to collaborate with the geoscientists in various fields as part of the overall arrangement are also required. The raising of third-party funds is expected.

The position will initially be assigned for a term of 5 years.

Senckenberg aims to increase the proportion of women on its staff. Therefore qualified female candidates are particularly encouraged to apply. Assuming that they have the necessary qualifications, seriously disabled candidates (male or female) will be given preference. Written applications, including the customary documentation (in addition also as electronic version on CD), are to be sent by 20 September 2008 to:

Prof. Dr. Dr. h.c. V. Mosbrugger Director Senckenberg Research Institute c/o Dr. Ulf Linnemann Museum für Mineralogie und Geologie (Dresden), Königsbrücker Landstr. 159 D-01109 Dresden, Germany

"Fritz, Uwe - SNSD" <uwe.fritz@snsd.smwk.sachsen.de>

## FiS-Dresden PopulationGeneticist

Position available at the Forschungsinstitut Senckenberg (Senckenberg Research Institute), Museum of Zoology Dresden, pending appropriation of governmental funding:

1 Population Geneticist (Salary TV-L Ost E 13), starting 1st January 2009

We are seeking a graduated researcher (PhD or equivalent) with extensive knowledge of computer-assisted evaluation of population genetic data of natural populations for the Museum of Zoology Dresden. The appointee is expected to have experience of a broad spectrum of approaches to the analysis of evolutionary factors and processes at the population level, and have expertise in the application of relevant computer programs (e.g., Arlequin, DnaSP, Migrate, ms, Pop-

gene, Structure, SAMOVA). An interest in questions related to the interface between phylogeny, phylogeography and population genetics, as well as a background in organismic biology, is also expected, together with capacity for teamwork and willingness to collaborate with biologists in diverse fields at Senckenberg. International publication activity in high quality, peer-reviewed journals and an excellent command of the English language are essential. The raising of third-party funds is expected.

The appointment will initially be made for a term of five years.

As an Equal Opportunity Employer, we positively encourage applications from women, people of minorities, difference races and those with disabilities that will be given preference at equal qualification.

Written as well as electronic applications (CD), including full curriculum vitae and other supporting documentation, are to be sent by 20 September 2008 to

Prof. Dr. Dr. h.c. V. Mosbrugger Director Research Institute Senckenberg c/o PD Dr. Uwe Fritz Museum of Zoology (Museum für Tierkunde) Königsbrücker Landstr. 159 D-01109 Dresden, Germany

"Fritz, Uwe - SNSD" <uwe.fritz@snsd.smwk.sachsen.de>

## FloridaStateU IntegratingGenotypePhenotype

The Department of Biological Science invites applications for tenure-track faculty positions at any rank in our cluster hiring initiative Integrating Genotype and Phenotype. We are seeking faculty with interests complementary to those already hired into the cluster. For more information see http://www.bio.fsu.edu/-genphensearch/ .

Evolutionary Genetics: Researchers using experimental, computational, or theoretical approaches to study the genotype-phenotype map, including, but not limited to, evolution of development, epigenetic systems, genetic regulatory networks, comparative genomics, or quantitative genetics.

Epigenetics: Researchers investigating fundamental aspects of chromatin or RNAVmediated regulation of phenotypic variation, epigenetic mechanisms in development and evolution, chromosome structure and dynamics and those using genomics or computational approaches to study chromatin landscapes or regulatory networks.

Please submit one electronic application (PDF files preferred) consisting of a cover letter, curriculum vitae, statements of research and teaching interests, and have four letters of reference sent to genphensearch@bio.fsu.edu. Review of applications will begin September 15, 2008, but will continue until the positions are filled. FSU is an AA/EO employer. Applications from minority and female candidates are especially encouraged.

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Dr. Kimberly Hughes

Mailing Address: Department of Biological Science Florida State University 319 Stadium Drive Tallahassee, Florida 32306-4295

Ph: 850-645-8553 FAX: 850-645-8447 Office: 4062 King Life Sciences Building http://-www.bio.fsu.edu/faculty-hughes.php Kimberly Hughes <kahughes@bio.fsu.edu>

## HarvardU DiseaseEvolutionEpidemiology

Assistant or Associate Professor of Infectious Disease Evolution and Epidemiology

The Department of Epidemiology at the Harvard School of Public Health (HSPH) seeks candidates for the position of assistant or associate professor of infectious disease evolution and epidemiology. This is a tenure-ladder position, with the academic rank to be determined in accordance with the successful candidates experience and productivity. The successful candidate will play a central role in the departments program of teaching and research.

Candidates are sought with expertise in one or more of the following areas: infectious disease field epidemiology in developing countries, especially sub-Saharan Africa; biological aspects of infectious disease evolution and epidemiology; population biology and population genetics of infectious agents; and theoretical and empirical studies of infectious disease transmission dynamics. Applications from individuals studying malaria or other major infectious diseases not currently under study in the department are especially encouraged, but applica-

tions from excellent researchers in any area of infectious disease epidemiology are welcomed. The successful candidate will be expected to develop an independent research program and to participate in collaborative research activities within the department. The successful candidate will participate in the Interdisciplinary Program in the Epidemiology of Infectious Diseases and will be responsible for teaching and for student supervision, which will encompass the direction of doctoral students in dissertation research and student advising at the masters and doctoral levels.

The successful applicant will hold a doctoral degree in epidemiology, ecology, mathematical biology, or another relevant area of biology or public health, or will have a medical degree and formal training in epidemiology.

Please send a letter of application, including a statement of current and future research interests, curriculum vitae, sample publications, and the names of four referees to the following address. Applicants should ask their four referees to write independently to this address.

Chair, Search Committee for Asst/Assoc Professor of Infectious Disease Epidemiology c/o Rebecca Cantor Department of Epidemiology Harvard School of Public Health 677 Huntington Avenue Boston, MA 02115

Harvard University is committed to increasing representation of women and minority members among its faculty and particularly encourages applications from such candidates.

Rebecca Cantor <RCANTOR@hsph.harvard.edu>

## HarvardU LabServices

The FAS Center for System Biology, located on the Cambridge Campus of Harvard University, is seeking a Lab Services Team Leader (Requisition Number 34658). The duties and the responsibilities of the position are as follows:

Leads the on site management of daily operation of the glass washing, autoclave, media prep facility in the Northwest Building. Coordinates service calls for the dishwashers and autoclaves. Ensures that all staff using the facility have received the proper training in the use of the equipment. Performs a variety of moderately complex support duties for the FAS Center for Systems Biology. Responsible for: preparation of a wide variety of stock solutions and media; washing and drying laboratory glassware and small laboratory implements; sterilizing glassware, plastic ware, and solutions as needed; organizing and maintaining laboratory supplies, including distribution and some ordering. Management of the media support financial operations including ordering of raw materials, calculation of media costs and providing monthly billing information for the media used by the research groups. Responsible for all hazardous materials shipments for the center, shipping packages containing diagnostic samples, genetically modified organisms, and dry ice. Appropriate record-keeping to ensure compliance with federal guidelines. Responsible for weekly inspections of the center's hazardous waste satellite accumulation areas (SAAs).

The basic qualifications include a high school diploma and three years related laboratory experience. Additionally, the successful candidate will have superior organizational skills, learn rapidly, take initiative, pay attention to detail, and have a service-oriented attitude. Experience working in an academic environment would be helpful.

Interested parties can apply online through the Harvard Jobs Web Site: http://jobs.harvard.edu/jobs/-summ_req?in_post_id=3D38569 .

Sarah Lyn Elwell Assistant Director of Operations Department of Molecular and Cellular Biology FAS Center for Systems Biology Harvard University | Bauer Laboratory 7 Divinity Ave, Cambridge, MA 02138 Office (617) 496-5649 | Fax (617) 495-2196

selwell@cgr.harvard.edu <mailto:selwell@cgr.harvard.edu>

## LundU EvolutionaryMolecularEcol

Ref no: 1586

ASSOCIATE SENIOR LECTURER IN ANIMAL ECOLOGY, with an emphasis on evolutionary molecular ecology or animal migration ecology At the section of Animal Ecology, Department of Ecology, Lund University.

N.B. Application no later than September 10 2008.

For more information see:

http://www.science.lu.se/the-faculty/vacant-positions
Document to download with application instructions:

http://www.science.lu.se/upload/LUPDF/natvet/-

Utlysningar/080910_1586E.pdf Erik Svensson <Erik.Svensson@zooekol.lu.se>

## Muenster PlantEvolution

The University of Münster, School of Biological Sciences invites applications for a

Professor of Botany - Evolution and Biodiversity of Plants

(W2 salary scale, starting date: April 2009)

The University of Münster seeks to appoint an outstanding botanist to fill a Professorship in the School of Biological Sciences. Candidates should have an excellent track record of research in the evolution and biodiversity of plants. The successful candidate's expertise will complement that of the other professors in the recently established Institute for Evolution and Biodiversity (http://www.uni-muenster.de/ Evolution/) and will broaden the corresponding research focus. The responsibilities of the professorship include the management of the university's botanical garden (www.uni-muenster.de/ BotanischerGarten/), and teaching at both the BSc and MSc levels.

Applicants must hold a doctorate and have a postdoctoral track record of independent research and teaching (German Habilitation, Juniorprofessor or equivalent scientific experience at home and abroad). International applicants are encouraged to apply but will be expected to acquire sufficient language proficiency to teach in German within 2 years after taking up the position. In addition, the candidate will contribute to ongoing and planned research initiatives in the University of Münster, in particular in collaboration with other researchers working on processes of adaptive evolution, e.g. stress and adaptation.

The position comes with substantial funding, including an annual budget and core dedicated funds for scientific postdoctoral and technical posts.

The University of Münster seeks to increase the proportion of female staff members in the faculty and therefore strongly encourages interested female candidates to apply. In addition, preference will be given to qualified disabled applicants.

Applicants should send their CV with details of grants received, copies of transcripts and degree certificates, and a research plan by 30th Sept. 2008 as a hard copy and in electronic form (pdf) to the Dean of the School of Biological Sciences, University Münster, Hindenburgplatz 55, 48143 Münster, Germany; dekanat.bio@uni-muenster.de

The legally binding German-language version of this announcement is published in "DIE ZEIT" from 24th July 2008.

Prof. Dr. Joachim Kurtz

University of Muenster Institute for Evolution and Biodiversity, Animal Evolutionary Ecology Group Hueffer-str. 1, D-48149 Muenster, Germany Phone: + 49 251 83 24661 Fax: + 49 251 83 24668 joachim.kurtz@uni-muenster.de http://www.uni-muenster.de/Evolution/- joachim.kurtz@uni-muenster.de joachim.kurtz@uni-muenster.de

## NewMexicoStateU DepartmentHead

BIOLOGY DEPARTMENT HEAD – NEW MEXICO STATE UNIVERSITY

The Biology Department at New Mexico State University seeks applicants for a 12-month tenured appointment as professor and department head. Candidates must have a Ph.D. in a biological science. Preferred qualifications include an outstanding record of internationally recognized, externally funded biological research; an excellent record of undergraduate and graduate teaching and advising; and demonstrated leadership and administrative skills. Responsibilities will include long-term departmental planning and development in teaching, research, and service; day-to-day management of the department including faculty, staff, students, and departmental resources; representing the department to the administration and public; and contributing to the department's teaching. Strong candidates will be able to continue a productive research program. Send a signed application letter; a current curriculum vitae; a summary of leadership accomplishments; a statement of teaching, research, and leadership philosophy and expertise; and contact information for at least five references. Individuals selected for interview must submit transcripts from their highest degree-granting institution at the time of interview. Application materials should be sent to: Department Head Search, P.O. Box 30001, MSC 3AF, New Mexico State University, Las Cruces, NM 88003. Application review will begin 30 August 2008 and continue until the position is filled. For further departmental information see http://biology-

web.nmsu.edu. For further information on this position (Req. #2008005674) see http://www.nmsu.edu/~personel/postings/faculty/16314666.html. NMSU IS AN EEO/AA EMPLOYER. Offer of employment is contingent upon verification of individual's eligibility for employment in the United States and upon completion of applicable background review.

brook@biology.nmsu.edu

## NorthCarolinaStateU PestEvolution

North Carolina State University - Assistant Professor -

Molecular-Genetic Manipulation and Evolution of Pest species.

POSITION: Assistant Professor: 85% Research, 15% Teaching. Tenure track position. Home department will be Entomology, Genetics, or Zoology depending on academic background and research concentration.

SALARY: Twelve month university salary commensurate with training and experience.

QUALIFICATIONS: Ph.D. in Molecular Biology or related field. Experience with transgenic methods for genetic manipulation of arthropods and/or mammals. Skills in genomics and bioinformatics. Must have excellent academic record for stage in career.

RESPONSIBILITIES: This position is designed to be an integral part of a new interdisciplinary NCSU program in Genetic Pest Management. The incumbent will be expected to collaborate with other molecular biologists, ecologist, and pest management specialists in developing genetic strategies for control of agricultural pests, and vectors of human and animal diseases. The major research effort in this position must be focused on developing transgenic strains that could be used in the future to decrease pest severity and/or disease incidence. Work on model organisms can constitute a portion of the research program. Excellent extramural grant support and high quality research publications are expected. The individual in this position will develop graduate courses in her/his areas of expertise and will also co-teach courses in NCSU's interdisciplinary graduate concentration in Genetic Pest Management ( refer to the following URL —-http://www.ncsu.edu/project/gpm/) .

APPLICATIONS: Applications will be accepted until September 15, 2008, or until a suitable candidate is selected. Applicants must apply online. See http://jobs.ncsu.edu for instructions and required documentation. Proper documentation of identity and employability will be required before the hiring process can be finalized.

AA/EOE. ADA Accommodations: please call 919-515-3148. NC State welcomes all persons without regard to sexual orientation.

## NorthCarolinaStateU PestEvolution 2

North Carolina State University - Associate/Full Professor -

Molecular-Genetic Manipulation and Evolution of Pest species.

POSITION: Associate or Full Professor: 85% Research, 15% Teaching. Home department will be Entomology, Genetics, or Zoology depending on academic background and research concentration.

SALARY: Twelve month university salary commensurate with training and experience.

QUALIFICATIONS: Ph.D. in Molecular Biology or related field. Experience with transgenic methods for genetic manipulation of arthropods and/or mammals. Skills in genomics and bioinformatics. Must have excellent academic record for stage in career and proven leadership record.

RESPONSIBILITIES: This position is designed to be an integral part of a new interdisciplinary NCSU program in Genetic Pest Management. The incumbent will provide leadership to the program in the area of molecular biology. She or he will be expected to collaborate with other molecular biologists, ecologist, and pest management specialists in developing genetic strategies for control of agricultural pests, and vectors of human and animal diseases. The major research effort in this position must be focused on developing transgenic strains that could be used in the future to decrease pest severity and/or disease incidence. Work on model organisms can constitute a portion of the research program. Excellent extramural grant support and high quality research publications are expected. The individual in this position will develop graduate courses in his/her areas of expertise and will also co-teach courses in NCSU's interdisciplinary graduate concentration in Genetic Pest Management ( refer to the following URL

—-http://www.ncsu.edu/project/gpm/).

APPLICATIONS: Applications will be accepted until September 15, 2008, or until a suitable candidate is selected. Applicants must apply online. See http://-jobs.ncsu.edu for instructions and required documentation. Proper documentation of identity and employability will be required before the hiring process can be finalized.

AA/EOE. ADA Accommodations: please call 919-515-3148. NC State welcomes all persons without regard to sexual orientation.

## Pennsylvania ResTech

Research Technician Position The Stroud Water Research Center, Fish Molecular Ecology Group is searching for a Research Technician. The primary duties of this position are: 1) to maintain day to day operations of the new Fish Molecular Ecology lab and 2) perform sample analysis for ongoing and proposed studies in areas of fish physiology, population genetics, and fish monitoring surveys. The first duty includes purchasing supplies and organizing the new Fish Molecular Ecology lab. This duty may also include coordinating seasonal interns and volunteers. The second duty includes sample analysis using established protocols to investigate questions in fish physiology and population genetics, and assisting or leading fish surveys. A currently funded project will use enzymatic assays to detect levels of cortisol, glucose and triglycerides in whole fish homogenates.

Requirements A Bachelors degree in fisheries, ecology, biology, or related field and three years of experience, and good written and oral communication and organizational skills are required. A Masters degree in fisheries or related field may be substituted for two of the three years of experience. Experience in the following is desired: 1) population or quantitative genetics, 2) fish physiology, 3) fish field surveys and knowledge of East Coast fresh water and diadromous fish species, 4) population dynamics, 5) fish culture, 6) other areas of fish ecology.

Salary commensurate with experience. The appointment is for two years and may be extended.

How to Apply To apply for this position mail or email a cover letter describing your qualifications, CV and three references to Willy Eldridge (weldridge@stroudcenter.org) and indicate Research Technician Position in the subject heading. Applications will be accepted through September 12, 2008. Please contact Dr. Eldridge if you have questions.

About Stroud Water Research Center The Stroud Water Research Center seeks to advance the global knowledge of fresh water streams, rivers and lakes through research, education and public outreach, and to promote stewardship of fresh water among businesses, landowners, policy makers and individuals, around the world. The SWRC is an independent, 501(c)(3) not-for-profit organization. More information on the SWRC is available at http://www.stroudcenter.org .

William Eldridge, PhD Assitant Research Scientist Fish Molecular Ecology Group Stroud Water Research Center 970 Spencer Rd. Avondale, PA 19311 610-268-2153x272

weldridge@stroudcenter.org

weldridge@stroudcenter.org

## Portugal 7 CIBIO ResearchContracts

CIBIO is a young and highly dynamic Research Centre located close to Porto, in the north of Portugal, which aims to be an international Centre of Excellence in the fields of Biodiversity and Evolution, offering great opportunities for multidisciplinary research. The Centre occupies recently-built facilities, and now has approximately 55 researchers holding a PhD degree and more than 50 MSc and PhD students, as well as people from many different countries. The working atmosphere is vibrant and enthusiastic, and the CIBIO is regularly visited by many scientists from abroad. The Centre has fully equipped molecular laboratories (multiple PCR rooms, automated sequencers, real-time PCR machines, etc), as well as technicians, and the necessary equipment for fieldwork. In 2007, we were able to get 7 research positions, and successful research scientists came from places as different as Colorado, Alaska, Utah and Montpellier, among others, to work in molecular phylogenetics, biodiversity and conservation, theoretical population genetics and plant evolution. For 2008, we are now advertising seven 5-years full research contracts (www.eracareers.pt), and expect to recruit enthusiastic and highly motivated researchers in the areas indicated below. The positions are expected to start by the end of 2007.

1. Genetics of host-parasite interactions

A 5-year research position, renewed yearly, is available at CIBIO (http://cibio.up.pt), Portugal, in the area of genetics of host-parasite interactions. Although the exact field of research is open, the researcher is likely to work on the study of genetic variation at host candidate genes that confer resistance against diseases, possibly using the European rabbit as a model species, because these are prime candidates for undergoing adaptive evolutionary change. It would be desirable if the candidate had previous experience working with immunogenetic markers (namely MHC, immunoglobulin genes, cytokine and chemokine receptors), with particular focus on the molecular evolution of such genes as well as detection of natural selection and recombination events. The candidate must have a PhD and a minimum of 3 years postdoctoral experience. A sound knowledge of molecular evolution will be reflected in the candidate?s Curriculum Vitae, that evidences a significant publication record in SCI journals for the above-mentioned topics. Experience is expected in the supervision of postgraduate students (both MSc and PhD theses) and on the preparation, development and coordination of scientific projects. The candidate is expected to establish solid international collaborations, and be able to attract national and international funding. The candidate should also be a good communicator (speaking and writing fluent English) and may participate in teaching at MSc and PhD levels. Candidates will be assessed initially on their CV, followed by a job interview. Salary corresponds to a gross annual income of 43000 euros (before taxes).

2. Sexual selection and mating systems

A 5-year research position, renewed yearly, is available at CIBIO (http://cibio.up.pt), Portugal, in the area of behavioural ecology and evolution. Applicants should have a PhD Degree in Biology and a minimum of 3 years of research experience at post-doc level, preferably in the fields of ecology and animal behaviour. The researcher is expected to integrate a Behavioural Ecology & Evolution research group and will study animal behaviour from a multidisciplinary perspective, combining experimental analysis of behaviour with ecological and evolutionary work. Among the main research topics to be covered, special attention will be given to the evolution of mating systems, sexual selection and other reproduction related topics. Given the ongoing environmental alterations, a clear focus will be devoted to the analysis of some of the above-mentioned subjects in populations that inhabit the extremes of a species geographical distribution. As such, the candidate is expected to have experience in studying animal behaviour, both in the laboratory as well as in the field, and show solid knowledge in experimental design and biostatistics. Since some of the model organisms expected to be used are mainly marine, a diver?s certificate may be considered useful. Additional key requirements involve excellence in research, translated into a significant publication record in SCI journals on the above stated topics, proven ability to build up independent research initiatives, such as established involvement in the development, preparation and coordination of research projects, PhD student supervising experience and a clear vision on national and international research priorities. A history of conference attendance

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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

## Portugal 7more CCHAR

Several researcher positions now open to develop new research lines at CCMAR, Portugal, funded by the Portuguese Science Foundation (FCT, Portugal): http://alfa.fct.mctes.pt/apoios/contratacaodoutorados/ edital2008.phtml.pt

The center of Marine Sciences (CCMAR) is an independent research centre located in the University of the Algarve, Portugal, dedicated to research in areas related to Marine Sciences, including Ecology, Evolutionary Biology, Biotechnology, Biodiversity and Management of Aquatic Ecosystems. CCMAR, together with the Centre of Marine and Environmental Research of the University of Porto (CIIMAR), constitute the Associate Laboratory, CIMAR, created in March 2002. As an Associate Laboratory, CIMAR is recognized as a centre of excellence in Marine Sciences, receiving special funding directly from the Ministry of Science.

These 7 specific positions are now open, and in addition independent researchers may apply in any fields if they meet the criteria listed below. These are initial contracts for 5 years (possibility of unlimited renewal). Gross annual income: 43000 euros.

Metagenomics http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId990 http://tiny.cc/l3cuE Environmental Genomics http://www.eracareers.pt/opportunities/index.aspx?task=-

global&jobId027 http://tiny.cc/wXmZm Bioeconomics http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId049 http://tiny.cc/3cUB4 Biofuels http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId065 http://tiny.cc/rGr2g Chemical Ecology http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId072 http://tiny.cc/gfcN3 Algal Blooms http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId071 http://tiny.cc/4Ga8D Gelatinous zooplankton http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId037 http://tiny.cc/w5TIs Besides these specific topics, in any other research themes related to marine sciences, scientists that meet the following criteria, can apply for independent researcher positions :

- must have finished the PhD at least 3 years ago. (in well justified cases of exceptional candidates this may not be necessary)

- must have published at least 1.5 international indexed papers per year, since the year when the PhD was started.

- 20 % of all the papers must be published in the top 10 best ranked journals (counting the best rank of the journal, in all the listed scientific areas of the journals)

The candidates should be willing to develop a new research line, supervise students and postdoctoral researchers, and obtain independent funding for their research.

In order to verify if you would be eligible for an independent research line application, please send (ASAP, no later than September 8, 2008) an e-mail to ccmar@ualg.pt, describing how you expect to develop your new research line in CCMAR, send your CV; and e-mail contacts of at least 3 referees. Appointment of successful candidates is dependent on final approval by FCT.

Final (FCT) deadline for applications: September 30, 2008.

eserrao@ualg.pt

## Portugal Borneo ConsGenetics Tech

***** Technician job in conservation genetics: habitat fragmentation and large mammals of Borneo

*****

The Population and Conservation Genetics group (http://www.igc.gulbenkian.pt/research/unit/88) is looking for a technician to work on the impact of fragmentation on large mammals from Borneo. The project will involve both lab, field and simulation work in collaboration with L. Chikhi (in Portugal) and B. Goossens (in Malaysia).

The candidate is expected to work in close collaboration with a post-doctoral researcher who will be hired on the same project. Since the post-doc and technician are expected to be complementary, we are open regarding the profile that the technician should have. S/he could thus be a biologist with a strong interest for modelling, a biologist working in the laboratory or a theoretician/computer scientist with an equally strong interest in biological problems, and software development. Excellence and adaptability are the main selection criteria.

The Month Stipend follows the regulations of the FCT Scientific Fellowships in Portugal (745.00/month) and will initially be for 24 months.

The post-doc will be based at the Instituto Gulbenkian de Ciencia (IGC, http://www.igc.gulbenkian.pt/) which is a leading Research Institute in Portugal and in Europe. Researchers at the IGC work on a wide range of subjects from epidemiology, to genetics, evolutionary biology, bioinformatics and theoretical immunology. The IGC is located in Oeiras, a small sea-side town 20 min. by train from downtown Lisbon, along the Tagus. It is only 10-15 min. walking distance from the beaches and the quality of life is excellent. The IGC provides excellent research conditions and English is the communication language among and within groups. Several other research institutions are located near-by addressing both fundamental and applied questions in biomedical sciences using interdisciplinary approaches.

Applications in PDF format will be accepted by email only (to chikhi at igc.gulbenkian.pt) until September 15th, 2008, and will include: -a short CV -a motivation letter -two recommendation letters (sent independently by referees) or contacts of two referees.

– ##### Lounès Chikhi Chargé de Recherche CNRS UMR CNRS Evolution et Diversité Biologique, Toulouse chikhi@cict.fr

—– NOUVELLE ADRESSE (01/10/2007 AU 30/09/2008): —– Population and Conservation Genetics Group Instituto Gulbenkian de Ciência Rua da Quinta Grande, 6 P-2780-156 Oeiras, Portugal Tel: +351 21 446 46 71 Fax: +351 21 440 79 70 chikhi@igc.gulbenkian.pt #####

chikhi@cict.fr chikhi@cict.fr

## SmithCollege PlantSystematist

PLANT ECOLOGIST/SYSTEMATIST

The Smith College Department of Biological Sciences invites applications for a full-time, tenure-track Assistant Professorship in terrestrial plant ecology/systematics beginning July 1, 2009. A commitment to undergraduate education and a strong research program including field research opportunities for undergraduates are essential. Teaching responsibilities will include courses in plant ecology and plant diversity/systematics (each with a field component), and participation in the department's core course on biodiversity, ecology and conservation. A Ph.D. is required; teaching and/or postdoctoral experience is preferred. Smith College is a leader in education of women and has a vibrant Biological Sciences Department. Exceptional resources in the plant sciences include a botanic garden, greenhouse, herbarium, and field station. State-of-the-art facilities include a GIS lab and centers for molecular genetics, biochemistry, and microscopy. Programs in Environmental Science and Policy and Landscape Studies facilitate interdisciplinary collaboration. The Five College Consortium, comprised of Smith, Amherst, Mount Holyoke, and Hampshire Colleges and the University of Massachusetts, provides a rich intellectual and cultural life for faculty and students, as well as collegial opportunities for teaching and research.

A curriculum vitae, statements of teaching philosophy and research interests, and three letters of recommendation should be sent by October 31, 2008 to: Plant Ecology Search Committee, Dept. of Biological Sciences, Clark Science Center, Smith College, Northampton, MA 01063. Smith College is an equal opportunity employer committed to excellence through diversity.

In addition, please email me if I can answer any questions about this position. Laura Katz – lkatz@smith.edu

lkatz@smith.edu lkatz@smith.edu

## TrinityU EvolutionaryBiol

from the ad to appear in Science:

The Department of Biology is seeking two Assistant Professors to begin appointments in August 2009. This is a search for one animal behaviorist and one evolutionary biologist. Applications will be accepted from qualified candidates across the full range of these disciplines, and the Department especially encourages applications from individuals who use invertebrate model systems. We seek to hire two candidates who will create exciting synergies within the Department and who will participate in our active undergraduate research program. The Department is well equipped, and start-up funds are available to meet the individual needs of new faculty.

Candidates are expected to (1) possess a Ph.D. Degree, preferably with postdoctoral research experience, (2) teach an upper division course in their area of expertise, (3) contribute to the introductory and/or non-majors curriculum, (4) be involved in academic advising, and (5) develop a research program involving significant undergraduate participation. Applicants should send curriculum vitae, statement of teaching philosophy, summary of research interests, and three letters of reference to Prof. David Ribble, Chair of Search Committee, Department of Biology, Trinity University, One Trinity Place, San Antonio, TX 78212. Digital applications and references are welcome at dribble@trinity.edu. Review of applications will begin 10 October 2008. Women and minority candidates are strongly encouraged to apply. Trinity University is an Equal Opportunity Employer.

In addition, I can answer any questions about these positions.

cheers -Kevin Livingstone

Department of Biology One Trinity Place San Antonio, TX 78212 (210) 999-7236 klivings@trinity.edu

Kevin.Livingstone@Trinity.edu
Kevin.Livingstone@Trinity.edu

## UKansas ResAssist DrosophilaGenomics

Research Assistant, University of Kansas

Quantitative Genetics and Genomics in Drosophila

An NIH-funded Research Assistant position is available in Stuart Macdonald's lab in the Department of Molecular Biosciences at the University of Kansas. The

Macdonald lab explores the genetic basis of complex phenotypic variation within and between species using Drosophila as a model system (web.ku.edu/sjmac/). We seek an enthusiastic individual to supervise and carry out large-scale quantitative genetics projects and to oversee various lab activities. Most of the duties will be related to the care, maintenance, and use of a large number of Drosophila strains. The successful candidate should be motivated, organized and careful, and have excellent oral and written communication skills. Salary will be commensurate with experience and will include benefits.

Job Responsibilities:

Generate, maintain and use Drosophila strains: Our NIH-funded project seeks to create a large panel of Recombinant Inbred Lines by inbreeding. Once the lines are constructed we will use them to carry out a series of large quantitative genetics experiments. The Research Assistant will be responsible for carrying out much of the line creation and maintenance, coordinating with undergraduate assistants, a postdoctoral research fellow, and the PI.

Test the strains for contamination: The Research Assistant will periodically test the strains via PCR/genotyping assays.

Keep accurate and detailed records: These duties include maintaining an up-to-date digital record for each strain, allowing us to track progress of the panel.

Routine lab management: The Research Assistant will be responsible for ordering all supplies and reagents used in fly maintenance.

Qualifications:

Required qualifications are a Bachelors degree in biology or a related field, demonstrable experience conducting research in a (broadly- defined) genetics or molecular biology laboratory, and strong written communication skills as evidenced by the application materials. Preference will be given to those candidates with significant laboratory experience that includes troubleshooting and optimizing protocols, those who have previously worked with Drosophila, and those with prior experience managing large scientific projects.

The University of Kansas (www.ku.edu) has an active academic community in the life sciences, and the Macdonald lab is affiliated with the Department of Molecular Biosciences (molecularbiosciences.ku.edu), and works closely will members of the Department of Ecology and Evolutionary Biology (www2.ku.edu/~eeb). The range and number of research groups presents many opportunities for fostering academic and social interactions. The University of Kansas is in the city of Lawrence (www.visitlawrence.com, www.ci.lawrence.ks.us, www.lawrence.com, en.wikipedia.org/wiki/Lawrence,_Kansas) situated 45 minutes West of Kansas City.

Review of applications will begin September 8, 2008 and continue until the position is filled. Informal inquires about the position are welcome and can be directed to Stuart Macdonald (sjmac@ku.edu). To apply, complete an online application at https://jobs.ku.edu (position number 00206282). Attach a cover letter (describing your interest in the position and any relevant expertise), a full CV, and complete contact information for 3 referees. EO/AA Employer.

Dr. Stuart J. Macdonald Department of Molecular Biosciences 1030 Haworth Hall 1200 Sunnyside Avenue University of Kansas Lawrence KS 66045

tel: 785-864-5362 fax: 785-864-5321 email: sjmac@ku.edu web: http://web.ku.edu/sjmac/ sjmac@ku.edu sjmac@ku.edu

## UMexico EvolutionaryBiol

POSITION AVAILABLE FOR AN ASSOCIATE OR FULL PROFESSOR, DEPENDING ON QUALIFICATIONS, TO WORK AT THE INSTITUTE OF ECOLOGY, NATIONAL AUTONOMOUS UNIVERSITY OF MEXICO (UNAM), MEXICO CITY. STARTING DATE: AS SOON AS POSSIBLE

Minimum requirements: PhD and postdoctoral experience of 1 year. Publications in international journals of relatively high impact. Experience in ecological research with an evolutionary emphasis.

Acceptable areas of interest: evolutionary epidemiology, molecular evolution, comparative methods, demography/ life histories OR other areas of evolutionary ecology.

Language: Should speak Spanish or acquire sufficient competence to teach in Spanish within two years of starting work. Able and willing to collaborate with other researchers, particularly within the Department of Evolutionary Ecology. Interested in participating in applied projects related to national ecological problems. Teaching experience and willingness to teach. Experience seeking funding for research.

Please send your Curriculum Vitae to: Dra. Ella

Vazquez, Secretario Académico, Instituto de Ecología, UNAM, A.P. 70-275, 04510 D.F., México

Hugh Drummond Instituto de Ecología Universidad Nacional Autónoma de México AP 70-275 04510 D.F. México

Teléfono, oficina: (Mexico, Mexico City) 52 55 - 56229007 Fax, oficina: (Mexico, Mexico City) 52 55 - 56161976, 52 55 - 56228995

Hugh Drummond <hugh@servidor.unam.mx>

## UNorthCarolinaAsheville EvolutionaryBiol

The Department of Biology at the University of North Carolina Asheville invites applications for a tenure-track, full-time position at the Assistant Professor level. Candidates must possess a Ph.D. and an established record of scholarship, a broad background in biology, and a strong commitment to teaching and scholarship at the undergraduate level. The successful candidate will (1) teach undergraduate courses in zoology, ecology and evolution, and introductory biology, (2) develop and offer advanced courses in his/her area of expertise, and (3) develop an active research program involving undergraduates that addresses issues in animal ecology, evolution, systematics, or behavior. Review of applicants begins 15 Oct. and continues until the position is filled.

Visit www.unca.edu/biology for details.

Thanks, Jennifer Rhode

Jennifer Rhode, Ph.D. UNC Asheville Department of Biology One University Heights CPO #2040 Asheville, NC 28804 Phone: 828-251-6232 Fax: 828-251-6892 jrhode@unca.edu http://facstaff.unca.edu/-jrhode/ jrhode@unca.edu jrhode@unca.edu

## USouthCarolina PathogenEvolution

The following ad will be released soon. Note that we are particularly interested in candidates using evolutionary approaches, and do not specify a host organism. Direct inquiries to Jay Pinckney, jpinckney [at] biol.sc.edu.

Assistant Professor - Biological Sciences

As part of the Faculty Excellence Initiative at the University of South Carolina, the Department of Biological Sciences invites applications for a Microbial Ecologist specializing in waterborne pathogens for a tenure track assistant professor position to begin August 2009. This position is one of several in a university-funded faculty cluster, which was established to build strategic research capabilities in Environmental Microbiology with a focus in the emerging research area of Environmental Stresses and Microbial Stress Responses. Research interests should include, but are not limited to, processes contributing to resilience or adaptive changes of microorganisms, especially pathogenic microbes, in response to stress in natural aquatic systems. Topics of particular interest are the roles of natural selection and horizontal gene transfer in the adaptation to stressed environments and/or the role of phenotypic plasticity in survival and functionality under stressful conditions. The position is a 9-month academic year tenure-track appointment. For more information about the Department of Biological Sciences, visit www.biol.sc.edu . Applicants should include with their application a vita, statement of research and teaching interests and goals, and the names, addresses, and phone numbers of at least three references. This information should be sent to: James L. Pinckney, Chair, FEI Environmental Microbiology Search, Department of Biological Sciences, University of South Carolina, Columbia, SC 29208. To ensure full consideration, applications must be submitted by October 15, 2008.

The University of South Carolina is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or veteran status.

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Jeffry L. Dudycha Assistant Professor Dept. of Biological Sciences & School of the Environment University of South Carolina Columbia, SC 29208 dudycha [at] biol.sc.edu http://www.biol.sc.edu/-faculty/dudycha.html dudycha@biol.sc.edu dudycha@biol.sc.edu

## UStAndrews YeastGenetics

Dear EvolDir Members,

Please share this job advert with anyone appropriate!

Best wishes, Anne Smith

—

University of St Andrews Laboratory Research Assistant School of Biology Salary: £23,002 per annum

This position has become available in the laboratory of Dr V Anne Smith to perform experimental work in yeast, S. cerevisiae, in support of an integrated computational-experimental research program to reveal gene regulatory networks.

You should have an undergraduate honours degree or the equivalent in Biology, Bioinformatics, or related field, and experience in laboratory techniques. We are looking for an adventurous person who will enjoy exploring and troubleshooting new protocols. Prior experience with yeast is desirable, but not required.

The post is fixed term for a period of 29 - 35 months, available from 1 October 2008 or as soon as possible thereafter.

Informal enquiries to Dr V Anne Smith, email: anne.smith@st-andrews.ac.uk and for further information about the lab please visit http://biology.st-andrews.ac.uk/vannesmithlab/ . Please make applications to HR (information at http://www.st-andrews.ac.uk/employment/Code,22772,en.html), including application form, CV, and covering letter.

Please quote ref: CD214/08 Closing Date: 29 August 2008

Application forms and further particulars are available from Human Resources, University of St Andrews, College Gate, North Street, St Andrews, Fife KY16 9AJ, (tel: 01334 462571, by fax 01334 462570 or by e-mail Jobline@st-andrews.ac.uk. The advertisement, further particulars and a downloadable application form can be found at http://www.st-andrews.ac.uk/-employment/ . The University is committed to equality of opportunity. – Dr V Anne Smith School of Biology Sir Harold Mitchell Building University of St Andrews St Andrews, Fife KY16 9TH United Kingdom +44 (0)1334-463368 anne.smith@st-andrews.ac.uk biology.st-andrews.ac.uk/vannesmithlab/

anne.smith@st-andrews.ac.uk anne.smith@st-andrews.ac.uk

## UToronto ComparativeVertebratePhysiology

*Assistant Professor in Comparative Vertebrate Physiology*

*University** of **Toronto** **Scarborough***

The Department of Biological Sciences invites applications for a tenure stream position in Comparative Vertebrate Physiology. The position will be at the rank of Assistant Professor and will begin on July 1, 2009. The ideal candidate will have demonstrated expertise in examining physiological adaptations of tetrapod vertebrates to their environment and placing these adaptations into an evolutionary and ecological context. Applicants must have a PhD and at least one year of postdoctoral experience. The successful candidate will be expected to establish a strong, externally funded research program and to supervise graduate students. The Department of Biological Sciences has significant strength in ecology, behavior and neuroscience and the successful candidate will ideally be able to interact with faculty within these disciplines and facilitate the enhancement of animal physiology within the department. The successful candidate will have a strong commitment to excellence in teaching and be expected to contribute to undergraduate teaching of animal physiology (human or other), pathophysiology and/or anatomy. Salary to be commensurate with qualifications and experience. Further information on the research and teaching activities of the Department may be found by consulting the departmental web site at http://-www.utsc.utoronto.ca/ ˜ biosci/index.html < http://-www.utsc.utoronto.ca/%7Ebiosci/index.html >.

Applicants should submit a complete vita, a statement of research interests, a statement of teaching philosophy / interests and copies of recent reprints. Three letters of recommendation (including comments on research, publications and teaching) should be provided. Applicants are also asked to provide a brief description of the anticipated animal holding facility needs of their research program. All materials should be addressed to: The Chair, Comparative Vertebrate Physiology Search Committee, Department of Biological Sciences, University of Toronto Scarborough, 1265 Military Trail, Toronto, Ontario, Canada, M1C 1A4 or to biologicalsciences@utsc.utoronto.ca <mailto:biologicalsciences@utsc.utoronto.ca>. The

closing date for applications is October 17^th , 2008.

/The //University// of //Toronto// is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas. The University is responsive to the needs of dual career couples. The //University// of //Toronto// offers the opportunity to conduct research, teach, and live in one of the most diverse cities in the world. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority./

Greg Vanlerberghe <gregv@utsc.utoronto.ca>

## UWyoming AvianSystematist

Evolutionary Biologist/Avian Systematist University of Wyoming

The Department of Zoology and Physiology at the University of Wyoming invites applications for a full-time, nine-month, tenure-track FACULTY POSITION at open rank, starting August 2010. We seek an evolutionary biologist with a proven track record in avian biology and curation of museum collections. The main responsibilities include research, teaching in the University[1]s life sciences program, outreach, and curation of the Department[1]s research and teaching collection within the recently endowed Robert and Carol Berry Center for Natural History and Conservation. The successful candidate will have a PhD and evidence of research productivity. Departmental research strengths include ecology, wildlife/fisheries biology, comparative physiology, cell biology/physiology, and neuroscience. The department has access to outstanding microscopy, macromolecular, stable isotope, and nucleic acid facilities, and the Red Buttes Environmental Research Laboratory. The Center will provide additional resources for research, outreach, and conservation.

Interested applicants should email pdf files of their curriculum vitae, a statement of research and teaching interests, three publications that represent their best work, and three letters of recommendation to: Evolutionary Biologist Search Committee <zprequest@uwyo.edu>. Website: http://-uwadmnweb.uwyo.edu/Zoology. Review of applications will begin 1 October 2008. The University of Wyoming is a Carnegie Foundation Research/Doctoral Extensive Institution, and is an AA/EEO employer.

For inquiries contact:

Dr. Craig Benkman Department of Zoology and Physiology University of Wyoming Laramie, WY 82071 cbenkman@uwyo.edu

Tom Parchman <tparchma@uwyo.edu>

## UWyoming EvolutionaryMolBiology

The Molecular Biology Department at University of Wyoming is searching for an Assistant Professor. While the search is intended to be broad, the department has recently made two hires in molecular evolution/comparative genomics. Candidates with a research interest in this direction or other evolutionary directions that have a functional molecular component (including, but not limited to in-vitro evolution) will be seriously considered. As the search is indeed intended to be broad, if you are in doubt, please do apply and your application will be considered.

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Assistant Professor - Molecular Biology

The Department of Molecular Biology at the University of Wyoming seeks an outstanding scientist for a tenure-track position at the Assistant Professor level. The successful candidate will be expected to establish an extramurally funded research program, participate in undergraduate teaching in the core molecular biology curriculum, and contribute to the Graduate Program in Molecular and Cellular Life Sciences (http://www.uwyo.edu/mcls/). Salary and start-up package will be competitive. Candidates must have a Ph.D. degree or equivalent, postdoctoral research experience, and clear evidence of research productivity. Applications should be sent via email to molecularbiology@uwyo.edu as a single pdf file (labeled with your last name) that includes a cover letter, CV, research interests, and teaching interests and philosophy. In addition, three letters of recommendation should be sent by e-mail to molecularbiology@uwyo.edu or by regular mail to Search Committee Chair, Department of Molecular Biology, University of Wyoming, 1000 E. University Ave., Dept. 3944, Laramie, WY 82071. The Department of Molecular Biology consists of 15 faculty with diverse research

interests and significant extramural support (http://-/uwacadweb.uwyo.edu/UWmolecbio/).The University of Wyoming enrolls ~12,000 students, including ~2,500 graduate students. Laramie is located in the Rocky Mountain region of southeastern Wyoming, about 120 miles from Denver. In addition to opportunities for academic excellence, the University of Wyoming offers a college-town environment, extraordinary outdoor recreation, and daily conveniences that contribute to our quality of life. Screening of applications will begin on October 15, 2008 and continue until a suitable candidate is identified.

The University of Wyoming is an EO/AA employer.

David Liberles <liberles@uwyo.edu>

## WashingtonStateU PlantEvolutionaryGenetics

Research Assistant in Plant Evolutionary Genetics

A research assistant is needed to conduct experiments in the Busch laboratory at Washington State University (WSU). The Busch laboratory conducts experiments in plant evolutionary genetics, with a particular emphasis on the evolution of mating systems and their genetic consequences. Experiments are currently focusing on species of Leavenworthia, a genus of mustards that are endemic to the southeastern United States. An independent and highly motivated individual is being sought to conduct independent research in the following two areas: 1) an examination of genetic incompatibilities contributing to reproductive isolation in hybrid offspring produced in crosses between populations of a self-fertilizing species; and 2) PCR amplification of microsatellite loci to study the effects of mating system on population structure in several Leavenworthia species. Field trips to collect natural material may also be required, so the candidate should be comfortable collecting plant material in the field. The ideal candidate will have recently graduated from University with a B.A. or B.S. in biology, in addition to having experience conducting independent research in a laboratory. Experience with molecular techniques (PCR, electrophoresis, cloning, etc.) is an asset but not a requirement for employment. Responsibilities of the position include maintenance and oversight of the laboratory (25%), growth of plant material, experimental crosses, and measurement of plant traits in a greenhouse (35%), in addition to PCR amplification and analysis of polymorphic DNA (40%).

Interested individuals should submit a one-page letter outlining why the position is being sought to Jeremiah Busch at jwbusch@wsu.edu. Applicants must also provide the email addresses and phone numbers of three references in their letter. The position is to be filled for one year, although employment for a second year may be offered upon satisfactory performance. Applications will be accepted and screened until September 1st, 2008. The starting salary is $25,000, although this amount is negotiable based upon prior experience. The position is expected to start on January 5th, 2009. Washington State University is housed in Pullman, Washington, a small town with strong school systems and many opportunities for outdoor recreation. The biology department at WSU has many faculty and graduate students with interests in ecology and evolution (http://www.sbs.wsu.edu), and we enjoy very strong interactions with biologists on the nearby campus of the University of Idaho.

Jeremiah Busch Assistant Professor Washington State University School of Biological Sciences PO Box 644236 Pullman, WA 99164

jwbusch@wsu.edu jwbusch@wsu.edu

# Other

## Adonis samples

Dear Evoldir-ers,

We are currently seeking any Adonis spp. samples you may be willing to share, preferably viable seed, but freeze-dried leaf tissue would also do. In particular, Adonis palestina samples would be most welcome.

Thanks,

Dan

Dan Milbourne, PhD Research Officer Crops Research Centre Teagasc Oak Park Carlow Ireland

Dan.Milbourne@teagasc.ie

Tomas Murray <tomas.murray@teagasc.ie>

## Ancestral haplotype sequence

Hi, All,

Does anyone know how to determine the ancestral haplotype/sequence from a set DNA sequences (I'm using mtDNA)? Are there any softewares to perform this task? and the idea to determine that?

Thanks in advance, Best regards, Ai-bing

Ai-bing Zhang, Ph.D. Gene Technology Albanova University Center Royal Institute of Biotechnology SE-106 91 Stockholm Sweden Email:zhangab2008[at]yahoo.com.cn Tel: int+46-7040 36 208

ZhangAB <zhangab2008@yahoo.com.cn>

## Arlequin coding

Dear friends, I have used a few haplotype data to do AMOVA in Arlequin, but here I meet a problem, because Arlequin needs the length of every haplotype to be the same , but some of the haplotypes I got has an Alu in some loci, but I don't know how to coding the Alu in Arlequin, has anyone met this problem before? and has anyone know how to coding in this condition?

Thanks!!!

An Fan, postgraduate from China. Phone:020-87332513 Fax:020-87332513 Email:fanan@mail2.sysu.edu.cn

"An Fan<fanan@mail2.sysu.edu.cn>"

Fan An <fanan@mail2.sysu.edu.cn>

## Crab larva samples

Dear EvolDir members,

I have initiated a comparative morphological study on the four extant horseshoe crabs, but miss one species.

The missing material is first- and second-instar larvae from the Asian horseshoe crabs of Tachypleus tridentatus. I need the larvae for SEM studies and can use either live or fixed larvae ? even exuviae. I can also use fertilized eggs and hatch them in the lab.

Does anyone know where I can get such specimens? I would appreciate any help very much

Best wishes,

Ariel D. Conradsen, graduate student ariel@biology.au.dk

– Ariel D. Conradsen, Graduate Student Dept. of Ecology & Genetics Inst. of Biology University of Aarhus Ny Munkegade, Buildg. 1540-218 DK-8000 Aarhus C. Denmark Tel.: +45 8942 3334 Cell.: +45 2061 3746

ariel.conradsen@biology.au.dk

## Eppendorf Realplex 4 and SNPs

Dear Evoldir,

I'm about to start working with SNPs on an Eppendorf Realplex 4 system. I've never used this platform and I'm curious to hear about other peoples experience of running SNPs on it (like which dye system people have been using, pitfalls etc.).

Thanks

Jens

Dr. Jens Carlsson Population Geneticist

Duke University Marine Laboratory Nicholas School of the Environment 135 Duke Marine Lab Road Beaufort, NC 28516-9721, USA Office: +1 252 504 7615 Fax: +1 252 504 7615 (wait 7 rings) Email: jens.carlsson (at) duke.edu

jac61@duke.edu jac61@duke.edu

## ESF ThermAdapt call for grants

**** PERMANENT CALL FOR WORKSHOP GRANT APPLICATIONS ****

In 2006 we launched a new ESF Programme on "Thermal adaptation in ectotherms: Linking life history, physiology, behaviour and genetics" (ThermAdapt); see http://www.esf.org/thermadapt . The Objective of this ESF Programme is to foster a multidisciplinary European network of scientists working on thermal adaptation. We particularly aim to integrate research at multiple levels of investigation, including genetics, physiology, ecology, behaviour or theory. Interested persons or groups are encouraged to join our activities. These include advertising their expertise via our web site, and participation in various activities to be announced separately and regularly over the next 5 years such as workshops, training courses, short and long exchange grants, exchange of specimens and expertise, sharing of facilities, and scientific collaboration of any kind.

We PERMANENTLY call for applications for local organization of

==> WORKSHOPS, SCIENCE MEETINGS or TRAINING COURSES on specific topics within the realm of the ThermAdapt Programme

There is no particular deadline. Instead, submission of workshop proposals is now PERMANENTLY OPENED, as explained on our web site http://-www.esf.org/thermadapt under > Science Meetings, where the application procedure is also outlined. We shall periodically review submissions about every 3 to 6 months.

Such workshops, financed by our ESF programme if approved, bring together between 10 and 50 participants for 2 to 4 days to focus on a specific issue and are planned to occur on an annual basis over the coming years.

Workshop grant applications will be chosen based on scientific quality, and priority will be given to applicants who come from or intend to visit countries supporting the programme (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Netherlands, Portugal, Slovenia, Spain, Switzerland), but other European nations can be involved.

For further inquiries, or if you wish to be included in the ThermAdapt e-mail list to receive regular updates on Programme activities, please contact:

Ellen Degott (ESF office liaison; Email: edegott@esf.org) Wolf Blanckenhorn (chair; Email: wolf.blanckenhorn@zm.uzh.ch) Mauro Santos (co-chair; Email: mauro.santos@uab.es)

Dr. Wolf Blanckenhorn Chairman ESF ThermAdapt Programme Zoological Museum University of Zurich-Irchel 34 (building)-J (floor) -98 (office) Winterthurerstrasse 190 CH-8057 Zurich

Phone: +41 44 635.47.55 Fax: +41 44 635.47.80 e-mail: wolf.blanckenhorn@zm.uzh.ch http://www.esf.org/-thermadapt wolfman@zm.uzh.ch

## FishEgg DNA

Dear All,

We are working on the mapping of fish spawning areas in the south of the North Sea and the English Channel. To map these areas, we wanted to identify by DNA markers the species of the collected eggs (mainly gadoid species and some flat fish).

Eggs are sampled during research cruises and are preliminary fixed in a formalin solution (less than 1%) during 3 weeks before to be washed and stored in a solution without formalin.

We are using mitochondrial gene (cytochrome b)as the molecular marker. But since now, we have problems to extract DNA from individual egg. Sometimes it works, sometimes not. It seems to be dependent on the fish species. We have used different DNA extraction methods: (1) phenol/chloroform/isoamyle, (2)DNeasy Tissue Kit (from Qiagen), (3) magnetic bead-based technology (ChargeSwitch Forensic DNA purification kits from invitrogen), (4)Whatman FTA cards and (5)5% Chelex extraction.

Does someone have already encountered this DNA extraction problem? All ideas will be useful for us.

Thank you very much in advance for your answers,

Véronique Verrez-Bagnis

Ifremer Département Sciences & Techniques Alimentaires Marines Rue de l'Ile d'Yeu, B.P. 22105 44311 Nantes Cedex 3 - France

Tél.: +33 (0)2 40 37 40 81 Fax: +33 (0)2 40 37 40 71 E-mail : vverrez@ifremer.fr

Website Ifremer: htpp://www.ifremer.fr Website FishTrace: htpp://www.fishtrace.org Veronique.Verrez@ifremer.fr Veronique.Verrez@ifremer.fr

## How to teach evolution for kids

Dear friends,

Several of my Biology students are starting teaching in schools for kids and teenagers and they are interested in to organize some activities about evolutionary biology, explaning natural selection for example.

I would like to help these students here and if anyone have some material please share with me the internet links, games, applets, PDF articles, peoples addresses!

Thanks for any help !!!

Prof. Dr. J. C. VOLTOLINI Grupo de Estudos em Ecologia de Mamiferos (ECOMAM) Universidade de Taubate - Departamento de Biologia Taubate, SP. 12030-010. E-Mail: jcvoltol@uol.com.br Website do grupo de pesquisa ECOMAM: http://jcvoltol.sites.uol.com.br/ Fotos de Projetos e Cursos: http://jcvoltol.fotoblog.uol.com.br/- Amostra de um Curso de Campo de Ecologia: http://trabiju.blogspot.com/ Currículo Lattes: http:/-/lattes.cnpq.br/8137155809735635 Fotos Artísticas: http://voltolini.fotos.net.br/texturas "Siamo tutti angeli con un'ala e possiamo volare soltanto se ciabbracciamo"

jcvoltol@uol.com.br

## How to teach evolution for kids 2

Dear Professor Voltolini and interested others,

I have a very simple "experimental" simulation of natural selection that uses dice (I call it "Natural Selection Craps" or "NSCraps"). It is meant to demonstrate that natural selection is not a random process (as it is mischaracterized by the intelligent design people–see IDnet sites). I wrote a simple program in C and am willing to share the source code and/or compiled version (the latter for Mac OS X)–just e-mail me (david.fitch@nyu.edu). But the dice simulation is also very amenable to experimentation with a class of students of virtually any size.

Each die represents a gene; each face of the die represents a different allele. So there are six possible alleles per gene. One can use as many dice as one likes. I use 3 dice, each with a different color. The object is to determine how many "generations" (= rolls of the dice) it takes to achieve some pre- determined optimal "genotype" (= particular sequence of numbers on the dice faces; e.g. "1 2 3"). To simulate "random chance alone", a student simply rolls all three dice each generation. Of course, the chance of getting any such "optimal genotype" will be $1/(6\hat{}3) = 1/216$. To simulate an ide-

alized stepwise process of "natural selection" in which each genotype with an optimal allele is fitter than the previous genotype, a student only rolls the dice that do not have the optimal alleles. The chance is significantly enhanced by selection to 1/36.

The results are pretty fascinating. Natural selection is a surprisingly efficient mechanism to achieve an optimum solution. And the more dice (genes; i.e., the higher the genomic complexity), the more efficient it is over random chance.

Of course, there are several simplifying (and thus instructive) assumptions underlying the model used here. For example, the "organism" is haploid and there is a direct mapping between genotype and phenotype. Also, there is no epistasis, no interaction between the genes. And of course each gene is a mendelian factor that mutates and segregates independently of any other gene. There is a single peak in the "adaptive landscape"; etc.

Nevertheless, this is a great simulation for a class. The class can be divided into two parts–Randomists vs. Selectionists; each part can then be divided into pairs of students: one student rolling the dice while the other student does the counting. Thus, the experiment is replicated in parallel. I then show the computer simulation using 9- or 10-gene genotypes.

After such a demonstration, most students are pretty impressed by the power of selection to reduce improbability, thus overcoming a major hurdle for many of the more skeptical students. In any case, such hands-on activity has more teaching power than just a lecture.

David Fitch

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ ~ ~ - - ~ David H. A. Fitch ~ \ / / / ~ Associate Professor ~ \/ / / ~ Department of Biology ~ \ / / ~ New York University ~ [] / / ~ Main Building, Room 1009 ~ \ / / ~ 100 Washington Square East ~ \/ / ~ New York, NY 10003 ~ \ / ~ U S A ~ \/ ~ Tel.: (212) 998-8254 ~ \ ~ Fax: (212) 995-4015 ~ \ ~ e-mail: david.fitch@nyu.edu ~ \ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

http://www.nyu.edu/projects/fitch/
david.fitch@nyu.edu david.fitch@nyu.edu

## Informative AFLP markers

Dear EvolDir Members,

I work on a large-scale population-level project with over 2000 samples, using AFLP. In order to reduce the laborious scoring of AFLP profiles I'd like to select the most informative AFLP markers. I was wandering if any of you have experience with this and can recommend an approach/software/procedure etc.

I have already scored selected panel of about 150 samples in 9 primer combinations used and this generated over 400 AFLP markers. I was hoping that if we could select less markers/primer combinations that would give us nearly the same results I could substantially reduce time spent by scoring and use it for subsequent data analysis. Please note that most of the samples are already lab-analysed in all 9 primer combinations so I'm not looking for cutting down the cost of lab-work.

Any suggestions will be greatly appreciated!

Best wishes, Sarka

– Sarka Jahodova

Department of Ecology Charles University Vinicna 7 CZ-128 44 Prague 2 Czech Republic

Tel. +420 221951805 E-mail: jahodova@natur.cuni.cz

And

Department of Invasion Ecology Institute of Botany Academy of Sciences of the Czech Republic CZ-252 43 Pruhonice Czech Republic

http://www.ibot.cas.cz/invasions jahodova@natur.cuni.cz

## MacVector files

Dear EvolDir,

I've got a bunch of MacVector files that I need to import to Vector NTI. However, I no longer have access to MacVector. Does anyone know of a third party (free) software that could allow for converting the MacVector files to a format that Vector NTI can handle?

Thanks

Jens

jens.carlsson@duke.edu jens.carlsson@duke.edu
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

## Marine invert microsats

Dear Evoldir members,

I am currently isolating microsatellites for a marine arthropod, and have encountered a curious pattern. From a total of 300 clones sequenced so far, over 95% contain 'beautiful', long microsat regions, but in more than half of them, there is virtually zero (or very near zero) flanking sequence (i.e. the linkers/adapters used in the isolation protocol are followed immediately by the repeat region).

I have anecdotally heard of this pattern in marine invertebrates, but have not found any clear literature on this. Has anyone experienced this issue to the same extent? Is this pattern real? Or am I possibly doing something wrong at some step (e.g. too much PCR product going into the sequencing reactions)?

Thanks for any input!!

Felipe Barreto Dept. of Ecology and Evolution University of California Irvine, CA

felipesbarreto@gmail.com

## Marine invert microsats answers

Hi, I received a variety of responses to my post, and I really thank all that responded. Copied below are my original post followed by the responses. If you are interested in this topic, there are some great suggestions here!

To give you a bit more detail on my conclusions: -it seems the pattern is relatively common in at least some marine invertebrate groups. -I encountered this pattern in the last two pycnogonid species I have developed microsats for, using the Hamilton et al. protocol. With enough sequencing effort (~400 clones), I have successfully developed polymorphic microsats for them. So my query was intended to learn ways to minimize these problems in the future. -So in developing loci for future study species, I will be interested in incorporating some of the suggestions below, particularly with regard to decreasing the amount initial gDNA, using less-frequent cutters in the restriction step, and making sure to use probes tagged at the 3' end.

Again, thanks a lot for the help!

Felipe Barreto

ORIGINAL QUESTION:

Dear Evoldir members,

I am currently isolating microsatellites for a marine arthropod, and have encountered a curious pattern. From a total of 300 clones sequenced so far, over 95% contain 'beautiful', long microsat regions, but in more than half of them, there is virtually zero (or very near zero) flanking sequence (i.e. the linkers/adapters used in the isolation protocol are followed immediately by the repeat region).

I have anecdotally heard of this pattern in marine invertebrates, but have not found any clear literature on this. Has anyone experienced this issue to the same extent? Is this pattern real? Or am I possibly doing something wrong at some step (e.g. too much PCR product going into the sequencing reactions)?

Thanks for any input!!

Felipe Barreto Dept. of Ecology and Evolution University of California Irvine, CA

—— RESPONSES: Hi Felipe

We made a microsatellite library a few years ago that had the same problem, and we realized it was because the initial restriction cutter we used had a recognition site that included GT, which happened to be the repeat we were trying to isolate. Maybe you've done the same?

Cheers,

Andrew

——

Dear Felipe,

This is interesting question. I've recently encountered a similar problem with plant DNA during development of the microsats. We didn't really have 'zero' flanking sequences, nevertheless still so short that designing the primers was impossible or only possible with including a part of the microsat. therefore, I would be interested in the responses you get. Can you please summarize them and forward to me?

good luck,

Monika

—-

Hi Felipe,

You will probably get a load of answers about this, but I can tell you what we found in our lab. We had the same problem where we had beautiful repeats but the linkers were jammed right up against them. We thought it could be because there was too much DNA going into the initial enrichment procedure with the probe. The reason for this is that if there is too much DNA, the fragments that were lacking flanking sequence (just by chance) would be preferentially bound to the probe because the repeat region would be more exposed (i.e. there is no flanking region to "get in the way"). We quantified our DNA right before the enrichment procedure and started putting much less into the enrichment (unfortunately, I can't remember the exact amount right now and I don't have my notes with me, but I think it was around 100ng). This seemed to do the trick. We would still get the occasional sequence with no flanking region, but overall most of them were good. We had this problem across a wide variety of species (frogs, carnivores, birds, shrimp) and found that putting in less DNA worked for all of them.

Another factor that could be contributing to it is the type of repeat you are enriching for and the restriction enzyme. We were enriching for GATA repeats, and using Sau3AI to initially digest the DNA, which has a cut site of GATC. So if one repeat had experienced a substitution from A to C, you could end up with a cut site right in the middle of your repeat. This might increase the number of fragments with no flanking sequence. We switched to HaeIII to digest the DNA (cut site GGCC). I don't know what your total protocol is, the only problem with this is that it's not recommended for use with SNX linkers (which we were using). I think there is a HaeIII cut site within the linkers, so if you have any residual enzyme it could cut off the linkers. To get around this, we did a single phenol-chloroform step after digestion to get rid of any residual enzyme. When we finally got good flanking sequences, we did see that sometimes there would be a GATC site within a GATA repeat, so I think it was definitely contributing to the problem.

>From what I remember (this was several years ago!), the first thing we tried was switching the enzyme from Sau to Hae. I think it may have

— / —



## Museum DNA

Dear group: Could someone please respond to my student, Daniel Contreras (email = contrerd@uregina.ca) regarding the possibility that there may be something in the museum specimens inhibiting amplification. Many thanks, Bill Chapco.

I extracted the DNA from two museum specimens (grasshoppers: M.Sang and Band Wing), along with a positive control(a fresh specimen of M. sang) and a negative control, using the QIAGEN DNeasy tissue kit.

When I attempted to perform PCR amplification of the extracted DNA, I did not get any amplification of either M. sang or BW. The positive control worked fine, and the negative control was clean. I ran several PCRs, using several primers, and attempting to amplify DNA of different lengths. None of them worked. I assumed that there is some DNA in the sample, since the specimens I extracted the DNA from were in good shape. I have to admit I didn't bother checking the concentration of the DNA using a spec since I have a very small amount

of sample in this case (and I find that the concentrations for amplification are usually in the right range for PCR after extraction anyways).

I started to suspect that there was something in the original insects that was contaminating my PCRs and preventing amplification of these samples. So I ran the following PCR experiment (50 ul total volume):

tube 1)M.sang alone (3 ul)

tube 2)BW alone (3 ul)

tube 3)+ control alone (3ul)

tube 4)+ control diluted (3 ul + 3ul water) - control for dilution of a positive sample with one that doesn't work

tube 5)M. sang combined with + control (3 ul each)

tube 6)BW combined with + control (3 ul each)

tube 7)+ control (1) combined with + control(2) - control for the combination of two working samples.

tube 8-10)Several negative controls (no primers, no taq, no dna).

(note: the positive control is a sample of M.sang that has previously been succesfully amplified using the primers I used for this experiment)

I ran these on a 1.3% agarose gel and stained with ethidium bromide. I

got the following results:

Tubes 1 and 2 were unsuccessful and showed no bands. Tubes 3 and 4 both had bright bands. Tube 5 had no bands and tube 6 had a VERY light

band (almost non-existant). Tube 7 had a VERY bright band. All negative controls were clean.

So basically, when the DNA extracted from the museum specimens is combined with DNA that has been successfully amplified previously, I get no amplification or very weak amplification. Can I conclude that the some sort of contaminant got through in my extraction? If so, what

can I do about it? Any ideas?

Dr. William Chapco Department of Biology University of Regina Regina, SK, S4S 0A2 Canada 306-585-4478 306-337-2410 (FAX) chapco@uregina.ca

William.Chapco@uregina.ca

## Mussels Collaboration

Good morning,

I am a moroccan Biologist working on avian and mamal genetics and doing a Master in Fisheries.

I am specializing in Mussels ( Mytilus galloprovincialis and Perna perna ) genetics (gene flow, genetic structures studies...).

As I am about starting my PhD soon, I would be very delightful to know if there is any chance of collaboration between our laboratory in Morocco and any laboratory around the world.

Thank you in advance.

Best regards.

KA

amalkorrida1@aol.co.uk

## Portugal OtterEvolution VolFieldAssist

Iâm seeking enthusiastic undergraduates and recent college graduates who are interested in a field research on the European Otter (Lutra lutra) in Portugal.

The overall objective of my research program is to study the behavioural evolution of the otters. More in detail, Iâm trying to understand the relationships between the use of space of this species and the availability and dispersion of the resources, namely freshwater and food. This could be of particular interest in an ecosystem, like the Portuguese one, which is strongly influenced by summer droughts and heavily altered by humans (by creating many reservoirs).

Iâm carrying out a PhD of the University of Rome (Italy) with Prof Luigi Boitani (http://-dipbau.bio.uniroma1.it/web/Docenti/Docente364/-index.htm) as advisor, and Iâm collaborating with the Prof AntÏnio Mira, the head of the Conservation Biology Unit of the University of Ãvora (http://-www.ubc.uevora.pt/). The field work started at the end of June 2007, at present we caught 15 otters (including escapes and recaptures), marked and followed 7 of them (of which 2 died), and many others will be hopefully caught and followed soon.

Successful applicants will assist with fieldwork (consisting of trapping sessions, radiotracking, prey sampling and collection of environmental data) in our Study Area (Alentejo, South of Portugal), and with data entry. In addition, successful applicants could develop their own individual research projects on a topic related to the program and their own interests, with the opportunity to carry out their Final Degree/Master Thesis, and, if particularly motivated, to be involved in the publications.

The position is unpaid. This means that successful applicants should provide by theirself for the logistic (accommodations and living expenses), with the only luck that here the cost of life it is not prohibitive.

Strong motivation to work in extreme environmental conditions, during both nights (mainly) and days; English/Italian/Portuguese speaking skills and a valid European Driverâs license are required. Class background in animal evolution, zoology, statistics, and experience in radiotelemetry techniques would be an advantage. Competent, enthusiastic, and emotionally mature people desired!

Students could apply starting from now and until July 2009, starting to work as soon as they could or as will be planned together with me.

For more information, contact Lorenzo Quaglietta (PhD student): lorenzo.quaglietta@uniroma1.it Lorenzo Quaglietta

Lorenzo Quaglietta PhD student Department of An-

imal and Human Biology University of Rome La Sapienza Viale dell'UniversitÃ, 32 00185, Roma, Italy (0039) 06-49914763 phone (0039) 06-49914763 fax lorenzo.quaglietta@uniroma1.it

giaguarenzo@yahoo.it

## Software LOSITAN SelectionDetection

Dear Colleagues,

I would like to announce version 1 of LOSITAN, A easy to use graphical interface to the fdist (Beaumont and Nichols, 1996) Fst-outlier method.

LOSITAN tries to make selection detection feasible to a much wider range of users, even for large population genomic datasets, by both providing an easy to use interface and essential functionality to complete the whole selection detection process.

The application runs directly from the web on Windows, Mac and Linux (only a recent Java installation is required).

The current stable version is an enhancement of a an early release beta and incorporates the feedback of both evoldir readers and reviewers comments.

Web address: http://www.biomedcentral.com/1471-2105/9/323 Best regards, Tiago Antao

tiagoantao@gmail.com

## Software PhaseEstimation with ploidy

We have developed a maximum likelihood programme that estimates allele frequencies and linkage phase at up to three loci in samples which vary in their ploidy level.

It is explicitly designed for malaria because when we genotype malaria parasites from human blood, the blood may contain 1,2,3.... malaria infections. Malaria are haploid in the blood stage so this is equivalent to analysing samples with ploidy levels of 1,2,3....

A referee pointed out that this may have more general application, for example in plants where ploidy may vary, or where diploids have a gene duplication resulting in 4 gene copies in an individual.

So I'll point you towards the work in the hope that it will save someone a bit of time.

The work is published in the Malaria Journal at

http://www.malariajournal.com/content/7/1/130 < http://www.malariajournal.com/content/7/1/130 >

and/or you can find the users' manual at

http://pcwww.liv.ac.uk/hastings/MalHaploFreq < http://pcwww.liv.ac.uk/hastings/MalHaploFreq >

Regards,

Ian Hastings

Ian Hastings, Liverpool School of Tropical Medicine, Liverpool L19 3PR. tel: 0151 705 3183 (direct) 0151 705 3371 (Dept. secretary)

"Hastings, Ian" <hastings@liverpool.ac.uk>

## Software SAM

Dear Colleagues,

SAM is a Windows program designed to detect candidate loci for selection in whole-genome scans. It also gives valuable clues as regards the ecological factors at stake in the selection process. The method used is based on multiple univariate logistic regression models to test for association between allelic frequencies at marker loci and environmental variables. The software reads matrices constituted of presence/absence of molecular markers, and of the corresponding environmental parameters at sampling locations. It provides dynamic analysis tables to process the results.

Two papers were published about SAM. The first one describes the method and was published in Molecular Ecology :

- Joost, S., Bonin, A., Bruford, M.W., DesprÃ©s, L., Conord, C., Erhardt, G., Taberlet, P., (2007) A Spatial Analysis Method (SAM) to detect candidate loci for selection: towards a landscape genomics approach to adaptation, Molecular Ecology, 18:3955â3969.

The other one presents the software and was published in Molecular Ecology Resources :

- Joost, S., Kalbermatten, M., Bonin, A. (2008) Spatial Analysis Method (SAM): a software tool combining

molecular and environmental data to identify candidate loci for selection, Molecular Ecology Resources, Vol. 8, issue 5, start page 957

The tool is freely available for download at : http://-www.econogene.eu/software/sam/ Best regards,

Stephane

–

Dr Stephane Joost GIS Research Laboratory (LASIG) Ecole Polytechnique FÃ©dÃ©rale de Lausanne (EPFL) School of Architecture, Civil, and Environmental Engineering (ENAC) BÃtiment GC, Station 18, 1015 Lausanne, Switzerland Telephone: +41 21 693 57 82 - Fax: +41 21 693 57 90 http://lasig.epfl.ch/ Stephane Joost <stephane.joost@epfl.ch>

## Software SLOUCH

SLOUCH Stochastic Linear Ornstein-Uhlenbeck Models for Comparative Hypotheses

Most phylogenetic comparative methods used for testing adaptive hypotheses make evolutionary assumptions that are not compatible with evolution of a trait towards an optimum. SLOUCH allows the user to estimate 1) the evolutionary and optimal regressions between a predictor and a response trait, and 2) phylogenetic inertia. These quantities are estimated jointly by a comparative method based upon an Ornstein-Uhlenbeck model of adaptive evolution in which a single trait adapts to an optimum that is influenced by one or more continuous, randomly changing predictor variables.

Please register for a free download of the SLOUCH program and the accompanying manual at http:/-/freshpond.org/software/SLOUCH/ or http://-folk.uio.no/thomasha/Programs/ The biological, conceptual, and mathematical basis for SLOUCH is presented in

A Comparative Method for Studying Adaptation to a Randomly Evolving Environment by Thomas F. Hansen, Jason Pienaar, and Steven Hecht Orzack, Evolution 62: 1965-1977 2008.

– Steven Orzack

The Fresh Pond Research Institute 173 Harvey Street Cambridge, MA. 02140 617 864-4307

www.freshpond.org orzack <orzack@freshpond.org>

## SouthAfrica FieldVol MouseEvolution

Volunteers needed as field assistants for the project:

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

>From October onwards

Project: We study the reasons of group living, paternal care, communal nesting and social flexibility in the striped mouse. As this species is diurnal and the habitat is open, direct behavioral observations in the field are possible.

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

Work of field assistants: Trapping and marking of mice; radio-tracking to determine home ranges and nest sites; direct behavioral observations in the field; experiments and observations with captive specimen under natural weather conditions; maintenance and cleaning of the research station.

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

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 750 (around 70 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 2000 or 180 Euro/month). Students get an invitation letter which they can use to apply for funding in their home country (eg. DAAD in Germany, SANW in Switzerland).

Place: The field site is in the Goegap Nature Reserve

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

When and how long: Currently we are looking for one volunteer to start in September and two volunteers to start in October. Applications for later periods are also possible. Volunteers are expected to stay at least 2 months, but longer periods of up to 6months are preferred.

How to apply? Send a short motivation letter stating why and for which period you are interested and your CV via email to carsten.schradin@zool.uzh.ch.

More information under www.stripedmouse.com Contact via e-mail: carsten.schradin@zool.uzh.ch

Dr. Carsten Schradin Research Assistant, Zoological Institute, Department of Animal Behavior, University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland. Tel: +41 - (0)44 635 5486

Honorary Researcher at the School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, South Africa.

Best regards, Carsten

Dr. Carsten Schradin Research Associate, Zoological Institute, Department of Animal Behavior, University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland. Tel; +41 - (0)44 635 5486 Fax: +41 - (0)44 635 5490

(Tel. secretary: +41 - (0)44 635 5271)

Honorary Researcher at the School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, South Africa.

Succulent Karoo Research Station, Goegap Nature Reserve, Private Bag X1, 8240 Springbok, South Africa.

visit http://www.stripedmouse.com Carsten Schradin <carsten.schradin@zool.uzh.ch>

# PostDocs

## ArizonaStateU TheoreticalPopGen

A postdoctoral position is available for research in theoretical population/evolutionary genetics of infectious disease in Arizona State University. The funding is available for two years, with good possibility of extension. The successful applicant is expected to develop quantitative models of drug resistance evolution in pathogen population using either computer simulation or mathematical analyses. The project also involves the analysis of malaria parasite (Plasmodium falciparum and/or P. vivax) genomic data for inferring parasite demographic structure and evolutionary events involving antimalarial drug resistance. The project specifically aims to elucidate whether or how rapidly the resistance to antimalarial drugs would emerge, become prevalent, or disappear under various parasite demographic structures and drug deployment policies. However, this problem will be addressed in the broad context of adaptive multi-locus evolutionary dynamics under temporally and spatially heterogeneous selection. He or she in this position will collaborate closely with both Dr. Yuseob Kim (theoretical population genetics) and Dr. Ananias Escalante (evolutionary ecology of malaria parasites) of the School of Life Sciences in ASU. The applicant should have advanced knowledge and skill in population genetics theory, computer programming and, preferably, experience in the statistical data analysis DNA sequence variation. Knowledge in malaria biology is not required. Candidates must have earned a Ph.D. in biology or a related field at the time of appointment.

To apply send a CV, a personal statement and selected publication by email to yuseob.kim@asu.edu or by mail: Yuseob Kim, Biodesign/EFG, Arizona State University, PO Box 875301, Tempe, AZ 875301. Informal inquiry is encouraged. The initial deadline for receipt of applications is 30 September, 2008, with application reviewed weekly thereafter until the search is closed. Arizona State University is an affirmative action, equal opportunity employer committed to excellence through diversity.

Yuseob Kim <Yuseob.Kim@asu.edu>

## Belgium PlantPopulationGenetics

POSTDOC GRANT APPLICATIONS - CONSERVATION

As part of a new project funded by the Belgian National Fund for Scientific Research (FNRS), it is possible for non-Belgian young postdoc researchers to APPLY for a three-year FNRS postdoc grant in the laboratories collaborating to the project (Univ. Mons-Hainaut, UCLouvain-la-Neuve, National Botanical Garden, all located in Belgium). The topic is “Key factors for the persistence of fragmented populations of rare or declining plant species and their preferential pollinators: pollination patterns, inbreeding depression, gene flow and available resources”. Four insect-pollinated plant species from fens are studied: Comarum palustre, Menyanthes trifoliata, Vaccinium oxycoccos and V. uliginosum, as well as the diversity and efficiency of their pollinators. In particular we will study the following aspects: 1. Study of the pollinator guilds: diversity, behaviour and diet 2. Reproductive biology: floral biology, pollen transfer limitation, mating system, and inbreeding depression. 3. Population genetics: outcrossing rates and realized pollen flow using DNA microsatellite markers.

The study sites are located in two regions in southern Belgium (High Ardenne and Lorraine). They are protected areas (EU Natura 2000 zones and natural reserves) and ecologically managed fens. This project is realized in collaboration with the local nature managers and aims to contribute to the long-term preservation of viable populations of fen species in these highly threatened habitats.

The grant is for a full-time position, salary up to 37000 euros/year, depending upon experience, with social se-

curity cover. To be qualified to apply to this grant, the candidate must have obtained his /her PhD after 1 January 2003 (= max. 6 years at 1 January 2009), have a good CV (several publications in ecological, conservation or evolutionary journals) and did not stay in Belgium for more than 24 months during the last 3 years.

Three different profiles are sought: 1. A plant population geneticist (training and experience in development and use of microsatellite markers and in genetic data analysis is a requirement, experience in spatial analyses would be an advantage), to be based at the National Botanical Garden of Belgium (Meise; Olivier Raspe, Fabienne Van Rossum; see http://www.br.fgov.be/-RESEARCH/PROJECTS/floraofbelgium.php).

2. A plant population biologist (experience in reproductive biology, pollination and mating systems; entomological skills would be advantageous), to be based in UCL (Université Catholique de Louvain, Louvain-la-Neuve), in the research group genetics, populations, reproduction (Anne-Laure Jacquemart; see http://-www.uclouvain.be/gena-pops.html).

3. An entomologist (experience in insect observation, ecology and systematics, especially for Apidae, and in plant/pollinator interactions; botanical skills would be advantageous), to be based in University of Mons-Hainaut (Mons), in the laboratory of Zoology (Denis Michez & Pierre Rasmont; see http://www.zoologie.umh.ac.be, http://-www.zoologie.umh.ac.be/hymenoptera/).

If you are interested, please send an e-mail message and attach a cover letter outlining your interest and motivation to join us with your Curriculum vitae (including a publication list and contact information for two reference scientists) as a separate document, to Fabienne Van Rossum, fabienne.vanrossum@br.fgov.be BEFORE 24 AUGUST 2008. Please indicate which profile you are interested in. The selected candidates will be informed beginning of September. The deadline of the application to the FNRS grant (done by the promoter of the project) is 15 September. IF GRANTED, the starting date is 1 January 2009.

Best regards

Fabienne Van Rossum Department of Vascular Plants, National Botanic Garden of Belgium, Belgium Tel (direct line): +32 2 2600932 Fax: +32 22600945 e-mail: fabienne.vanrossum@br.fgov.be

fabienne.vanrossum@br.fgov.be fabienne.vanrossum@br.fgov.be

## BiK-Frankfurt CrustaceanPopulationGenetics

The Biodiversity and Climate Research Centre has recently been founded by the Senckenbergische Naturforschende Gesellschaft, the Goethe-Universität Frankfurt am Main, and additional partners. It is funded by the Hessian State Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the Centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level. The Project Area C ¿Adaptation and Climate¿ invites applications for the position of a Postdoctoral Researcher (Ref. TP C 5.2) [#C03] BAT II a

The applicant is expected to have expertise in the following areas: molecular genetics, population genetics and ecology. The successful applicant will cooperate with various groups of biologists and palaeontologists working on the reconstruction of evolutionary processes using resting eggs of crustaceans which will be isolated from lake sediments. Classical ecological, genetic and genomic methods will be used to identify the long term consequences of climate change. Furthermore, the researcher will be responsible for the organisation of advanced training courses, participation in university teaching and in the acquisition of external research funding. The applicant should hold an earned Ph.D. in biology and have a strong publication record. Very good written and oral English language skills, fluency in German and interest in joining a multidisciplinary research team are required. The Bio+C Research Centre advocates gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference. The contract shall start as soon as possible and will initially be restricted to a period of two years with a possible extension being subject to personal performance and availability of funds. The duty station will be Frankfurt am Main, Germany. Official employer is SENCKENBERGISCHE NATURFORSCHENDE GESELLSCHAFT. Please send your application by mail or e-mail, including a detailed CV, 3 references, a list of publications and five selected reprints, until July 31 [ext. to August 14], 2008 to:

Prof. Dr. Dr. h.c. V. Mosbrugger, Scientific Coordinator Biodiversity and Climate Research

Centre, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mail to Personal & Service: bernd.schleich@senckenberg.de

For enquiries about the position and the contract conditions please write to Prof. Dr. B. Stribrny. E-mail: bernhard.stribrny@senckenberg.de. For enquiries about the scientific framework and practical work please write to PD Dr. K. Schwenk. E-mail: k.schwenk@bio.uni-frankfurt.de

Marie Buscail <mbuscail@senckenberg.de>

## BiK-Frankfurt CrustaceanPopulationGenetics 2

The Biodiversity and Climate Research Centre (Bio+C) has recently been founded by the Senckenbergische Naturforschende Gesellschaft, the Goethe-Universität Frankfurt am Main, and additional partners. It is funded by the Hessian State Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the Centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level. The Project Area C Adaptation and Climate invites applications for the position of a

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The contract shall start as soon as possible and will initially be restricted to a period of two years with possible extension being subject to personal performance and availability of funds. The duty station will be Frankfurt am Main, Germany. Official employer is SENKENBERGISCHE NATURFORSCHENDE GESELLSCHAFT.

Please send your application by mail or e-mail, including a detailed CV, 3 references, a list of publications and five selected reprints, until August 29, 2008 to Prof. Dr. Dr. h.c. V. Mosbrugger, Scientific Coordinator Biodiversity and Climate Research Centre, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mai to Personal and Service: bernd.schleich@senkenberg.de.

For enquiries about the position and the contract conditions please write to Prof. Dr. B. Stribrny. E-mail: bernhard.stribrny@senckenberg.de. For enquiries about the scientific framework and practical work please write to PD Dr. K. Schwenk. E-mail: k.schwenk@bio.uni-frankfurt.de.

PD Dr. Klaus Schwenk Ecology and Evolution Institut for Ecology, Evolution and Diversity Johann Wolfgang Goethe-Universität Frankfurt Siesmayerstraße 70 (Gebäude A) 60323 Frankfurt am Main

Tel.: ++49 (0)69 7982 47775 E-Mail: k.schwenk@bio.uni-frankfurt.de homepage: www.uni-frankfurt.de/~kschwenk/

kschwenk <k.schwenk@bio.uni-frankfurt.de>

## BiK-Frankfurt GeneAdaptation

The Biodiversity and Climate Research Centre (Bio+C) has recently been founded by the Senckenbergische Naturforschende Gesellschaft, the Goethe-Universität Frankfurt am Main, and additional partners. It is funded by the Hessian State Initiative for the Development of Scientific and Economic Excellence (LOEWE). The mission of the Centre is to carry out internationally outstanding research on the interactions of biodiversity and climate change at the organism level. The Project Area D “Laboratory Centre” invites applications for the position of a

Postdoctoral Researcher (Ref. TP D 5.1)

* *

The applicant will be responsible for a project aiming to identify candidate genes playing key roles for climate adaptation in various invertebrate taxa (/Daphnia/, /Chironomus/, /Radix/). The project investigates genes which are positively selected along a climate gradient, including cross-taxon similarities. To this end, genomic resources (EST bank, micro-array) for /Radix /have to be established; for the other taxa, these resources are already available. Furthermore, the technical implementation of the high throughput laboratory is part of the responsibilities. The incumbent will also be responsible for the organisation of advanced training courses. Participation in university teaching and in the acquisition of external research funding is highly desired.

The applicant should hold an earned Ph.D. in molecular biology, preferably with a strong focus on transcriptome analysis. She or he should already have experience with high throughput technologies and should be interested in ecological and climate change issues. Applicants should have a strong publication record. Very good written and oral English language skills, fluency in German and interest in joining a multidisciplinary research team are required, as well as proven organising abilities.

The Bio+C Research Centre advocates gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference.

The contract shall start as soon as possible and will initially be restricted until December 31, 2010 with a possible extension being subject to personal performance and availability of funds. The duty station will be Frankfurt am Main, Germany.

Please send your application by mail or e-mail, including a detailed CV, 3 references, a list of publications and five selected re/é-prints, until July 31, 2008 to

Prof. Dr. Dr. h.c. V. Mosbrugger, Scientific Coordinator Biodiversity and Climate Research Centre, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany. E-mail: vmosbrugger@senckenberg.de <mailto:vmosbrugger@senckenberg.de>

For enquiries about the position and the contract conditions please write to Prof. Dr. B. Stribrny (E-mail: bernhard.stribrny@senckenberg.de <mailto:bernhard.stribrny@senckenberg.de>) and for scientific enquiries to PD Dr. M. Pfenninger (E-mail: pfenninger@bio.uni-frankfurt.de <mailto:pfenninger@bio.uni-frankfurt.de>) or Prof. Dr. J. Oehlmann (E-mail: oehlmann@bio.uni-frankfurt.de <mailto:oehlmann@bio.uni-frankfurt.de>).

PD Dr. Markus Pfenninger Abt. Ökologie & Evolution J.W.Goethe-Universität BioCampus Siesmayerstraße D 60054 Frankfurt am Main Germany

Tel.: ++ 49 69 798 24714 Fax : ++ 49 69 798 24910 eMail: Pfenninger@bio.uni-frankfurt.de http:/-/user.uni-frankfurt.de/˜markusp Markus Pfenninger <Pfenninger@bio.uni-frankfurt.de>

## Chile Microevolution

POSTDOCTORAL POSITIONS AVAILABLE IN AT THE INSTITUTE OF ECOLOGY AND BIODIVERSITY (IEB), CHILE

CLOSING DATE FOR RECEPTION OF APPLICATIONS 30 SEPTEMBER, 2008 www.ieb-chile.cl The Institute of Ecology and Biodiversity (IEB) in Chile is offering a number of two-year postdoctoral positions for carrying out research in Chile related to the main research Foci and Cross-cutting themes of the Institute. Fellowships include a monthly stipend and an allowance for research expenses. Interested applicants should already be in possession of a Ph.D. degree or equivalent by 30 September, 2008. The two-year positions are open to Chilean citizens and foreigners living in and outside Chile, and may be held at any of the academic institutions associated with IEB. Fellows may use their stipends to support up to two months stay in a foreign country if this is considered desirable to carry out part of the proposed research. Knowledge of Spanish is not a requirement.

The main research Foci and Cross cutting themes are:

1) Palaeoecology and Biogeography 2) Ecosystems Ecology 3) Microevolutionary Processes 4) Conservation and Society / Global Change Impacts

IEB functions in a network mode and encourages collaborative and comparative research. Its lead scientists are academics at the Universidad de Chile (Santiago), Pontificia Universidad Católica de Chile (Santiago), Universidad de La Serena (La Serena), Universidad de Concepción (Concepción) and Universidad de Magallanes (Punta Arenas). More detailed information on the current specific research themes of the lead researchers of IEB and full listings of their sci-

entific publications can be found at www.ieb-chile.cl . Dr. Elie POULIN Laboratorio de Ecología Molecular (LEM) Instituto de Ecología y Biodiversidad (IEB) Departamento de Ciencias Ecológicas Facultad de Ciencias, Universidad de Chile Las Palmeras 3425, Casilla 653 CP 780-0024, Ñuñoa, Santiago, Chile

http://lem.dm.cl/ http://www.ieb-chile.cl/ Phone: (56)-2-9787298 Fax: (56)-2-2727363 E-mail: epoulin@uchile.cl

Elie Poulin <epoulin@uchile.cl>

## DalhousieU MarinePopulationGenetics

Support for a post-doctoral position is available in the laboratory of Daniel Ruzzante (Biology, Dalhousie University) in the area of population and conservation genetics of marine fish. The successful applicant will have experience with molecular techniques and a strong record of relevant publications in evolutionary or conservation genetics. The Department of Biology at Dalhousie has strengths in evolutionary/population and conservation genetics and the successful candidate will conduct the molecular aspects of his/her research in the Gene Probe Laboratory, a centralized molecular facility with ample opportunities for interaction with faculty, postdocs and students. Starting date winter - spring 2009.

If interested please send an e-mail application including CV, names and addresses of two to three referees and a statement describing the reason(s) for your interest in this research to: Daniel E Ruzzante, Associate Professor and Canada Research Chair in Marine Conservation Genetics, Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 4J1.(email: daniel.ruzzante@dal.ca, http://myweb.dal.ca/ruzzante )

Daniel Ruzzante, Associate Professor Canada Research Chair in Marine Conservation Genetics Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada, B3H 4J1 phone: (902) 494-1688 fax: (902) 494-3736 e-mail: daniel.ruzzante@dal.ca

http://myweb.dal.ca/ruzzante http://-patagonia.byu.edu Canada Research Chairs http://-www.chairs.gc.ca Daniel.Ruzzante@Dal.Ca

## Detroit Molecular Evolution Encephalization

Applications are invited for a postdoctoral fellow/research associate with Morris Goodman and Derek Wildman in the Molecular Evolution Laboratory at the Wayne State University School of Medicine, Detroit, Michigan, USA.

The project will involve a strong collaboration with Chet Sherwood (George Washington University).

The primary goal of this NSF funded project is to elucidate the genetic changes that orchestrated the expansion of the brain's neocortex during humankinds evolutionary history. The ideal candidate will have familiarity with phylogenetic reconstruction and a Ph.D. In Biology, Computer Science, Anthropology, or any Biomedical Science. In addition to conducting research, the candidate will be expected to participate in writing reports and manuscripts.

To apply, please submit applications (by e-mail to Morris Goodman or Derek Wildman), including (1) a CV, (2) brief statement of past accomplishments and PDFs of most relevant publications, (3) research interests and (4) names and contact information of three referees.

Morris Goodman (mgoodwayne@aol.com) Derek Wildman (dwildman@wayne.edu) http://-homopan.wayne.edu – Derek E. Wildman, Ph.D. Assistant Professor Center for Molecular Medicine and Genetics Department of Obstetrics and Gynecology Perinatology Research Branch/NICHD/NIH/DHHS Wayne State University School of Medicine 540 E. Canfield Ave. 3218 Scott Hall Detroit, MI 48201 USA Voice 313.577.8234 or 313.577.1253 Fax 313.577.5218 Web http://homopan.wayne.edu dwildman@wayne.edu dwildman@wayne.edu

## EmoryU VisionMolecularEvolution

Postdoctoral Positions available at Emory University

Molecular Genetics and Evolution of Dim-Light and Color Vision

For the last 20 years, we have been studying the molecular genetics and evolution of color vision in a diverse range of species, from fish to human. We are currently cloning the opsin genes of five deep- sea fishes lampfish (S. leucepsarus), loosejaw (A. scintillans), scabbardfish (L. fitchi), thornyhead (S. altivelis), and viperfish (C. macouni), which live at different depths, ranging from 200 to 4,000 m. Among these, the lampfish and viperfish emit bioluminescence at ~480 and the loosejaw at ~480 and ~700 nm. We plan to explore three features of visual pigments: 1) the molecular and chemical bases of the spectral tuning of visual pigments; 2) exploration of adaptive evolution by engineering ancestral pigments and performing mutagenesis analyses; and 3) co-evolution of paralogous pigments in each of the five deep-sea fish species. In experiments, molecular/cellular methods, such as construction and screening of DNA and cDNA libraries, DNA sequencing, mutagenesis, and transfection of cultured cells will be heavily used. In theoretical analyses, quantum chemical computations are performed in the Prof. Keiji Morokuma's (Co-PI) laboratory in Chemistry Department.

Currently, we are looking for recent graduates who are well versed in experimental molecular biology/genetics and are interested in evolution. If you are interested, please send CV to:

Shozo Yokoyama, Ph. D. Asa G. Candler Professor of Biology Department of Biology Emory University 1510 Clifton Road Rollins Research Center Atlanta, GA 30322 Tel:404-727-5379 FAX:404-727-2880 Email:syokoya@emory.edu

syokoya@emory.edu

## ESF ThermAdapt

***** PERMANENT CALL FOR SHORT-VISIT & EXCHANGE GRANT APPLICATIONS *****

In 2006 we launched a new ESF Programme on "Thermal adaptation in ectotherms: Linking life history, physiology, behaviour and genetics" (ThermAdapt); see http://www.esf.org/thermadapt . The Objective of this ESF Programme is to foster a multidisciplinary European network of scientists working on thermal adaptation. We particularly aim to integrate research at multiple levels of investigation, including genetics, physiology, ecology, behaviour or theory. Interested persons or groups are encouraged to join our activities. These include advertising their expertise via our web site, and participation in various activities to be announced separately and regularly over the next 5 years such as workshops, training courses, short and long exchange grants, exchange of specimens and expertise, sharing of facilities, and scientific collaboration of any kind.

We PERMANENTLY call for applications for

==> Short Visit (< 15 days) and Exchange Grants (15 days - 3 months)

There is no particular deadline. Instead, submission of grant proposals is now PERMANENTLY OPENED, as explained on our web site http://www.esf.org/-thermadapt under > Grants, where the application procedure is also outlined. These grants are competitive and open for all ranks (including MSc/PhD students). We shall periodically review submissions about every 3 to 4 months.

Proposals should be broadly related to the scientific objectives of the Programme. Short Visits may serve for planning collaborative research projects, brief data gathering or data analysis. The longer-term Exchange Grants typically involve planning and execution of a larger collaborative research project (under special circumstances stays longer than 3 months may be possible).

Grant applications will be chosen based on scientific quality, and priority will be given to applicants who come from or intend to visit countries supporting the programme (Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Netherlands, Portugal, Slovenia, Spain, Switzerland), but other European nations can be involved.

For further inquiries, or if you wish to be included in the ThermAdapt e-mail list to receive regular updates on Programme activities, please contact:

Ellen Degott (ESF office liaison; Email: edegott@esf.org) Wolf Blanckenhorn (chair; Email: wolf.blanckenhorn@zm.uzh.ch) Mauro Santos (co-chair; Email: mauro.santos@uab.es)

Dr. Wolf Blanckenhorn Chairman ESF ThermAdapt Programme Zoological Museum University of Zurich-Irchel 34 (building)-J (floor) -98 (office) Winterthurerstrasse 190 CH-8057 Zurich

Phone: +41 44 635.47.55 Fax: +41 44 635.47.80 e-mail: wolf.blanckenhorn@zm.uzh.ch http://www.esf.org/-thermadapt wolfman@zm.uzh.ch

## Grenoble France BacterialAdaptation

Applications are invited for a postdoctoral research associate with Dominique Schneider in the Laboratory "Adaptation et Pathogénie des Microorganismes", University Joseph Fourier, Grenoble, France.

The project will involve a strong collaboration with Richard Lenski (Michigan State University).

The sequence of hundreds of bacterial genomes uncovered the extraordinary diversity and plasticity of metabolic and regulatory networks. However, the dynamics of evolution of such a wide range of functions, and especially the link between genomic modifications, diversity and overall performance of a living organism remains a challenging yet fascinating task. For most microbiologists, "mechanism" refers to the biochemical or regulatory interactions among genes, proteins and metabolites in a cell. All these interactions have however to be related to fitness, the measure of the reproductive ability of a genotype which is the ultimate parameter of ecological success. Dynamics of entire genomes is one key of fitness changes, ultimately driving the interactions among genotypes and between genotypes and their environment. By linking changes in genomes to changes in fitness, it is possible to investigate how natural selection is able to re-shape and improve entire genomes, and which functions are more plastic over evolutionary time. Using such an evolutionary perspective is fully complementary to most "Systems Biology " approaches, which try to understand the global functioning of an organism by the precise analysis of a reference clone and therefore provide a static description of metabolic or regulatory networks. Using an evolutionary perspective is however difficult mainly because the relevant adaptive events that allowed the emergence of the present genomic structure of the organism occurred some unknown time in the past, in unknown conditions, with unknown genomic constraints. To overcome these limitations, we can reproduce evolution in controlled conditions in the laboratory.

In this project, we will use the longest-running evolution experiment, where an ancestral cell of /Escherichia coli/ has been used to propagate twelve populations in a defined environment for 40,000 generations. The evolutionary dynamics of genomes will be investigated by performing Solexa-sequencing of genomes from 135 evolved clones sampled from the different populations at each of ten different time points during evolution. Among many questions that will be addressed, this project will enable us to understand the successive genetic events leading to the increased performance of bacteria in their environment. Rigorous genetic and functional phenotypic analyses will be combined to dissect the complete adaptive diversification paths that will be uncovered in key populations. We will study how adaptive mutation appearance is constrained by the presence of other mutations and how they affect the metabolic or regulatory networks. We will therefore address for the first time how evolvable are genomic features and what are the molecular bases of such evolvability.

Candidates must have a Ph.D. in Genetics, Molecular and Evolutionary

Biology or related field. Expertise in sequence analyses is requested. All candidates are expected to have a background or interest in molecular evolutionary genetics. In addition, the candidates should have expertise in molecular biology, and computational skills for genome sequence analyses.

To apply, please submit applications (by e-mail to Dominique Schneider), including (1) a CV, (2) brief statement of past accomplishments and PDFs of most relevant publications, (3) research interests and (4) names and contact information of three referees.

Dominique Schneider

Laboratoire Adaptation et Pathogénie des Microorganismes

CNRS UMR5163

Université Joseph Fourier

Institut Jean Roget

Domaine de la Merci

BP170

38042 Grenoble Cedex 9

France

Phone: +33 (0) 4 76 63 74 90

Fax: +33 (0) 4 76 63 74 97

E-mail: dominique.schneider@ujf-grenoble.fr

http://www-ijr.ujf-grenoble.fr/ – Dom Schneider Laboratoire Adaptation et Pathogénie des Microorganismes CNRS UMR5163 Université Joseph Fourier Institut Jean Roget Domaine de la Merci BP170 38042 Grenoble Cedex 9 France Phone: +33 (0) 4 76 63 74 90 Fax: +33 (0) 4 76 63 74 97 E-mail: dominique.schneider@ujf-

grenoble.fr http://www-ijr.ujf-grenoble.fr/ Dominique Schneider <dominique.schneider@ujf-grenoble.fr>

## ImperialCollegeLondon EcolEvol

Imperial College London

Division of Biology

Faculty of Natural Sciences

Research Associate â Ecology and Evolution

Salary: Â£25,310 - Â£28,910 per annum

Imperial College London is ranked in the top five universities of the world, according to the 2007 Times Higher Education Supplement league tables.

We are seeking a highly analytical candidate to fill the post of Research Associate within the Department of Life Sciences at the Silwood Park Campus of Imperial College London. The successful candidate will work with Dr Tim Barraclough and his research group (http://www3.imperial.ac.uk/people/t.barraclough). You will conduct scientific research on the ecological and evolutionary responses to changing environments in a laboratory assemblage of bacterial species. You will be required to apply a number of techniques within the laboratory including isolation, culturing, cell density estimation and fitness assays of bacteria in monoculture and mixtures, plus some molecular techniques. You will perform independent and original research and prepare results for publication to refereed journals.

To be considered for this position, you will hold a PhD or equivalent level of professional qualification in evolutionary biology, ecology or microbiology; have experience in isolating and culturing bacteria or other microbes and a strong interest in evolutionary ecology. You will also have experience of experimental design and statistical analysis. Ideally you will have experience of laboratory evolution experiments.

The post is funded by the Natural Environment Research Council (NERC) for a period of 3 years in collaboration with Dr Thomas Bell at the University of Oxford.

For informal enquiries please contact Dr Tim Barraclough: t.barraclough@imperial.ac.uk

Further details and an application form can be obtained from the College employment website: http://www3.imperial.ac.uk/employment/research Completed application forms accompanied by a curriculum vitae and the name and contact details of two referees should be sent to: Dr Tim Barraclough, Imperial College, Silwood Park Campus, Buckhurst Road, Ascot, Berkshire, SL5 7PY or by email to: t.barraclough@imperial.ac.uk

Closing date: 28 August 2008

Valuing diversity and committed to equality of opportunity

Timothy Barraclough <t.barraclough@imperial.ac.uk>

## INRA France PopulationGenetics

A postdoctoral position in population genetics is available as part of a program on evolutionary history of Prunus species. The position is for a year, will start in the fall of 2008, and will be located at INRA, Bordeaux, France.

The postdoctoral project aims at studying the impact of the reproduction system and genetic structure on the extent of linkage disequilibrium in two cultivated Prunus species.

Candidates must have a PhD in biology, genetics, evolutionary bology or in a related field. Review of applications will begin immediately and continue until the position is filled.

For any question on the position, write to Stephanie Mariette (smariett@bordeaux.inra.fr). Application documents should include a C.V. and a publication list, a summary of past research interests and PDFs of most relevant publications, and the names and email addresses of two potential referees. Applicants are invited to send their documents electronically to Stephanie Mariette (smariett@bordeaux.inra.fr).

Dr. Stephanie Mariette INRA UREF 71, avenue Edouard Bourlaux BP 81 - 33883 Villenave d'Ornon Cedex France Tel: 33 557 122 450 Fax: 33 557 122 439 Email : smariett@bordeaux.inra.fr

smariett@bordeaux.inra.fr

## INRA-Versailles PlantTEs

I would like to post the following annoncement on the EvolDir web site. The topic is not directly related to the study of evolutionary issues, but the functional impact of transposable elements may eventually play a role in the evolution of host genomes and in their adaptation to environmental changes. I have therefore the feeling that some EvolDir readers may be interested in this announcement.

Sincerely Yours

Marie-AngÃle Grandbastien

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LTR-Stress: Retroviral-type LTRs as intermediate of the stress response in plants

A three-year postdoctoral position is available in the team "Host-Transposons Interactions and Plant Biodiversity" (http://www-ijpb.versailles.inra.fr/en/bc/-equipes/Transposons/index.html), at the Institut Jean-Pierre Bourgin, Laboratoire de Biologie Cellulaire, INRA-Versailles, France.

The project will focus on testing how the transcriptional activation of the tobacco Tnt1 retrotransposon may impact the expression of cellular genes in response to stress or at developmental stages such as senescence. The work is based on our previous expertise on Tnt1 expression and on observations that LTRs of retrotransposons can drive the expression of chimeric co-transcripts with adjacent genic regions, and may play a role in host phenotypic plasticity.

Good experience in gene expression analysis (Northerns, RT-PCR, analysis of transcriptional features) is required. Expertise in retroelements (in animal or in plant systems) will also be appreciated.

The starting date will be beginning of 2009.

Requirement: the candidate must not have held a previous CDD position at INRA for more than 6 months

Send a curriculum vitae, research interests, long term goals, and two recommandations contacts to:

Dr Marie-AngÃle GRANDBASTIEN (gbastien@versailles.inra.fr) Laboratoire de Biologie Cellulaire Institut Jean-Pierre Bourgin INRA-Centre de Versailles 78026 Versailles cedex, France gbastien@versailles.inra.fr tel: 33 1 30 83 30 24 fax: 33 1 30 83 30 99

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Marie-AngÃle GRANDBASTIEN Laboratoire de Biologie Cellulaire Institut Jean-Pierre Bourgin INRA - Centre de Versailles 78026 Versailles, France Tel: 33 (1) 30 83 30 24 Fax: 33 (1) 30 83 30 99 Email: gbastien@versailles.inra.fr

Marie Angï¿½le Grandbastien <Marie-Angele.Grandbastien@versailles.inra.fr>

## Israel OliveTreeGenetics

POST-DOC POSITION

A post-doctoral position is available in an interdisciplinary research team studying phenotypic and genetic variation of East Mediterranean old olive trees in relation to environmental parameters. We look for a Ph.D. highly skilled in molecular biology and genetic marker techniques and in population genetic data analysis. The position requires working in two collaborating laboratories in Germany (Mainz University) and Israel (Agricultural Research Organization), and in cooperation with several research groups involved in the project.

We will combine different methodologies to evaluate the genetic and phenotypic variation of old grafted olive trees to assess environment x genotype interactions. The research will address evolutionary aspects of the domestication process that led to East Mediterranean cultivars, and to try and understand the genetic basis of adaptation in olive trees. For more information please contact Dr. Oz Barazani (barazani@agri.gov.il).

Applications together with names and addresses of three referees should be sent to:

Prof. Joachim W. Kadereit (kadereit@uni-mainz.de), or Dr. Oz Barazani (barazani@agri.gov.il).

Oz Barazani <barazani@volcani.agri.gov.il>

## Leipzig Rwanda MountainGorillas

Postdoctoral Researcher: Population biology and Feeding Ecology of Virunga Mountain Gorillas

We are seeking a postdoctoral scientist to conduct an in-depth investigation of the population biology and feeding ecology of the Virunga mountain gorillas in Rwanda. Despite numerous, detailed studies conducted on the feeding ecology of mountain gorillas at Karisoke Research Center, Rwanda and other areas of the Virunga Volcanoes, many questions remain. In par-

ticular, additional ecological studies can contribute to our understanding of trends in population dynamics over the past decades and assist in conservation efforts of this critically endangered population.

In particular, we are interested in examining the following questions: -how has the availability of food resources for the gorillas changed over time (area last surveyed 15-30 years ago)? -how does the availability of food resources vary in different regions of the Virunga Volcanoes? -what is the energy intake and energy expenditure of the gorillas and does it change depending on season, group size, etc? -what is the relationship between group size and within-group feeding competition?

To address these questions, the person will conduct vegetation surveys in the area of the Karisoke research center as well as other regions of the Virunga Volcanoes. Behavioral observations will be made on the habituated gorillas at the Karisoke Research Center to measure food intake as well as measures of feeding competition. Additionally, the person will assist with supervising Rwandan undergraduate and MSc students with their field work projects.

The position will be jointly funded by the Max Planck Institute for Evolutionary Anthropology and the Dian Fossey Gorilla Fund International. For more information about MPI-EVAN, please see: http://-www.eva.mpg.de/primat/. The person will spend the first few months in Leipzig, Germany developing the project, then the next year in Rwanda conducting field work, followed by additional time in Leipzig for analysis and write-up. The position will start approximately November 1, 2008 and run for 1-2 years.

Qualifications

The successful candidate:

-must have completed a PhD in biology, zoology, anthropology, or related field. -must have prior field work experience, preferably with ecological studies. -must have experience working in a developing country, preferably in Africa. -must be fluent in English and have basic knowledge of French. -must be able to work independently, responsibly, and show evidence of ability to help supervise student projects. -have excellent verbal and written skills. -must have knowledge of statistics. -must be prepared to write grants to help fund the project.

Please send the following to to Dr. Martha Robbins: - CV (resume) - letter of interest, that includes a description of your field research experience - names and email addresses of 3 referees

Salary: 2, 100 euros per month. Airfare from Germany to Rwanda provided.

Deadline: September 15, 2008

Martha Robbins <robbins@eva.mpg.de>

## NewYorkU PlantPhylogenies

A postdoctoral position is available immediately for an NSF-funded project (contingent on final approval) to reconstruct the phylogenies and examine the molecular evolution of all gene families in Arabidopsis and rice. The position is for one year, renewable annually for up to three years depending on satisfactory performance. The postdoctoral fellow will work directly with Michael Purugganan (NYU) and Rob DeSalle (AMNH), and is part of a larger project titled "The Arabidopsis Proteome Folding Project" (Richard Bonneau, NYU, PI). There are opportunities in this project to work with computational biologists on evolution of protein structure and function. The ideal candidate will have experience in phylogenetic and molecular evolutionary methods. The Center for Genomics and Systems Biology at NYU, where the postdoc will be based, is a dynamic group (http:// biology.as.nyu.edu/object/facilities.gsb.html) and is located in the Greenwich Village campus in downtown Manhattan, and together with the Department of Biology (http://www.nyu.edu/fas/dept/biology), offers an outstanding and collegial research environment.

The deadline for applications is August 15, 2008. Please send your CV and contact information for at least three individuals who can act as references to: Michael Purugganan at mp132@nyu.edu. NYU is an Equal Opportunity/Affirmative Action Employer.

Michael Purugganan Dorothy Schiff Professor of Genomics

Department of Biology Center for Genomics and Systems Biology 100 Washington Square East New York University New York, NY 10003

Tel. (212) 992 9628 Web: http://biology.as.nyu.edu/-object/MichaelPurugganan.html mp132@nyu.edu mp132@nyu.edu

## NHM London FlatwormEvoDevo

Postdoctoral Research Associate

The Natural History Museum, Department of Zoology

We are seeking to appoint a highly motivated and productive Postdoctoral Research Associate to join a new programme of research entitled "Developmental genes in the life cycle of a parasitic flatworm". This work seeks to characterize the roles of key homeotic genes in the processes of metamorphosis and segmentation in tapeworms and represents a major component in understanding the genetic processes underlying the evolution of parasitism in flatworms (see Olson. 2008. Parasitol Int 57:8-17). The successful candidate will use gene expression and suppression techniques in a beetle and mouse- hosted tapeworm model to explore the roles of Hox, ParaHox and other relevant genes (eg. -catenin). Techniques including whole-mount and genomic ISH, PCR-RACE, and Q-PCR will be employed, and methods for RNA interference will need to be adapted to a cestode model.

The post is funded by the BBSRC for up to three years and will be undertaken within the well-equipped laboratories of the Natural History Museum in South Kensington under the supervision of Dr Peter Olson. The appointment will be on a Band 5 pay scale starting at 29,000 pa.

Applicants should possess a background in molecular biology, parasitology or evolutionary developmental biology, with a Ph.D. in a related subject area. Significant experience in genetic manipulation including RNA-based techniques and a willingness to work with live animal cultures are prerequisites, and experience with gene expression and functional genomic techniques such as ISH and RNAi is highly desirable. The successful applicant will have a strong publication record and proven experience in applying one of more of these multidisciplinary skills to a singular research question within or outside the field of parasitology.

Applications including a short CV, list of publications, names of three referees willing to provide a letter of recommendation upon request, and a brief statement on interest and qualifications should be sent to p.olson@nhm.ac.uk.

Closing date for applications: Oct 15, 2008.

Dr Peter D Olson Department of Zoology 709 Darwin Centre The Natural History Museum Cromwell Road, London SW7 5BD United Kingdom

+44 (0)207 942 5568 (Office) +44 (0)207 942 5151 (Fax) +44 (0)207 942 5427 (Molecular Biology Unit) http://www.nhm.ac.uk//research-curation/staff-directory/zoology/ cv-6456.html

Interested in utilizing museum resources for systematic research? See funding opportunities via SYNTHESYS http://www.synthesys.info/ NEW Open Access Journal!

BMC Parasites & Vectors http://-www.parasitesandvectors.com "Dr. PD Olson" <P.Olson@nhm.ac.uk>

## NorthCarolinaStateU PopulationBiology

NC State University — Population Biology/Epidemiology/Modeling

Postdoctoral Fellowship

POPULATION BIOLOGY / EPIDEMIOLOGY / MODELING: We are searching for a postdoc who has a strong theoretical or empirical background in population ecology/genetics to work on an NIH- and Gates Foundation- funded project aimed at decreasing the mosquito-vectored human disease, dengue fever.

QUALIFICATIONS: Although substantial experience with building simulation models is desirable, we will consider applicants who have little experience with model building, but have a strong record of picking up new quantitative skills. In depth knowledge of statistical methods is a plus.

PROJECT DESCRIPTION: The project is aimed at building and testing stochastic, spatially explicit, simulation models that link insect population dynamics, disease epidemiology, and population genetics in a way that can contribute to improving strategies for releasing transgenic mosquitoes to reduce the incidence of human disease. Sensitivity analysis and uncertainty analysis of model outputs will be critical in assessing reliability.

The fellowship is for 2 years (starting as soon as possible) but could be extended for a third year pending additional funding. In addition to working on model development and analysis, the person in this position will collaborate in an interdisciplinary group composed of mosquito ecologists, disease epidemiologists, molecu-

lar biologists, biomathematicians, ethicists, and scientists from disease-endemic countries, in efforts to develop novel transgenic strategies for disease reduction. The person in this position will work with the PIs (Fred Gould & Alun Lloyd) and another postdoc in organizing a workshop to teach other researchers how to use the models.

There are opportunities for some empirical research (if desired), and for interactions with other members of the lab who are working on other ecological and evolutionary research projects. NCSU is developing an interdisciplinary graduate program in Genetic Pest Management, so there are likely to be teaching opportunities (if desired). http://www.ncsu.edu/project/gpm/ An overview of the area of research and an entry point to relevant literature can be found in:

Gould, F. K. Magori, and Y. Huang. 2006. Genetic strategies for controlling mosquito-borne diseases. Am. Sci. 94:238-246.

Sinkins, S. P., and F. Gould. 2006. Gene-drive systems for insect disease vectors. Nat. Rev. 7:427-435.

North Carolina State University is a leading research institution with a strong commitment to the study of quantitative and population genetics. The University is situated in Raleigh, NC and is within 30 miles of Duke University, UNC-Chapel Hill, NIEHS, an EPA research unit, and the Research Triangle Park. NC State University is an equal opportunity and affirmative action employer.

To apply: Send to Fred_Gould@NCSU.edu 1) A one or two page letter of intent. 2) CV, and 3) Names of 3-4 references. The closing date for applications is October 15, 2008, or until a suitable candidate is found.

For further information call Fred Gould at 919-515-1647 or email to above email address.

fred_gould@ncsu.edu

Fred Gould <fred_gould@ncsu.edu>

## Portugal Borneo ConsGenetics

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Post-doc job in conservation genetics: habitat fragmentation and large mammals of Borneo

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The Population and Conservation Genetics group (http://www.igc.gulbenkian.pt/research/unit/88) is looking for a post-doctoral researcher to work on the impact of fragmentation on large mammals from Borneo. The project will involve lab, field and simulation work in collaboration with L. Chikhi (in Portugal) and B. Goossens (in Malaysia).

The post-doctoral candidate is expected to work in close collaboration with a technician who will be hired on the same project. Since the post-doc and technician are expected to be complementary, we are open regarding the profile that the post-doctoral should have. S/he could thus be a biologist with a strong interest for modelling, a biologist working in the laboratory or a theoretician with an equally strong interest in biological problems. Excellence and adaptability are the main selection criteria.

The Month Stipend follows the regulations of the FCT Scientific Fellowships in Portugal (1495.00/month) and will initially be for 18 months but the successful candidate will be encouraged to apply for independent funding from international or Portuguese funding bodies.

The post-doc will be based at the Instituto Gulbenkian de Ciencia (IGC, http://www.igc.gulbenkian.pt/) which is a leading Research Institute in Portugal and in Europe. Researchers at the IGC work on a wide range of subjects from epidemiology, to genetics, evolutionary biology, bioinformatics and theoretical immunology. The IGC is located in Oeiras, a small sea-side town 20 min. by train from downtown Lisbon, along the Tagus. It is only 10-15 min. walking distance from the beaches and the quality of life is excellent. The IGC provides excellent research conditions and English is the communication language among and within groups. Several other research institutions are located near-by addressing both fundamental and applied questions in biomedical sciences using interdisciplinary approaches.

Applications in PDF format will be accepted by email only (to chikhi at igc.gulbenkian.pt) until September 15th, 2008, and will include: -a short CV -a motivation letter -two recommendation letters (sent independently by referees) or contacts of two referees

– ##### Lounès Chikhi Chargé de Recherche CNRS UMR CNRS Evolution et Diversité Biologique, Toulouse chikhi@cict.fr

—– NOUVELLE ADRESSE (01/10/2007 AU 30/09/2008): —– Population and Conservation Genetics Group Instituto Gulbenkian de Ciência Rua da Quinta Grande, 6 P-2780-156 Oeiras, Portugal Tel: +351 21 446 46 71 Fax: +351 21 440 79 70 chikhi@igc.gulbenkian.pt #####

chikhi@cict.fr chikhi@cict.fr

## Portugal PolarPhytoplanktonTranscriptomics

Applications are invited for postdoctoral researchers to work in the emerging and exciting field of environmental community transcriptomics. The project is concerned with the study of Antarctic and Arctic phytoplankton assemblages, focusing on diatom- dominated communities. The applicant will work as part of a multinational and multidisciplinary team studying climate forcing and tipping points in Polar ecosystems in response to climate forcing factors. The specific area of research will involve the assessment of early gene expression responses at the community level using high-throughput pyrosequencing of the "community transcriptome". The collection and analysis of these data from community samples will be the major challenge and responsibility of the successful candidate, to be supplemented with traditional molecular and gene expression approaches (e.g., quantitative real-time PCR), to assign particular genes of interest to community components, and investigate these in laboratory cultures.

The successful candidate will have a strong background and expertise in one or more of the following areas; environmental genomics, high throughput sequencing, and bioinformatics.

Applications will be submitted to FCT (Portuguese Science Foundation) for funding, and will be dependent on their approval by FCT. The post also allows the opportunity for independent-minded researchers to develop their own research themes within the group. The work will be mainly conducted at CCMAR, Algarve, Portugal, in the team MAREE (http://ccmar.ualg.pt/-maree/), in collaboration with Gareth Pearson (CCMAR), Carlos Duarte and Susana Augusti (IMEDEA, CSIC, Spain).

(Net income is 1495 euros/month, tax free, duration maximum 6 years, start date January 2008 or later)

Interested applicants should send a CV and e-mail contacts of 3 referees to eserrao@ualg.pt by August 31.

eserrao@ualg.pt

## PurdueU EvolutionaryBiol

NSF-funded postdoc opportunity with Peter Waser and Andrew DeWoody at Purdue University

A postdoc position in evolutionary biology/genetics is available at Purdue University. Strong molecular and/or bioinformatic skills are essential, as this project may involve microsatellite genotyping, sequencing MHC genes, or genomic analyses of the kangaroo rat genome sequence. For more information, contact Andrew DeWoody or see http:/-/www.agriculture.purdue.edu/fnr/html/faculty/-DeWoody/index.html .The cost of living in West Lafayette is low, and we are only an hour from Indianapolis and two hours from Chicago. Motivated applicants should submit (as PDFs) a short letter of interest, a curriculum vitae, relevant reprints, and contact information for three references.

For more about our kangaroo rat research, see:

Skvarla J., Nichols J.D., Hines J.E. & Waser P.M. (2004). Modeling interpopulation dispersal by banner-tailed kangaroo rats. Ecology 85:2737-2746.

Waser P.M., Busch J., McCormick C.R. & DeWoody J.A. (2006) Parentage analysis detects cryptic pre-capture dispersal in a philopatric rodent. Molecular Ecology 15:1929-1937.

Waser P.M. & DeWoody J.A. (2006) Multiple paternity in a philopatric rodent: the interaction of competition and choice. Behavioral Ecology 17:971-978.

Busch J.D., Waser P.M. & DeWoody J.A. (2007) Recent demographic bottlenecks are not accompanied by a genetic signature in two populations of banner-tailed kangaroo rats (Dipodomys spectabilis). Molecular Ecology 16:2450-2462.

Busch J.D., Waser P.M. & DeWoody J.A. (2008) Characterization of expressed class II MHC loci in the banner-tailed kangaroo rat (Dipodomys spectabilis) reveals multiple DRB loci. Immunogenetics (in press).

dewoody@purdue.edu dewoody@purdue.edu

## QueensU FishPopulationGenetics

Dear all,

We would be very grateful if you could pass details onto any of your colleagues whom you think might be interested in the following positions in Fish Genetics Research available at Queen's University Belfast:

1- Senior Researcher in Fish Population Genetics: - The School of Biological Sciences, Queen's University Belfast, Northern Ireland - UK, is seeking to employ ONE Postdoctoral Senior Research Fellow in Fish Population Genetics under the Beaufort Marine Science Awards. The successful applicant will join the Beaufort Fish Population Genetics Research Centre, which also involves researchers from University College Cork and the Marine Institute, Ireland. This position is available for up to 7-years, from the date of appointment.

The Senior Researcher will participate in the practical implementation of an all-Ireland programme in Fish Genetics, aiming to generate high-level of research activity and to produce publications in the area of population and evolutionary genetics initially of brown trout and European lobster, and in conjunction with University College Cork, Atlantic salmon and Atlantic cod. Research on these species will be primarily focused on questions related to: local adaptation; stock management; phylogeography; identification of conservation units; the genetic impact of fishing; farm escapes; stock enhancement and commercial ranching on local populations; the effects of habitat fragmentation and climate change on local populations. The successful candidate will be expected to produce a regular output of first author publications in ranking journals, and collaborate on those of the rest of the research group.

There will be good opportunity for the development and implementation of independent research projects within the remit of the programme of the Beaufort Fish Population Genetics Research Centre (Salary range: £28,290 - £36,912 per annum, including contribution points - see www.qub.ac.uk/sites/QUBJobVacancies/-ResearchJobs/ for further details on the position and how to apply).

2- One PhD Studentship. The holder of this four year PhD studentship, based at Queen's University Belfast, will undertake a research project in line with the research programme of the Beaufort Fish Population Genetics Research Centre. Depending on the student's aptitudes, research will be focused either on brown trout or European lobster population genetics. Research topic will address a number of issues including: local adaptation; stock management; phylogeography; identification of conservation units; the genetic impact of fishing; farm escapes; stock enhancement and commercial ranching on local populations; the effects of habitat fragmentation and climate change on local populations. Highly motivated and interested applicants should have a good degree or equivalent in Biological Sciences, or related subject. They are also expected to have good theoretical background and interest in population and evolutionary genetics; good writing skills, and practical experience generating and analyzing molecular data. This position is particular suited for students with an aptitude/interest in developing skills in statistical genetics. The successful applicant will receive a stipend of approximately £13,771 - 14,610 per annum plus tuition fees (£3,541 -3,757 per annum). As part of the PhD studentship, limited funding is available for stays in international centres of excellence. It is envisaged that this PhD will begin in September/October 2008.

Applications should be made preferably through the University admissions portal at https://-pg.apply.qub.ac.uk/home or via submission of a short cover letter (max 500 words) outlining the reasons why they are particularly suited for a PhD and C.V. (less than 2 pages), via e-mail email, to Paulo A. Prodohl (email: p.prodohl@qub.ac.uk). A one page abstract describing final year undergraduate project or MSc Project should also be included if available.

Many thanks

Paulo

Paulo A Prodöhl Reader in Population & Evolutionary Genetics School of Biological Sciences Queen's University Belfast Medical Biology Centre, 97 Lisburn Road Belfast BT9 7BL Northern Ireland - UK

P.Prodohl@qub.ac.uk P.Prodohl@qub.ac.uk

## RiceU BacterialGenomeEvolution

We are seeking applications for postdoctoral positions with our group, focusing on developing computational tools for evolutionary analysis of bacterial genomes (with emphasis on the detection of horizontal gene transfer, and other events that lead to gene tree incon-

gruence). The project is an ongoing collaboration between Prof. Luay Nakhleh at Rice University in Houston, TX, and Prof. Hideki Innan at the Graduate University for Advanced Studies, in Japan. Openings are available both in Houston and Japan. The duties include developing computational phylogenomics tools as well as data analysis. The candidate should have a solid background in evolutionary biology and computational phylogenetics, with experience in algorithm design and software implementation. Applicants should submit a CV, 1-2 representative publications in PDF format, and a list of at least three potential recommendations with contact information by email to nakhleh@cs.rice.edu. For more details, please see our group's website at http://bioinfo.cs.rice.edu/ . Thank you. Luay

Luay Nakhleh http://www.cs.rice.edu/ ~ nakhleh nakhleh@cs.rice.edu

Luay Nakhleh <nakhleh@rice.edu>

## UAdelaide AncientDNA

Developing new methods to retrieve and analyse preserved genetic information for forensics, archaeology and ancient DNA.

ARC Senior Research Associate Australian Centre for Ancient DNA (ACAD) School of Earth and Environmental Sciences

Job Reference Number: 15126

A three year Australian Research Council (ARC)-funded Postdoctoral position is available at the Australian Centre for Ancient DNA in Adelaide (http://-www.ees.adelaide.edu.au/acad/). The project is to research and develop revolutionary new methods to extract and characterise DNA from a range of unusual ancient samples including ancient bones and teeth, sunken ship timbers, stone tools, sediments and other ancient materials. The project is an ARC LINKAGE collaboration with the National Geographic Society, Australian Federal Police, and Forensics South Australia. The main aim of the project is to comprehensively re-assess and re-design current approaches to ancient/damaged DNA characterisation from the ground up, and to develop and extend recent new molecular approaches to DNA recovery and detection such as SPEX (Brotherton et al. NAR 2007), paleogenomic library construction and new approaches to sequencing.

You will need a first-rate knowledge and experience of practical molecular biology, and expertise in nucleic acids biochemistry. You should have a demonstrated ability to work from a first principles basis, with minimal reliance on kits and pre-designed systems. The work will be experimentally challenging due to the difficult nature of the genetic templates, but this is a rewarding opportunity to undertake a complete overhaul of current ancient DNA and molecular archaeological practice. An interest in ancient DNA, archaeology or natural history would be very useful.

The position will be supported by a full time Technician, and will make use of the international quality ACAD facilities, and an extensive collection of >4,000 ancient samples from locations around the world covering the past 200,000 years.

You should have: o a PhD or equivalent in Molecular Biology, Nucleic Acids Biochemistry or equivalent o demonstrated knowledge and experience of molecular biology laboratory methods at the most fundamental levels o excellent written and oral communication skills with the ability to liaise collaborate and interact with a wide range of international scientific researchers o experience with advanced computational packages

Salary: (Level B) $70,075 - $83,215 per annum.

Plus an employer superannuation contribution of 17% may apply.

This fixed-term position is available immediately for a period of 3 years. Adelaide University is one of the 'Group of 8' leading Universities in Australia, in a cosmopolitan city offering an outstanding quality of life, with excellent food and wine and a low cost of living.

Further information may be obtained from Dr Jeremy Austin jeremy.austin@adelaide.edu.au, Prof. Alan Cooper, alan.cooper@adelaide.edu.au, Dr Wolfgang Haak (wolfgang.haak@adelaide.edu.au), or Dr Kefei Chen (kefei.Chen@adelaide.edu.au).

Deadline: 15 August 2008

Your application must o include your résumé/Curriculum Vitae o address the selection criteria o quote the relevant reference number o include the names, addresses and/or email details of three referees

Email applications to Maria Lekis <maria.lekis@adelaide.edu.au> or forward in duplicate to:

Maria Lekis School of Earth and Environmental Sciences The University of Adelaide South Australia 5005

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Prof. Alan Cooper, Federation Fellow

Darling Blg (DP 418), Rm 209b University of Adelaide North Terrace Campus South Australia 5005 Australia

Email: alan.cooper@adelaide.edu.au Ph: 61-8 -8303-5950/3952 Fax: 61-8-8303 4364

http://www.ees.adelaide.edu.au/acad/
alan.cooper@adelaide.edu.au

## UArizona EvolBiology

Positions Available: Research Associate Arizona Research Laboratories, University of Arizona NIH-IRACDA Program in Postdoctoral Excellence in Research and Teaching (PERT)

The Postdoctoral Excellence in Research and Teaching (PERT) Program is a comprehensive program which offers up to three years of support to outstanding candidates seeking advanced post doctorate research training, teacher training and student mentorship in preparation for an academic career. Another desired long-term outcome is to increase the number of well-qualified underrepresented minority students entering competitive careers in biomedical research.

PERT trainees may select from over forty-two faculty research mentors representing a broad range of disciplines in biomedicine, bioengineering, genetics, biochemistry, neurobiology, evolutionary biology, molecular/cellular biology, physiology and behavior. The program stresses the use of non-vertebrate models for Biomedical and Life Sciences research. The program is administered through the Arizona Research Laboratories Division of the Center for Insect Science and is partnered with a Minority Serving Institution, Pima Community College.

Starting salary, based on the NIH NRSA scale, will be $36,996 for program participants with less than one year of postdoctoral experience, and includes an annual allowance for research supplies and travel. Positions are dependent upon continued funding. Additional information about the Center for Insect Science and the PERT program is available at http://cis.arl.arizona.edu/PERT .Qualifications: Applicants must have, as of the beginning date of the appointment, a Ph.D. in a related field from an accredited institution and must be U.S. citizens or permanent residents. Applicants should have no more than two previous years of postdoctoral experience at the time of application.

Application: All applicants must apply electronically through the University of Arizona's Career Track website at: https://www.uacareertrack.com, citing job #41586. All applications are to include: –a letter of interest with a statement explaining how the PERT program will assist the applicant in his/her goals. –a CV –a three to six page research proposal developed with the intended PERT faculty research mentor describing the project to be undertaken during the training period –three letters of reference –a letter of support from the intended faculty research mentor

Original letters of reference and the letter from the proposed faculty research mentor should be mailed to: PERT, Center for Insect Science, 1007 E. Lowell Street, University of Arizona, Tucson, AZ 85721-0106. The letter of interest, CV and research proposal should be submitted online through the UA Career Track website listed above. Review of applications begins Monday, October 20, 2008 at 8:00 a.m. As an equal opportunity and affirmative action employer, the University of Arizona recognizes the power of a diverse community and encourages applications from individuals with varied experiences and backgrounds. Please contact Teresa Kudrna for more information, tkudrna@email.arizona.edu, 520-621-4923.

– Teresa Kudrna Program Coordinator PERT Program Email: tkudrna@email.arizona Telephone: 520-621-4923 Fax: 520-621-2590

Teresa Kudrna <tkudrna@email.arizona.edu>

## UBasel EvoltuionaryGenomics EvoDevo

POSTDOCTORAL POSITION IN CICHLID EVOLUTIONARY GENOMICS/EVO-DEVO

A postdoctoral position in evolutionary genomics/evo-devo is available in the group of Dr. Walter Salzburger at the University of Basel, Switzerland (http://-www.evolution.unibas.ch/salzburger/). The position is funded by a Starting Grant of the European Research Council (ERC), a new European funding body set up to support excellent investigator- driven research (http:/-/erc.europa.eu).

The ERC Starting Grant 'INTERGENADAPT' will run for a period of five years. It will focus on the identification of the molecular basis of adaptation, evolutionary innovation and diversification in one of the most exciting model systems for evolutionary research, the

adaptive radiations of cichlid fishes in the East African Great Lakes Tanganyika, Malawi and Victoria. These lakes harbor ecologically and morphologically highly diverse species flocks counting hundreds of endemic cichlid species each. We are interested in the genetic and developmental basis of the morphogenesis of sexually and naturally selected traits that might be crucial to the cichlid's evolutionary success (e.g. mouth morphology, pharyngeal jaw apparatus, color and pigmentation patterns). To do so, we will apply cutting edge technologies. The forthcoming genomes of four cichlid species will certainly facilitate these efforts.

We are looking for a highly motivated, open-minded, creative and socially skilled young researcher that shares our enthusiasm in the study of evolution. Ideally, the candidate has some background in one or several of the following fields: bio-informatics, developmental biology, (cichlid) fish biology, evolutionary biology, evo-devo, evolutionary genomics, molecular evolution, and/or transcriptomics.

The initial appointment will be made for one year, with a possible extension to up to three years. The salary ranges between CHF 55'000 and CHF 70'000 (per year; after tax), depending on experience. The position is available from October 2008, the starting date is negotiable though.

To apply, please send

(1) your CV, (2) a list of your publications, (3) a statement of your research interests, (4) a statement why you would like to join our team, and (5) the names of two persons who can be contacted for a reference letter

to the following email address:

salzburgerlab-dib@unibas.ch

Please also use this email address for informal enquiries.

Deadline for submission is September 17th, 2008.

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Note, that there is also a position open for a PhD student (3 years). Further positions will be advertised at a later stage of the grant period.

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ADDITIONAL INFORMATION:

The Salzburger Lab (http://www.evolution.unibas.ch/-salzburger/) is a young, multinational, open-minded, enthusiastic and creative team. We are, at present, about ten people. Our main model systems are East African cichlid fishes, although we also study the adaptive radiation of Antarctic notothenioid fishes and the diversification of Alpine taxa. We also develop our own software. Core of the Salzburger Lab is an excellently equipped molecular laboratory with an AB 3130xl genetic analyzer, an epMotion pipetting workstation, Veriti gradient PCR machines, research microscopes, etc.

The Salzburger group is based within the evolutionary biology group of the University of Basel's Zoological Institute (http://www.evolution.unibas.ch ). The evolutionary biology group promotes higher education and up-to- date research in organismic and evolutionary biology, thereby complementing existing strengths in life-sciences at the University of Basel. The evolutionary biology group is located in the Vesalianum in the historical part of Basel, in close proximity to other University institutes, the University hospital and the Biozentrum of the University of Basel.

The University of Basel (http://www.unibas.ch/) is Switzerland's oldest University with a strong focus on "Culture" and "Life Sciences". About 9'000 undergraduates and 2'000 postgraduate and doctoral students are enrolled in Basel. The University is regularly ranked among the best 100 Universities worldwide and top-ten in the German speaking countries.

Basel (http://www.basel.ch) is located in northwestern Switzerland on the river Rhine and borders Germany (Baden-Württemberg) and France (Alsace). Basel is an open and international cultural, educational, and economic metropolis and a major centre for the chemical and pharmaceutical industry. It is well connected by air transport (through the EuroAirport Basel), by train (through Swiss, German and

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## UBerne EvolutionTheory

Postdoc Position in Theoretical Evolutionary Ecology

The Institute of Ecology and Evolution, Div. Behavioural Ecology, University of Berne (chair: Michael Taborsky) seeks for a theoretician with a strong commitment to evolutionary biology.

RESEARCH FOCUS: Evolutionary mechanisms of conflict and cooperation, with particular emphasis on reciprocity and the coexistence of alternative be-

haviour tactics. In our group we aim for an integration of theoretical and empirical studies of evolutionary mechanisms of behaviour. Other groups in the Institute of Ecology and Evolution focus on Aquatic Ecology (Ole Seehausen), Community Ecology (Wolfgang Nentwig), Conservation Biology (Raphael Arlettaz), Evolutionary Ecology (Heinz Richner), and Population Genetics (Laurent Excoffier).

Ideal candidates will have a PhD in theoretical biology (or mathematics/economy) and should be experienced in modelling (e.g. analytical approach, game theory, agent-based simulation models, dynamic programming), preferably with a sound background in theoretical issues in evolutionary biology. The position is initially for three years and can be prolonged. Candidates will be encouraged to apply for funding in order to establish their own junior research group.

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 two letters of recommendation should be received by 31 August 2008 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 the secretary's office, c/o Marlis Gerteis, Dept. Behavioural Ecology, University of Bern, Wohlenstrasse 50A, CH-3032 Bern, Switzerland; or as e-mail attachments to marlis.gerteis@esh.unibe.ch. For inquiries please contact michael.taborsky@esh.unibe.ch. Please see also http://behav.zoology.unibe.ch/ Michael Taborsky <michael.taborsky@esh.unibe.ch>

## UCaliforniaSanDiego ModelingViralEvolution

Postdoctoral position

MODELING VIRAL EVOLUTION

School of Medicine

University of California San Diego

DESCRIPTION: A fully funded postdoctoral position is available starting immediately to work on the analysis of sequence evolution, statistical models and software development, specifically targeted at viral organisms, such as HIV-1 and Influenza A virus.

Specific goals include (but are not limited to):

(1) Development and improvement of statistical methods and algorithms that estimate properties of evolutionary processes from coding sequence alignments, especially very large data sets.

(2) Design of new procedures and algorithms to infer and compare evolutionary properties (such as selective forces, co-evolutionary dependancies between sites, rates of mutation and recombination, population structure) from different genes in order to develop the concept of evolutionary BLAST.

(3) Analysis of evolutionary patterns in large collections of viral sequence alignments using machine learning, data mining and other statistical techniques.

(4) Developing statistical methods, methods and algorithms to analyze the output of next-generation (e.g. Roche 454, Solexa) sequencers.

The position will be for one year, with the possibility of extension to up to three years, dependent on progress and funding. Salary will be according to recommended payscales, and commensurate with experience.

RESEARCH GROUP: The position is based in the research group of Drs. Simon DW Frost and Sergei L Kosakovsky Pond (http://www.hyphy.org/sergei/). The successful candidate will also work closely with Dr. Art Poon (http://www.datamonkeys.org/arts_cv.pdf). There is a potential to develop and co-supervise undergraduate and graduate research projects.

LOCATION: School of Medicine, University of California, San Diego. The position is based at the Antiviral Research Center (http://www.avrctrials.org), situated in the Hillcrest area (http://www.hillquest.com) near downtown San Diego.

REQUIREMENTS: Applicants must:

- hold a Ph.D. in one of the following disciplines: evolutionary, mathematical or computational biology, statistics, population genetics (candidates with doctorates in related fields are encouraged to apply as well); - have programming experience in a high-level programming language (C/C++ preferred) and scripting language such as Python.

A successful applicant should:

- display evidence of research productivity as indicated by peer- reviewed publications and conference presentations; - be acquainted with programming in a UNIX/Mac OS X environment; familiarity with distributed computing is a plus; - have a strong interest in and understanding of molecular evolution; - have strong communication and teamwork skills.

APPLICATION: Please send letter of interest, C.V., and the names and contact details of three referees to: Postdoctoral Position in Evolutionary Modeling of Sequence Data, Drs. Simon Frost and Sergei Kosakovsky Pond, UCSD Antiviral Research Center, 150 W. Washington St., San Diego CA 92103, USA. Electronic application materials (PDF, Word) are preferred - please email to sdfrost at ucsd dot edu and spond at ucsd dot edu. You can also direct information requests to either e-mail address. Review of applications will begin immediately, and continue until the position is filled.

spond@ucsd.edu spond@ucsd.edu

## UChicago EvolutionTranscriptionNetworks

Applications are invited for a postdoctoral research associate with Ilya Ruvinsky in the Department of Ecology & Evolution and the Institute for Genomics and Systems Biology at the University of Chicago.

The project will focus on understanding the mechanisms responsible for evolutionary and physiological robustness of transcriptional networks. We are using C. elegans as a primary model system. The project will provide ample opportunities for collaboration with other groups both within and outside the University of Chicago.

Candidates must have a Ph.D. in Genetics, Molecular or Evolutionary Biology or related field. The ideal candidate will be creative, energetic and have excellent communication skills. All candidates are expected to have a background or interest in molecular evolutionary genetics. In addition, the candidates should have expertise in molecular biology, particularly using genetics in model organisms, and computational skills.

To apply, please submit applications (by e-mail to I. Ruvinsky), including (1) a CV, (2) brief statement of past accomplishments and PDFs of most relevant publications, (3) research interests and (4) names and contact information of three referees. Review of applications will begin immediately and will continue until the position is filled.

Ilya Ruvinsky Department of Ecology & Evolution The University of Chicago e-mail - ruvinsky@uchicago.edu http://pondside.uchicago.edu/-ecol-evol/faculty/ruvinsky_i.html Ilya Ruvinsky <ruvinsky@uchicago.edu>

## UColorado PlantEvoDevo

Postdoctoral position in plant evolution and development

A one year post doctoral position is available at the University of Colorado, Boulder, in the laboratory of Professor Pamela Diggle. The post doc will participate in several ongoing projects including the evolutionary dynamics of fruit size and structure among species of the genus Solanum and the role of architectural variation in the expression of sexual dimorphism among members of the Apiaceae. See http://spot.colorado.edu/ ˜ diggle/- for additional information.

The position is available September 1, 2008, but start date is flexible. Please send a letter of interest and CV to Pamela.Diggle@colorado.edu . Review of applications will continue until the position is filled.

Pamela K. Diggle Professor Department of Ecology and Evolutionary Biology University of Colorado Boulder, CO 80309

303-492-4860

Pamela.Diggle@Colorado.EDU
Pamela.Diggle@Colorado.EDU

## UCopenhagen Macroecology and Evolution

University of Copenhagen Programme of Excellence in 'Macroecology and Evolution'

Postdoctoral positions in Macroecology, Biogeography, Evolution, Ancient DNA, Geology, and Human Diseases

Positions are available within a cross-disciplinary research program aiming at 'explaining distribution of life on Earth'. Candidates should have a strong publication record, relevant analytical and data handling skills, and an ability to communicate within a research team. Competitive salary offered. Themes where we seek postdoctoral applications:

THEME 1 - VERTEBRATE MACROECOLOGIST/BIOGEOGRAPHER to work on questions

related to species distributions and diversity patterns using information on species evolutionary history derived from phylogenetic trees.

THEME 2 - CLIMATE CHANGE ECOLOGIST to work on questions related to prediction of potential effects of climate change on future patterns of species distributions and diversity.

THEME 3 - INVERTEBRATE BIOGEOGRAPHER/MACROECOLOGIST to work on questions related to species distributions and diversity patterns using information on species evolutionary history derived from phylogenetic trees.

THEME 4 - SYSTEMATIC ENTOMOLOGIST/ARACHNOLOGIST to work on the phylogeny of spiders.

THEME 5 - ANCIENT DNA - PAST POPULATION GENETICS to work with questions relating to past population genetics of humans in the New World and/or past population genetics of marine animals and/or ice age megafauna.

THEME 6 - GEOLOGY to work on Paleogeography in close collaboration with the research groups in macroecology and biogeography.

THEME 7 - GEOLOGY to work on low temperature geochemistry in close collaboration with the research groups in macroecology and biogeography.

THEME 8 - HUMAN DISEASES - EVOLUTIONARY MEDICINE to work on questions related to the geographical distribution of vector born diseases, with particular emphasis on the climatic parameters that affect vector and host distributions and thus the geographic mosaic of their co-evolutionary history.

Full description on the individual postdoctoral positions within eight themes are given at http://-www1.bio.ku.dk/om/jobs/macroecology/ Applications must be based on the full description of the positions and submitted before Wednesday 1 October 2008. For enquiry about the program please contact Professor Carsten Rahbek, Center for Macroecology and Evolution, Dept. of Biology, University of Copenhagen, crahbek@bio.ku.dk

The programme includes research groups at the Department of Biology (PIs Carsten Rahbek, Eske Willerslev), the Natural History Museum of Denmark (PIs Jon Fjeldså, Minik Rosing, Nikolaj Scharff), and the Department of Veterinary Pathobiology (PI Thomas Kristensen), several NSF-funded research centers, and an international network of partners.

Elisabeth Houe Hansen <EHHansen@bio.ku.dk>

## UdoAlgarve MarinePopBiology

We accept 1 or 2 applicants for postdoctoral fellowships in our team at CCMAR, located at the University of Algarve, Portugal (to be funded by the Portuguese Science Foundation FCT, application deadline September 15) in the fields of population ecology and evolution, and biogeography of marine organisms. Successful candidates are expected to start working in ongoing projects but may also submit their own independent research proposals.

For further information and other inquiries please contact eserrao@ualg.pt and send your CV, preferably by September 1, 2008.

(Net income is 1495 euros/month, tax free, duration maximum 6 years, start date January 2008 or later)

Ester Serrao http://www.ccmar.ualg.pt/maree/ CCMAR, CIMAR-Lab. Assoc. FCMA, Universidade do Algarve Gambelas, 8005-139 Faro, Portugal telef: (+351) 289 800 928 fax: (+351) 289 800 069

eserrao@ualg.pt

## UGottingen EvolutionSymbioses

Postdoc

The newly formed junior research group "Geomicrobiology and Biosignatures in the Deep Biosphere" in the Courant Research Centre Geobiology at the University of Göttingen invites applications for one Postdoctoral position. The position is immediately available pending formal administrative approval.

Topic: Our research group focuses on the microbial ecology and evolution of chemoautotrophic ecosystems, with emphasis on symbioses between animals and chemoautotrophic microbes. Ecosystems sustained by chemoautotrophy are found at deep-sea hydrothermal vents, cold seeps and some sulfide-rich limestone caves. Terrestrial sulfide-rich caves are easier to access than deep-sea habitats and offer an excellent opportunity to study the interplay between geochemistry, microbes and macrofauna in chemoautotrophic ecosys-

tems. Our primary research field site is the actively forming sulfide-rich Frasassi cave complex of central Italy that hosts an ecosystem sustained entirely by chemoautotrophy. We have recently discovered the first example of a terrestrial chemoautotrophic symbiosis between a Frasassi-endemic amphipod and filamentous sulfur-oxidizing bacteria. Future projects will address the potential benefits of the bacterial symbionts to the amphipod host, and examine the evolution of this symbiosis. We also plan to expand our research to other sulfide rich caves, such as Movile cave in Romania and Villa Luz caves in Mexico. For more information, please contact Dr. Sharmishtha Dattagupta (see below).

Requirements: Candidates should have a strong background in Molecular Biology and/ or Geomicrobiology (A PhD. is required for the Postdoc position). Candidates should have fieldwork experience, an interest in cave exploration, and be fluent in English. International applicants are welcome. The University of Göttingen seeks to increase the participation of women in areas in which they are currently underrepresented and therefore explicitly urges women to apply. Disabled persons with equivalent aptitude will be favoured.

Employment: We offer two-year Postdoc positions with the possibility of extension to three years. Postdoc salary is based on the German TV-L system, level 13.

Environment: Göttingen is a quaint and traditional German university town with an international student-based community. The Courant Research Centre is one of five interdisciplinary research centres (www.uni-goettingen.de/crc) recently established by the University of Göttingen as part of its institutional strategy "Tradition - Innovation - Autonomy". The Centre offers a wide range of state-of-the-art analytical facilities and an excellent environment for interdisciplinary research.

Application: Candidates should upload a curriculum vita, a statement of research interests and a list of publications (if applicable) via the online form located at www.uni-goettingen.de/positions-exini by August 31, 2008. They should also arrange for two reference letters to be sent directly by email to Dr. Sharmishtha Dattagupta (sdattag@uni-goettingen.de) by the same date. Full contact information can be found within the portal link.

Sharmishtha Dattagupta Georg-August-Universität Göttingen Courant Research Centre Geobiology Goldschmidtstr. 3 37077 Göttingen, Gemany Phone (office): +49 551 39 12910 Mobile: +49 01577 5823206 Email: sdattag@uni-goettingen.de

Sharmishtha Dattagupta <sdattag@uni-goettingen.de>

## UGottingen MetazoanEvolution

The Courant Research Centre Geobiology at the University of Göttingen (Germany) offers:

1 post-doctoral position 1 PhD position

The Courant Research Centre Geobiology is one of five interdisciplinary research centres (www.uni-goettingen.de/crc) recently established by the University of Göttingen as part of its institutional strategy "Tradition - Innovation - Autonomy".

These positions will form part of the independent Junior Research Group "Evolution of the Metazoa" headed by Daniel Jackson.

The main focus of the Courant Research Centre is the development of early life and organic-matter-controlled rock- and mineral-forming processes (Coordinator: Prof. Reitner, Department of Geobiology, www.uni-goettingen.de/crc_c) .

Many details of the molecular events that drove the diversification of the Metazoa during the pre- and early Cambrian remain undiscovered. The relatively synchronous inception and subsequent radiation of body plans during this time are reflected in the fossil record by the ability of disparate taxa to secrete mineralized structures. By examining the way in which extant metazoan taxa biomineralize, we hope to better understand the evolutionary forces that nurtured the diversification of multi-cellular animal life. We are currently focusing on these processes in sponges and molluscs, but plan to expand this comparative dataset.

The positions require individuals with strong molecular biology skills and familiarity with the analysis of large computational datasets such as EST collections and unannotated whole genomes. Lab skills such as cDNA library construction, whole mount in situ hybridization, micro- injection and experience with spawning and rearing marine invertebrates are highly desirable.

Candidates for the post-doctoral position should hold a doctorate in evolution, developmental biology, molecular biology, or a related field. Candidates for the doctoral position should hold an excellent first degree in the same fields. In addition to their academic qualifications, candidates should have excellent communication and team-working skills, be committed to the topic and

to working in a dedicated, interdisciplinary research environment. The working language of the group is English, and applicants from abroad are encouraged to apply. The University of Göttingen seeks to increase the participation of women in areas in which they are currently underrepresented and therefore explicitly urges women to apply. Disabled persons with equivalent aptitude will be favoured.

The positions are initially available for two years starting immediately, and can be extended following favorable reviews. Salaries are in accordance with the German state regulated public service salary scale (E 13 TV-L). For informal enquiries please contact djackso@uni-goettingen.de

Applications, in English, should include: a full academic CV, examples of published or unpublished academic work, a 1-2 page summary outlining the candidate's particular qualification for this position. Candidates should also arrange for two reference letters to be sent directly by email to Daniel Jackson (djackso@uni-goettingen.de). Application deadline is 31st August 2008. Please submit your application online under the given link: www.uni-goettingen.de/positions-exini

djackso@gwdg.de

## UIdaho PlantAnimalCoevolution

Postdoc: Postdoctoral Position in Plant-Animal Coevolution

A postdoctoral position is available in the lab of Olle Pellmyr to study coevolutionary dynamics and diversification in the mutualism between yuccas and yucca moths. The project combines field work on joshua trees in the Mojave desert with lab work, using a range of genetic tools to explore how coevolutionary and abiotic forces interact in driving evolutionary trajectories.

Applicants must have a Ph.D. or equivalent degree in evolutionary biology, ecology, plant biology, or related field. Essential qualifications include experience in managing a lab using PCR-based molecular genetic methods, incl. microsatellite-based analyses, and a willingness to travel and work out of a field camp for several days at a time. Experience in experimental design, behavioral assays, and quantitative phylogenetic methodology would be useful. This position can begin immediately. Review of applications will begin Sept 9 and continue until a candidate is selected.

Initial duration of the position is 10 months, and could be extended by three years contingent on continuation of funding.

To apply, please submit your application through http:// www.hr.uidaho.edu. Direct questions directly to me at pellmyr@uidaho.edu.

Dr. Olle Pellmyr Dept of Biological Sciences University of Idaho P.O. Box 443051 Moscow, ID 83844-3051 USA

phone 208.885.6807 (off) 885.8860 (lab) http://-www.sci.uidaho.edu/biosci/faculty/pellmyr.html Olle Pellmyr <pellmyr@uidaho.edu>

## UIllinoisUC RiskGenes

Behavioral genomics at the University of Illinois, Urbana-Champaign

A post-doctoral position is available to work on an NIH-funded project to identify genes associated with risk-taking behaviors such as boldness under predation risk and aggression in threespined sticklebacks (Gasterosteus aculeatus). The project is a collaboration between Alison Bell in the School of Integrative Biology and Mark Band at the W.M. Keck Center for Comparative and Functional Genomics at the University of Illinois. Edelyn Verona (Department of Psychology) is a consultant on the project.

A Ph.D. and experience in the design and analysis of expression microarray experiments is required. There will be opportunities to collaborate with other ongoing projects in the lab and a chance to learn a variety of different skills and techniques in behavior, evolution and genomics. Preference will be given to applicants with experience studying animal behavior, evolution and/or fishes. The position is for up to five years, subject to review after one year and can begin as early as September 1, 2008. Salary is $35,000/year.

The University of Illinois provides a highly collaborative and supportive academic environment for behavioral genomics, with opportunities for interactions with other members of the Neural and Behavioral Plasticity theme at the Institute of Genomic Biology (www.igb.uiuc.edu/). Minorities, women, and members of other designated classes are encouraged to apply. Applicants should include a brief cover letter outlining their qualifications and interests, curriculum vitae, and names, phone numbers, and email addresses of three references via email to Dr. Alison Bell, al-

isonmb@life.uiuc.edu. Review of applications will begin on August 1, 2008 and will continue until the position has been filled.

The University of Illinois is an Affirmative Action/Equal Opportunity Employer Alison M. Bell, Assistant Professor, Integrative Biology, University of Illinois, Urbana, 505 S. Goodwin Ave., Urbana, IL 61801, Ph: 217-265-5469; Fax: 217-244-4565; email: alisonmb@life.uiuc.edu, website: http://www.life.uiuc.edu/bell/ Alison Bell <alisonmb@life.uiuc.edu>

## ULausanne Bioinformatics

BIOINFORMATICS POSTDOC IN FUNCTIONAL EVOLUTIONARY GENOMICS

Center for Integrative Genomics (CIG), University of Lausanne, Switzerland

A research associate/postdoctoral position (2 years with possible extensions up to 5 years) is available in the evolutionary genomics group of Henrik Kaessmann.

We are seeking highly qualified and motivated applicants with strong skills in computational biology/bioinformatics, preferably also with experience in data mining and comparative or evolutionary genome analysis. Statisticians and/or population geneticists with strong programming skills and an interest in evolutionary genomics are also encouraged to apply.

Our group is interested in a range of topics related to the functional evolution of genomes from primates and other mammals, including the origin and evolution of new genes by gene duplication. The specific project will be developed together with the candidate. It will be possible to complement data available from genomic databases with experimental data (large- and small-scale) in collaboration with the wet lab unit of the group as well as the state-of-the-art core facilities at the Center for Integrative Genomics.

For more information on the group and our institute more generally, please refer to our website: http://-www.unil.ch/cig/page7858_en.html The salary is in the order of 45.000 Euros per year.

The language of the institute is English, and its members form an international group that is rapidly expanding. The institute is located in Lausanne, a beautiful city at Lake Geneva.

Informal inquiries may be addressed to: Henrik.Kaessmann@unil.ch

Please submit a CV, statement of research interest, and names of three references to:

Henrik Kaessmann, Ph.D. Associate Professor Center for Integrative Genomics Genopode University of Lausanne CH-1015 Lausanne Switzerland E-mail: Henrik.Kaessmann@unil.ch Phone: +41-(0)21-692-3960 Fax: +41-(0)21-692-3965 http://www.unil.ch/-cig/page7858_en.html Some recent publications from the lab:

Potrzebowski, L., Vinckenbosch, N., Marques, A. C., Chalmel, F., Jegou, B., Kaessmann, H. (2008) Chromosomal Gene Movements Reflect the Recent Origin and Biology of Therian Sex Chromosomes. PLoS Biol., 6:e80.

Rosso, L., Marques, A. C., Weier, M., Lambert, N., Lambot, M.-A., Vanderhaeghen, P., Kaessmann, H. (2008) Birth and Rapid Subcellular Adaptation of a Hominoid-Specific CDC14 Protein. PLoS Biol., 6:e140.

Brawand, D., Wahli, W., Kaessmann, H. (2008) Loss of egg yolk genes in mammals and the origin of lactation and placentation. PLoS Biol., 6:e63.

Vinckenbosch, N., Dupanloup, I. & Kaessmann, H. (2006) Evolutionary fate of retroposed gene copies in the human genome. Proc. Natl. Acad. Sci. USA 103, 3220-3225.

Marques, A., Dupanloup, I., Vinckenbosch, N., Reymond, A. & Kaessmann, H. (2005) Emergence of young human genes after a burst of retroposition in primates. PLoS Biol., 3:e357.

Burki, F. & Kaessmann, H. (2004) Birth and adaptive evolution of a hominoid gene supporting high neurotransmitter flux. Nature Genet. 10, 1061-1063.

Henrik.Kaessmann@unil.ch Henrik.Kaessmann@unil.ch

## ULausanne PlantSpeciesDistribution

Postdoc Position on

Predicting the impact of climate change on plant species distribution in Europe

The ECOSPAT lab (http://www.unil.ch/ecospat) is looking for a motivated young scientist to work on the European ECOCHANGE project (http://-

www.ecochange-project.eu). The candidate will work on improving predictions of climate change impact on plant species distribution in Europe but also at more local scale in the Alps and the Arctic. Species data have already been or are currently sampled and a large set of environmental predictor is also already available. The candidate will additionally have to interact with graduate students on improving modelling tools and methodological aspects.

The candidate should have expertise in spatial modelling of species distribution, and feel comfortable working with ArcGIS and the R statistical package. Good knowledge of botany and plant ecology, and particularly of the flora of the Alps and/or the arctic will be highly appreciated.

Position available since: immediately Duration: 2 years Location: Spatial Ecology group, University of Lausanne URL: http://ecospat.unil.ch Applications, including CV + motivation letter, should be sent by email to: Dr. Antoine Guisan, Department of Ecology and Evolution, University of Lausanne, CH-1015 Lausanne, Switzerland Email: antoine.guisan@unil.ch Contact for more information: +41 21 692 42 54

Loic.Pellissier@unil.ch

## ULisbon GenomeDynamics

POSTDOC POSITION available at the Cytogenetic Unit of the Freshwater Fish Group of the University of Lisbon (Portugal)

Project title:

Genome dynamics in diploid and polyploid cyprinid fishes of hybrid origin: a molecular cytogenetic approach

We seek a highly motivated and enthusiastic candidate to pursue studies on the evolutionary consequences of hybridization and polyploidy in cyprinid fishes. In particular, the hybridogenetic minnow Squalius alburnoides has been studied by our team for several years and may be used as a model system to study the earliest stages of genome evolution in polyploids as well as genome reshaping mechanisms (for detailed information about the research team please visit http://-/ffishgul.fc.ul.pt).

We are looking for someone whose research interests focus on fish cytogenetics, molecular biology and reproductive genetics under an evolutionary perspective. The successful applicant will be responsible, with under- and post-graduate students, for maintaining experimental crosses and for conducting molecular cytogenetic work (FISH and GISH in the frame of a specific international collaboration) and test among others the hypothesis that hybridization may trigger undermethylation of the genome, resulting in high activity of TEs and subsequent chromosomal rearrangements.

A specific proposal already prepared, will be discussed with the candidate who must have obtained his/her PhD after 2004-2005 and have experience on molecular cytogenetics. The application is for a maximum of 6 years, being renewed each annual period, and will be submitted to the Portuguese Funding Agency (FCT - http://www.fct.mctes.pt/ bolsas/concurso2007/).

Next Deadline for grant applications is the 17th September 2008 (to start in January 2009).

Applicants should send a CV and names of three references via email to Prof. MJ Collares-Pereira (mjpereira@fc.ul.pt), Department of Animal Biology, Faculty of Sciences, University of Lisbon. Replies will be sent only the 1st of September.

Maria João Pereira <mjpereira@fc.ul.pt>

## UManchester ComputationalBiology

UNIVERSITY OF MANCHESTER FACULTY OF LIFE SCIENCES

Post Doctoral Research Associate - A rational in silico approach to mapping protein-protein interaction networks (Ref LS/80102)

Based in the research laboratories of Drs Simon Lovell and David Robertson, we seek a computational or structural biologist to study protein-protein interactions networks, specifically to develop evolutionary and structure-based methods to infer interaction networks between species. The post forms part of an interdisciplinary project in collaboration with Prof Michael Stumpf and Dr Ken Haynes at Imperial College London. Our combined aim is to predict protein interactions using sophisticated bioinformatics, statistical and comparative approaches. The salary will be £27,466 - £29,138 per annum.

You should have (or expect to hold) a relevant PhD. Experience of computer-based research is required and

experience in protein structure analysis, network analysis and/or molecular evolution an advantage.

Informal enquiries may be addressed to: Simon Lovell, tel.: +44 (0) 161 275 5748, e-mail: simon.lovell@manchester.ac.uk or David Robertson, tel.: +44 (0)161 275 5089, e-mail: david.robertson@manchester.ac.uk.

Information on Manchester computational biology research can be found at: http://-www.manchester.ac.uk/bioinformatics . Application forms and further particulars can be obtained at http:// www.manchester.ac.uk/aboutus/jobs/-research or from The Directorate of Human Resources Tel: ++44 (0) 161 275 8836 Email: Lifesciences-hr@manchester.ac.uk

***The closing date for applications is Friday 5th Sept 2008. Please quote appropriate reference.***

david.robertson@manchester.ac.uk

## UNorthCarolina ChapelHill PseudomonasGenomics

Subject heading: Post-doc position in comparative genomics and evolution of host specialization and virulence at UNC-Chapel Hill

We are using new whole genome sequencing technologies to study the evolution of host-specialization and virulence in Pseudomonas syringae pathovars. This is a NIH funded collaboration between Dr. Jeff Dangl and Dr. Corbin D. Jones. We seek a highly motivated post-doc interested in merging computational and experimental biology. Ideal candidates will have a strong evolutionary background and experience bioinformatics, programming, or genome assembly.

The University of North Carolina at Chapel Hill is a diverse campus located in the Research Triangle of North Carolina. Both North Carolina State University and Duke University are close by. UNC-CH is repeatedly ranked one of the best public Universities and a great place to post-doc.

Candidates should contact Corbin Jones at cdjones@email.unc.edu

Websites: http://www.bio.unc.edu/Faculty/-CDJones/Lab/ http://www.bio.unc.edu/dangl/lab/
Related publications:

Jeck WR, Reinhardt JA, Baltrus DA, Hickenbotham MT, Magrini V, Mardis ER, Dangl JL, Jones CD. 2007. Extending assembly of short DNA sequences to handle error. Bioinformatics. 2007 Sep 24;

Grant SR, Fisher EJ, Chang JH, Mole BM, Dangl JL. 2006. Subterfuge and manipulation: type III effector proteins of phytopathogenic bacteria. Annu Rev Microbiol.60:425-49.

Jones JD, Dangl JL. 2006. The plant immune system. Nature. Nov 16;444(7117):323-9.

Corbin D. Jones, Ph.D. Department of Biology Carolina Center for Genome Sciences Campus Box 3280, Coker Hall UNC-Chapel Hill Chapel Hill, NC 27599-3280

"Corbin D. Jones" <cdjones@email.unc.edu>

## UNottingham SnailChirality

Apologies if you have seen this advert previously, but I am reposting, because the application details were incomplete last time – Postdoctoral Research Fellow

Institute of Genetics / School of Biology, University of Nottingham

Unwinding snail chirality

Applications are invited for a postdoctoral research fellow to work on a three-year project, funded by the BBSRC, on "Unwinding snail chirality".

Although multiple lines of enquiry remain, a deep-seated theoretical problem has stoked a burning interest in understanding the symmetry-breaking event during development - how is one side of an organism consistently distinguished from the other, given that the side that is called 'right' is essentially arbitrary? Although most prior research has concentrated on models such as the mouse, chick and frog, we believe that the pond Lymnaea may be a crucial organism in coming to understand asymmetry, because their chirality is determined very early in development.

The objective of this project is to take advantage of the latest advances in DNA sequencing technology to clone and characterize the determinant of chirality in snails, by a novel method that we term "massive subtractive linkage analysis" (MSLA). A parallel PDRA in Professor Mark Blaxter's lab at the University of Edinburgh (to be advertised separately) will lead the bioinformatic analyses, and there will also be collaboration

with David Lambert's lab in Rochester, New York.

Candidates must possess a PhD in molecular genetics or equivalent qualification in a related discipline. Experience of working with RNA and cDNA libraries is essential, as is a meticulous approach to lab work and note-keeping. Experience of high-precision PCR work, genotyping, and micromanipulation of embryos (e.g. microinjection) would also be highly desirable.

Salary range £25888 - £33780 per annum, depending on qualifications and experience (salary can progress to £36912 per annum subject to performance). This post is funded by the BBSRC for a fixed-term of three years, with a provisional start date of October 1st, but with flexibility on the precise start date.

Informal enquiries are encouraged and should be addressed to Dr. Angus Davison, tel: 0115 823 0322 Email: angus.davison@nott.ac.uk, or Dr. Aziz Aboobaker Email: aziz.aboobaker@nott.ac.uk. For the bioinformatic post, a separate enquiry should be made to Prof. Mark Blaxter Email mark.blaxter@ed.ac.uk

Additional information on Dr. Davison's research is available at http://www.nottingham.ac.uk/biology/-contacts/davison/research.php Additional information on Prof. Blaxter's research is available at http://-www.nematodes.org/ For more details and/or to apply on-line please access: http://jobs.nottingham.ac.uk/-MED334X1 or send a detailed CV and covering letter, together with the names and addresses of two referees, to Dr A Davison, School of Biology, The University of Nottingham, Medical School, Queen's Medical Centre, Nottingham, NG7 2UH. Please quote ref. MED/334X1. Closing date: 22 August 2008.

– Dr. Angus Davison

Institute of Genetics The University of Nottingham Queen's Medical Centre Nottingham NG7 2UH angus.davison@nott.ac.uk www.molluscs.org tel 0115 823 0322 (int. 30322) fax 0115 823 0338



## UNSW Linking Genotype and Phenotype

Post doctoral Position available at University of New South Wales, Sydney Australia

Duties: to research in the area of the link between the genotype and the phenotype, to oversee research projects and students in the lab, and to manage the laboratory of Prof J. William O. Ballard (while he is Head of School) The position is available for a period of up to 5 years.

The research goal of the lab. is to link the genotype with the phenotype using comparative genomics, population genetics, biochemical analyses, and life-history trait analyses. Our system of choice is the mitochondrial genome in Drosophila, however, we plan to extend beyond this system over the next few years (so considerable research flexibility exists).

The successful applicant will have the opportunity to give some lectures in Genetics/ Biochemistry as well as supervise their own students researching mutually agreed upon projects.

For further information contact Prof Ballard.

Closing date for applications 10th September 2008

Professor Bill Ballard Head of School School of Biotechnology and Biomolecular Science Faculty of Science University of New South Wales NSW 2052 Australia

Tel: +61 2 9385 2029 FAX: +61 2 9385 1483 email w.ballard@unsw.edu.au http://-www.babs.unsw.edu.au/staff_directory/ballardw.html a.wilton@unsw.edu.au a.wilton@unsw.edu.au

## UOulu Evolution of social information use

A postdoctoral position, funded by the Academy of Finland, available at the Department of Biology, University of Oulu, Finland.

Recent studies suggest that Sir Francis Bacon?s 400 years old maxim ?Knowledge is power? holds true also in the rest of the animal kingdom. Many animals, such as insects, birds and mammals, have been shown to gather information in order to better anticipate future environmental conditions and to optimise own behaviour. However, very little is still known how animals gather and use information, how prevalent it is among animals, and what implications it has to individuals, populations and communities. Further, our recent studies indicate that information transfer can oc-

cur also between species. Behavioral traits can transmitted across species through social learning (Seppanen & Forsman 2007, Current Biology 17: 1248-1252) and this novel theme is just awaiting further exploration.

Research project: Depending on the skills and interests of the candidates, project can be build on different themes or combination of them. 1) One important part of the project is to examine examine how birds acquire and use information derived from competing species. We have recently developed a novel experimental (Current Biology 17) method to examine interspecific social learning among cavity nesting birds. We will apply this method and examine whether the non-genetic transmission of information via social learning shares the same attributes as genetic evolution. 2) In addition to experimental studies, it is also possible to use long-term data to study how interspecific information provided by resident titmice affects dispersal and nest-site selection decisions of the collared flycatcher. 3) The results of interspecific information use challenges many predictions of the traditional theory species coexistence. This provides many exciting and novel questions for theoretical studies. 4) Nest predation is an important factor affecting the fitness of birds, and one can assume that the information value of nest predation risk is high. Our aim is to examine which cues (olfactory, UV vision) birds use to assess local predation risk during habitat selection.

Field work will take place either in Oulu, or on the island of Gotland, in Sweden. Part of the studies will be done in collaboration with Dr. B. Doligez (Lyon, France) and Prof. L. Gustafsson (Uppsala University, Sweden).

Applications and requirements: Successful candidate has a PhD in ecology, evolutionary ecology or related field and is interested in social information use and social learning, habitat selection, and species interactions. An interest and skills for theoretical studies would be beneficial, but not necessary. The start of the position is flexible, but should preferably not be later than October 2008. Funding is available for 15-17 months. Salary will be 2800-3200 euros/month, depending on the experience.

Interested applicants should mail or email a statement of research interest, a full CV, and names and contact information of three academic referees no later than August 27, 2008 to Jukka Forsman, Department of Biology, University of Oulu, POB 3000, 90014 University of Oulu, Finland.

Informal enquiries are welcome (jukka.forsman@oulu.fi, phone: +358-(0)8-5531951. I will be at the ISBE congress at Cornell University in August (poster 154C), and I am happy to meet potential candidates during the meeting.

Jukka Forsman <jukka.forsman@oulu.fi>

## URochester PopGenomicsEvolGenetics

TWO POSTDOC POSITIONS at the UNIVERSITY OF ROCHESTER

1. Population Genomics- A Postdoctoral position is available immediately in the laboratory of Daniel Garrigan. Research themes of the lab include (1) evolutionary analysis of whole-genome polymorphism data, (2) modeling of population structure, divergence and speciation and (3) coalescent theory. Qualified candidates will have a strong background in population genetics and computational biology. There will be an excellent opportunity to develop strong computer programming and statistical skills with direct applications to the analysis of genome-wide datasets from both humans and Drosophila. Start date is flexible.

For more information, please visit http://-www.rochester.edu/College/BIO/professors/-garrigan.html 2. Evolutionary genetics- A Postdoctoral position is available with a July 2009 start date in the laboratory of Daven Presgraves. Research in the lab combines functional, molecular, and population genetic approaches in Drosophila to address questions focused on (1) the genetics of speciation, (2) the interaction between recombination and natural selection, and (3) the evolution and genetics of segregation distortion. Funds are available to support this position for up to three years.

For more information, visit http://-www.rochester.edu/College/BIO/professors/-presgraves.html To apply, send by e-mail a CV, a brief statement of research interests and contact information for 2-3 academic references to Dan Garrigan (dgarriga@mail.rochester.edu) or Daven Presgraves (dvnp@mail.rochester.edu).

Daven Presgraves Assistant Professor Department of Biology University of Rochester Rochester, NY 14627 U.S.A.

office: (585) 275-8946 FAX: (585) 275-2070 email: dvnp@mail.rochester.edu

dvnp@mail.rochester.edu

## USouthDakota EvolutionaryPhysiology of Stalk-Eyed Flies

University of South Dakota: Post-Doctoral Research in Evolutionary Physiology of Stalk-Eyed Flies

A postdoctoral position is available to study performance and fitness consequences of insect ornaments in stalk-eyed flies. The position is part of an NSF-funded CAREER project in the laboratory of John Swallow (http://www.usd.edu/ ˜ jswallow/index.html), Biology Department, University of South Dakota. The position calls for quantitative analyses of eye span and flight performance to test for trade-offs between secondary sexual traits and aerodynamic and physiological adaptations for flight via direct measurements of flight performance, load lifting capacity, and flight energetics. Primary responsibilities for this position include: 1) conducting laboratory research on flight biomechanics and performance, 2) analyzing data and writing manuscripts, and 3) helping to coordinate projects of undergraduate and graduate students involved in the project.

Successful applicants should have a Ph.D. in comparative physiology, evolution, biomechanics or a related field. Preference given to candidates with experience in measuring flight biomechanics or performance. Salary is $34,000 plus benefits, and funds are available for 2 years pending satisfactory progress. The position can begin as early as Jan 1 2009. Review of applications will begin immediately and continue until a candidate is selected.

To apply, please send a cover letter, a statement of research interests, CV, and names and e-mail addresses of three references to John Swallow (jswallow@usd.edu), Biology Department, University of South Dakota, Vermillion, SD 57069, USA.

USD is an equal opportunity/affirmative action employer.

John G. Swallow Associate Professor Department of Biology University of South Dakota 414 E. Clark Street Vermillion, SD 57069 USA

Phone (605) 677-6176 Fax (605) 677-6557 http://www.usd.edu/ ˜ jswallow/ < http://www.usd.edu/˜jswallow/ >

“Swallow, John G.” <John.Swallow@usd.edu>

## UWashington Bioinformatics PopGenet extended

Deadline extended to August 15:

Organization*: School of Aquatic and Fishery Sciences, College of Ocean and Fishery Sciences, University of Washington

*Title*: 2 Research Associates: 1 bioinformatics and 1 population genetics

*Position details*:

The School of Aquatic and Fishery Sciences (SAFS < http://fish.washington.edu/ >) at the University of Washington has openings for two postdoctoral *Research Associates (100% time) *to conduct research on SNP discovery using next generation sequencing or possibly SNP applications in Pacific salmon. These are 2-year positions with the possibility to extend depending upon funding. The positions are not eligible for tenure.

The general scope of the appointments may include but is not limited to:

Development SNPs using next generation sequencing and resequencing.

Bioinformatics.

Original research on salmon population genetics and conservation.

Work with regional fisheries managers to apply SNP research to contemporary problems.

Formulation of problems, analysis of data, production of scientific papers, and presentation at scientific meetings.

Mentor and otherwise assist graduate students who are doing projects in salmon genetics and supervise hourly help involved in data analysis.

Mentor visiting scientists from Russia and Japan who are cooperating on international SNP data bases.

/ /

Requirements:

* Ph.D. in genetics, biology, or a related field**

The following experience is desired:

Expertise in DNA sequencing

Expertise in bioinformatics

*Positions are located* at the University of Washington, Seattle, WA. The University of Washington is an affirmative action, equal opportunity employer. The University is building a culturally diverse faculty and staff and strongly encourages applications from women, minorities, individuals with disabilities and covered veterans.

"University of Washington faculty engage in teaching, research and service."

Interested persons should/ send/ CV, letter of intent including names and contact information for three references via email to /Dr. Jim Seeb, School of Aquatic and Fishery Sciences/, University of Washington (/jseeb@u.washington.edu <mailto:rayh@u.washington.edu>/). Application deadline is August 15, 2008./ /For successful candidates, a background check for criminal history is required.

Jim Seeb <jseeb@u.washington.edu>

## UWisconsinMadison PopulationGenetics

Postdoctoral Position in Population Genetics at the University of Wisconsin at Madison

A NIH-funded POSTDOCTORAL POSITION is available in the laboratory of Bret Payseur in the Laboratory of Genetics at the University of Wisconsin (Madison, WI). The research focus will be the inference of evolutionary processes from genome-wide patterns of DNA polymorphism. Potential topics include (but are not limited to): the detection and characterization of natural selection operating on different timescales, the measurement of population structure and demographic history, and genome-wide association mapping of complex traits.

The position offers several notable advantages. The postdoctoral researcher will work at the interface between genomics and population genetics, an exciting and rapidly expanding area with wide-ranging applications. The Payseur lab (http://-payseur.genetics.wisc.edu/), whose members conduct research on a broad array of interesting topics in evolutionary genetics, provides a stimulating and interactive environment conducive to inter-disciplinary training. The postdoctoral researcher will have the opportunity to collaborate closely with Professor Payseur, who is actively engaged with each project in the lab. Salary and benefits are competitive. The term of the position is flexible.

The Laboratory of Genetics features a strong historical tradition in population genetics, which includes Sewall Wright, Motoo Kimura, and James Crow. UW-Madison has a thriving community of evolutionary biologists from departments across campus (http://-evolution.wisc.edu/). The university is also very strong in related fields, such as statistical genetics. Madison is consistently ranked as one of the best U. S. cities in which to live.

The primary qualification for the position is a Ph.D. in population genetics, evolutionary biology, bioinformatics, computer science, statistics, genetics, applied mathematics, or a related field. Proficiency in programming and/or statistics is highly desirable.

Applicants should send a cover letter summarizing their research background and interest in the position, a recent CV, and contact information for three references (all as pdfs) to Bret Payseur at payseur@wisc.edu. Review of applications will begin immediately and continue until the position is filled.

Bret Payseur Assistant Professor Laboratory of Genetics

Genetics/Biotechnology 2428 425-G Henry Mall University of Wisconsin Madison, WI 53706

Office phone: 608-890-0867 Lab phone: 608-262-6856 Fax: 608-262-2976 Email: payseur@wisc.edu http://-/www.genetics.wisc.edu/faculty/profile.php?id=471
Bret Payseur <payseur@wisc.edu>

## UWisconsin MonocotPhyloGenomics

Post-doctoral positions, monocot phylogenomics and evolution

Two post-doctoral positions in monocot molecular phylogenetics and compar ative biology are now available in the Department of Botany at the University of Wisconsin-Madison. Annual salaries are $36,000 based on 22-month terms. These positions provide exciting opportunities for research on broad-scale patterns of monocot phylo geny, biogeography, and ecology. The successful candidates will work closely with T. J. Givnish in Madison, as part of a $2.9M project funded

by NSF and involving six campuses in the United States and colleagues in Canada, Europe, Japan, and Australia. Research will include (1) sequencing, annotating, and comparing whole chloroplast genomes, and (2) identifying and sequencing several nuclear genes for taxa represent ing all major groups of monocots. Both positions will involve extensive phylogenetic analyses, calibration of molecular trees against fossil dates, and overlays of morphoÂ'logical, ecological, and distributional data. Opportunities will be provided for close collabora tion with other post-docs and PIs involved in the project, including studies of transcrip tomes, whole-plastid genomes, a wide array of morphological and anatomical characters, and fossil monocots. Applicants should have extensive hands-on experience with DNA sequencing, informatics, and phylogenetic recon struc tion, broad evolu tionary interests, and excellent skills in written and oral expression.

Applicants should contact Professor Givnish at givnish@wisc.edu. Please provide a letter summarizing your research interests and experience, why this opportunity is exciting for you, and contact information for two professional references. Preferred starting dates are September 15 2008 for the plastome position, and February 1 2009 for the nuclear-gene position, but some flexibility is available to permit recruitment of the strongest possible candidates.

Madison is a vibrant community of 200,000 set amid four large lakes, with a rich mix of cultural offerings and outdoor activities, and an excellent quality of life. The University of Wisconsin-Madison is a world-class research center, with 42,000 students and 2000 faculty; federal research funding ranks third nationally among public institutions. Excellent sequencing facilities are available through the UW Biotechnology Center. The Department of Botany perennially ranks in the top five among its peers nationally, and includes six labs with a strong focus on plant evolution and systematics. Information on research in Professor Givnishâs lab can be seen at http://www.botany.wisc.edu/ givnish.

Unless confidentiality is requested in writing, information regarding applicants and nominees must be released upon request. Finalists cannot be guaranteed confi denti ality.

The University of Wisconsin-Madison is an Equal Opportunity and Affirmative Action Employer.

carollee@wisc.edu carollee@wisc.edu

## VanderbiltU EvolutionaryGenomics

POSTDOCTORAL POSITION IN BACTERIOPHAGE GENOMICS AND FUNCTION

A postdoctoral position in phage genomics and function is available in the Bordenstein laboratory in the Department of Biological Sciences at Vanderbilt University.

The Bordenstein lab is interested in the patterns that characterize the evolution and function of bacteriophage in intracellular bacteria. This work involves three components: the application of theory and data from bacteriophage in free-living bacteria to bacteriophage in intracellular bacteria, the comparative genomics of bacteriophages in endosymbionts, and the relevance of phage to bacterial functions. Wolbachia endosymbionts are an excellent bacterial system to study these biological phenomena. The spread of this germline bacterium through the majority of animal species over the last 100 million years represents one of life's great pandemics. Studying the molecular evolution and function of bacteriophage in this symbiont will contribute to a fuller understanding of mobile elements in intracellular bacteria, the evolution of a widespread, animal-microbe association, and forge applications to human health and agriculture.

Applicants soon to acquire their Ph.D. or with previous postgraduate experience are welcomed. Candidates should be skilled in genome sequencing, molecular evolution, and/or molecular biology of mobile elements. Vanderbilt is located in the cultural and educational center of Nashville, TN.

To apply, please send a CV, a cover letter stating research interests and anticipated start date, and contact information for three references to s.bordenstein@vanderbilt.edu.

Lab: https://medschool.mc.vanderbilt.edu/biosci/-bio_fac.php?id3=17392 Vanderbilt EEB group: http://www.vanderbilt.edu/evolution Department of Biological Sciences: http://sitemason.vanderbilt.edu/-biosci –

Seth Bordenstein Assistant Professor Department of Biological Sciences Vanderbilt University VU Station B, Box 35-1634 Nashville, TN 37235

email: s.bordenstein@vanderbilt.edu

phone: 1-615-322-9087 fax: 1-615-343-6707 http://bordensteinlab.vanderbilt.edu s.bordenstein@vanderbilt.edu s.bordenstein@vanderbilt.edu

## YaleU MicrobPopGenetics

Postdoctoral opening in the Townsend laboratory and the Galvani group

A post-doctoral position in microbial population genetics is available, located jointly in the Townsend laboratory in the Department of Ecology and Evolutionary Biology and the Galvani Group in the Division of Epidemiology of Microbial Diseases, at Yale University.

The Townsend laboratory integrates theory, computation, and experiment to study functional genomics and evolutionary biology. Theoretical work includes modeling of the evolution of gene expression, bioinformatics and statistics for the analysis of DNA microarrays, phylogenetics and evolutionary biology, and novel theoretical approaches for the analysis of microbial communities when horizontal gene transfer belies traditional species concepts.

The Galvani group focuses on theoretical approaches to integrating epidemiology and evolutionary ecology or economics in order to generate predictions that could not be made by these disciplines alone. This interdisciplinary approach has widespread potential for answering evolutionary questions, explaining empirical observations and informing public health policy.

This position provides an opportunity to integrate microbial population genetics and phylogenetics with epidemiological modeling and analysis. Although a project requiring skills in bioinformatics and microbial population genetics in this area is currently envisioned, candidates interested in any of the above topics should feel encouraged to inquire further. This position will require an independent and motivated individual.

Applicants soon to acquire their Ph.D. or with previous postdoctoral experience are welcomed. All applicants should have received their Ph.D. prior to takingup the appointment.

Funding is available for multiple years, depending on performance. The salary will be greater than the NIH guidelines, and commensurate with experience and expertise. Yale is located in New Haven in the heart of New England, close to New York, Hartford, Providence, and Boston.

Starting date is flexible.

To apply, please send a CV, a brief statement of research interests and contact information for three academic references to

Jeffrey.Townsend@Yale.edu

or

Alison.Galvani@Yale.edu

Lab web sites:

http://www.yale.edu/townsend/ http://-www.med.yale.edu/eph/faculty/labs/galvani/ jeffrey.townsend@yale.edu jeffrey.townsend@yale.edu

# WorkshopsCourses

## Auckland StatGenetics Dec9-16

A subset of the Summer Institute in Statistical Genetics will be offered at the University of Auckland, New Zealand during December 9-16, 2008. Six modules will be available: Population Genetic Data Analysis, Quantitative Genetics, QTL Mapping, Association Mapping, DNA Evidence, and Computing for Statistical Genetics. Details are available at http://www.stat.auckland.ac.nz/sisg2008/ Bruce Weir bsweir@u.washington.edu

Sharon Browing s.browning@auckland.ac.nz

## ETH Zurich DetectingSelection Sep23-24

Compact-course, Informatics department, Swiss Federal Institute of Technology Zurich (ETHZ)

23-24 september 2008 (1 or 2 day options) Title: "From dinosaurs to virology: detecting natural selection in comparative genomics" Prof. G. Gonnet, Dr. M. Anisimova

The course is designed for researchers in biomedical sciences, computing sciences and bioinformatics. Academic participants are offered a 50% discount. Places are limited, so early registration is recommended. For more information and registration visit the course website: http://www.inf.ethz.ch/kurs54 or contact Madeleine Bernard: bernard@inf.ethz.ch

manisimova@hotmail.com

## Panama ConsGenetics Jan18-31

Recent Advances in Conservation Genetics

January 18th through January 31st, 2009

The American Genetic Association (http://-www.theaga.org/ overview.html) in conjunction with the National Cancer, Institute, The Laboratory of Genomic Diversity, Frederick, Maryland (http:/-/home.ncifcrf.gov/ccr/lgd ), NOAHS-Smithsonian Institute and the Smithsonian Tropical Research Institute (http://stri.org/) is presenting a 13 day intensive course January 18th through January 31st, 2009, at the Smithsonian Tropical Research Institute in the Republic of Panama. The course will be directed by Dr. Stephen J. O'Brien, and taught by renowned scientists in methods, interpretation, and applications of molecular genetic analyses for conservation of endangered species, who will also share a variety of their personal experiences in this important field. Applicants should be conservation-minded scientists (advanced graduate students, post-docs, teachers, and researchers with advanced degrees) from academia, government, non-government organizations, or industry who are studying the genetics of endangered species and who will apply the knowledge gained from this course to the conservation of such species.

Interested individuals can contact us at congen@ncifcrf.gov or visit the website at http://-home.ncifcrf.gov/ccr/lgd/congen2009/index.asp for course details.

Sher Hendrickson, PhD

Laboratory of Genomic Diversity National Cancer Institute Bldg 560, Room 11-26 Frederick, MD 21702 (301)846-7244 hendricksons@mail.nih.gov

## Smithsonian Panama ConsGenetics Jan18-31

"Recent Advances in Conservation Genetics" January 18th through January 31st, 2009

The American Genetic Association (http://-www.theaga.org/overview.html) in conjunction with the National Cancer, Institute, The Laboratory of Genomic Diversity, Frederick, Maryland (http:/-/home.ncifcrf.gov/ccr/lgd), NOAHS-Smithsonian Institute and the Smithsonian Tropical Research Institute (http://stri.org/) is presenting a 13 day intensive course January 18th through January 31st, 2009, at the Smithsonian Tropical Research Institute in the Republic of Panama. The course will be directed by Dr. Stephen J. O'Brien, and taught by renowned scientists in methods, interpretation, and applications of molecular genetic analyses for conservation of endangered species, who will also share a variety of their personal experiences in this important field.

Applicants should be conservation-minded scientists (advanced graduate students, post-docs, teachers, and researchers with advanced degrees) from academia, government, non-government organizations, or industry who are studying the genetics of endangered species and who will apply the knowledge gained from this course to the conservation of such species. Interested individuals can contact us at congen@ncifcrf.gov or visit the website at http://home.ncifcrf.gov/ccr/lgd/-congen2009/index.asp for course details.

– Dr. Warren E. Johnson Laboratory of Genomic Diversity National Cancer Institute Frederick MD 21702-1201

TEL: 301-846-7483 FAX: 301-846-6327

johnsonw@mail.ncifcrf.gov johnsonw@mail.ncifcrf.gov

## Tucson Microarray Jan4-9

NINTH INTERNATIONAL LONG-OLIGONUCLEOTIDE MICROARRAY WORKSHOP

January 4-9, 2009 The University of Arizona Tucson, Arizona

This workshop will comprise a combination of lectures and hand-on laboratory sessions. The participants will primarily employ Arabidopsis and maize (plant side) and human, bovine and porcine (animal side) whole genome 70-mer oligonucleotide microarrays in their laboratory work (for details of the plant arrays see http://www.ag.arizona.edu/microarray and http:/-/www.maizearray.org/ . The workshop will be divided into two parts: Part I (Sunday 4PM to Wednesday 5PM) will cover wet-lab aspects of microarray target production and amplification, microarray hybridization, and scanning. Part II (all day, Thursday and Friday) will concentrate on data extraction, statistical analysis, and experimental design. Together these topics are aimed at the goal of the participants obtaining optimal results using oligonucleotide-based microarrays. Part II may be taken separately.

Specific topics to be covered include:

* Experimental design. * Probe preparation and microarray printing. * Microarray rehydration and probe immobilization. * Target preparation, including RNA extraction, direct and indirect labeling, and amplification techniques. * Microarray hybridization. * Array scanning and data extraction. * Data analysis and archiving.

Registration (Part I plus Part II) is $700, which includes costs of the microarrays and other supplies that you will use. Part II registration only is $300. Part I participants will be limited to 40 on a first-come, first-serve basis. Overall participation will be limited to 60 individuals.

Note: There are a number of airline connections from Tucson to San Diego on Friday evening, allowing workshop participants convenient access to the Plant and Animal Genome XVII Meeting (January 10-14).

For further details and to register, please contact David Galbraith (galbraith@arizona.edu)

David W. Galbraith Professor of Plant Sciences & Professor, Bio5 Institute University of Arizona Office: 341 Keating Building

Mailing address: BIO5 Institute The University of Arizona 1657 E. Helen St. Tucson, AZ 85721-0240

Tel: (520) 621-9153 Fax: (520) 626-4824 Email: galbraith@arizona.edu http://cals.arizona.edu/galbraith

taylorjerr@missouri.edu

# Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it

originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notifcation of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LaTeX files, Excel files, etc. ... plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

# Afterward

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by LaTeX do not try to embed LaTeX or TeX in your message (or other formats) since my program will strip these from the message.