

# 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.

# \_\_\_\_ / \_\_\_\_

prward	1
onferences	2
radStudentPositions1	2
bbs	7
$\operatorname{ther}$	5
ostDocs	7
VorkshopsCourses	1
structions	4
fterward	4

# Conferences

## Adelaide Biogeography Jan21-25

5th SOUTHERN CONNECTION CONFERENCE An international conference focused on southern hemisphere biology and biogeography 21-25 January 2007 Adelaide, South Australia

<http://www.ees.adelaide.edu.au/events/Southern\_Connections/> /www.ees.adelaide.edu.au/events/-

#### http:/-

Southern\_Connections/ Deadline for Early-bird Registration - 6 October 2006 Deadline for Abstracts -1 December 2006

Symposia:

Aridification on the four southern continents: Australia, South America, Africa and Antarctica. Timing of desertification and implications for the biota. Subterranean Connections: biodiversity and evolution in troglobite and groundwater ecosystems Southern temperate marine ecosystems Megafaunal extinctions Goodbye Gondwana: A fresh perspective on the roles of vicariance and dispersal in southern hemisphere biogeography Progress in developing methodologies for studying southern urban ecosystems Understanding the impact of invasive species

Quaternary palaeoclimates of the southern hemisphere:

SanDiego ConservationGenomics Jan13-17 CallForAb-
stracts
UArizona DrosophilaSpeciesID Oct26-299
UCLosAngeles IntlSummitEvolChange Feb8-10 29
UCLosAngeles IntlSummitEvolChange Feb8-10 Trav-
elGrants
ULausanne Genomics Oct5-610
UManchester PopGenet Jan9-1210
UMassAmherst NEMEB2006 Nov410
UWollongong MolluscConservation Dec6-811
Vienna MuseumNatHist Systematics Feb20-2312

correlation of land-ocean-ice records on orbital and suborbital timescales

Professor Andrew Austin Centre for Evolutionary Biology & Biodiversity School of Earth & Environmental Sciences Darling Building The University of Adelaide South Australia 5005

Phone: +61 8 8303 8240 Fax: +61 8 8303 4364 Mobile: 0438 378 151

Cooper.Steve@saugov.sa.gov.au Cooper.Steve@saugov.sa.gov.au

### Bangkok MEEGID Nov30-Dec3

MEEGID VIII Bangkok, Thailand. 30th November-3rd December 2006

Call for conferences/symposia proposals and papers

The 8th International Meeting "Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases" (MEEGID VIII) will be held in Bangkok, Thailand, 30th November morning-3rd December noon 2006. As for the 7 first MEEGID meetings, it will be co-organized by the Centers for Disease Control and Prevention (CDC; http://www.cdc.gov/) in Atlanta and the Institut de Recherche pour le Développement (IRD; http:/-/www.ird.fr/) in France. Mahidol University (http:/-/www.ird.fr/www.mahidol.ac.th/) will be an offficial co-organizer of the meeting, which will be supported also by the French Embassy in Bangkok (http://-www.ambafrance-th.org/).

The MEEGID meetings are organized in synergy with the new journal Infection, Genetics and Evolution (Elsevier; http://www.elsevier.com/locate/meegid ), which scientific topic is identical to that of the MEEGID. Launched only 5 years ago, Infection, Genetics and Evolution is now published with 6 issues per year, and is covered by Medline and Index Medicus, starting from the 1st 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 an official impact factor will be available soon. IF evaluated by Elsevier from the SCOPUS database is 3.195.

Communications on genetics, genomics, proteomics, population biology, mathematical modelling, bioinformatics are welcome. They can deal with the host, the pathogen, or the vector in case of 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, prion. All infectious models can be considered, including those of veterinary or agronomical relevance.

The papers communicated for MEEGID VIII will be published in a special issue of Infection, Genetics and Evolution, as already done for MEEGID VI (Paris, July 2002). MEEGID VIII will include 10-15 plenary lectures, about 20 specialized symposia, 12-15 "expressdebates" (20 mn presentation by only one speaker followed by 40 mn free discussion) and several poster sessions.

Special emphasis through plenary lectures and symposia will be given to health problems of particular interest to Thailand and South-East Asia: avian flu, SARS, malaria, dengue, tuberculosis. Pleanary lectures and symposia will also deal with transversal topics such as population genetics or species concepts. The congress is still open to proposals of conferences and symposia.

The following topics for symposia and/or plenary lectures have been already selected

Aedes aegypti: population biology, epidemiological role Avian flu Anthropozoonoses Contribution of private industry to infectious disease control Cytokine genetics Foodborne viruses Host-pathogen interactions HIV Human genetics/genomics and transmission of infectious diseases Human immune response gene polymorphism versus HIV-1 and dengue virus diversity in SE Asians Integrative models for the dynamics of antigenicallydiverse pathogens. Malaria Modern approaches to medical entomology : morphometry and population genetics Mycobacterium tuberculosis epidemiology, molecular typing and evolution Pharmacogenomics Phylogeography Population genetics of pathogens Trypanosome evolution and pathogenic role in humans and animals Vectors: Population structure and Genetic structure Viral evolution and inferences of natural selection

Awards will be attributed to the best communication, the best communication by a student and the best communication by a scientist from the Southern World on a problem specifically relevant to these areas. Each prizewinner will be offered a free 2-year copies to Infection, Genetics and Evolution.

Abstract submission deadline: 31st October.

Registration Fee: 200.00 euros or equivalent in other currencies; Thai scientists : 2400 bahts. Reduced rates for scientists from other southern coutries upon request, if external grants are unavailable. Students pay only meals and coffee breaks. Payment by money transfert only to : CAISSE NATIONALE DE CREDIT AGRICOLE INDOSUEZ PARIS SWIFT code (BIC) : AGRIFRPP Account number : 0010116-2150-001 THB Crédit Agricole Indosuez Bangkok 152 Wireless Road-BANGKOK 10330-THAILANDE Account owner : AL-LIANCE FRANAISE DE BANGKOK 29, Sathorn Tai Road BANGKOK 10120 THAILAND

Place: The Royal River Hotel http://www.royalrivergroup.com

Registration and abstract submission are possible by email (below). Please

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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

### Fribourg BioInvasions Oct2-3 programme

Dear all,

we have now posted the programme of the symposium on our website: http://www.unifr.ch/biol/ecology/- biolinv The registration deadline has been extended until SEPTEMBER 11, 2006.

\*\*\*\*\*\* AN EVOLUTIONARY PERSPECTIVE OF BIOLOGICAL INVASIONS \*\*\*\*\*\*

Symposium organised by Heinz Müller-Schärer, Thomas Steinger, Antoine Guisan, and Luc Gigord 2-3 October 2006, Fribourg/Switzerland

http://www.unifr.ch/biol/ecology/biolinv We are organising an international symposium on evolutionary processes of biological invasions. We try to bring together scholars from both ecology and evolution, and from plant and animal biology to discuss concepts and new developments in this greatly expanding research field.

We have invited a number of internationally renowned scientists to give plenary lectures, but we also have time for approximately 18 talks by younger researchers (PhD students & post-docs).

Invited speakers: Spencer C.H. Barrett (Univ. of Toronto, Canada) Ragan M. Callaway (Univ. of Montana, USA) Jes Pedersen (Univ. of Copenhagen, Denmark) Kevin Rice (Univ. of California at Davis, USA) Martin A. Schlaepfer (Univ. of Texas at Austin, USA) Bernhard Schmid (Univ. of Zurich, Switzerland)

The symposium will be free, but registration is necessary.

Deadline for abstract submission: August 12 Deadline for registration: extended until September 11

The symposium is generously funded by the "Troisième Cycle" Program of the Conférence Universitaire de Suisse Occidentale (CUSO).

Best regards,

Heinz Müller-Schärer (heinz.mueller@unifr.ch) Thomas Steinger (thomas.steinger@unifr.ch) Antoine Guisan (antoine.guisan@unil.ch) Luc Gigord (luc.gigord@unil.ch)

thomas.steinger@unifr.ch thomas.steinger@unifr.ch

#### IrvineCA EvolAdaptation Dec1-2

Dear Colleague:

This is to invite you to attend an Arthur M. Sackler colloquium, In the Light of Evolution: Adaptation and Complex Design, sponsored by the National Academy of Sciences. The Colloquium will be December 1-2, 2006, at the Beckman Center of the National Academies of Sciences and Engineering in Irvine, California.

Darwin's elucidation of natural selection was one of the great intellectual achievements in the history of science, revolutionizing thought not only in biology but also in philosophical and ideological realms. A century-and-ahalf after Darwin, the challenge of understanding nature's complex design remains in many regards in its infancy. Scientific advances are coming at a time of resurgent societal interest in supernatural explanations for biological complexity. The goal of this NAS Sackler Colloquium is to synthesize recent empirical findings and conceptual approaches towards understanding the evolutionary origins and maintenance of complex adaptations.

The Preliminary Program can be viewed at http:// /www.nasonline.org/site/PageServer?pagename=-

SACKLER\_evolution\_program Attendance at the Colloquium is limited to 250 registered individuals. To facilitate the participation of younger scientists, we request that you extend this invitation to interested graduate students and postdocs. The NAS has provided funds to supplement the expenses of participating graduate students and postdocs up to \$125 for hotel costs and \$150 for air travel. A maximum of 100 awards will be granted, with priority based exclusively on the order in which requests (accompanied by the registration fee) are received. Notification of the award will be made shortly after receiving the application but the awards will be paid after the Colloquium, upon documentation of qualifying expenses.

Please register on the NAS website <a href="http://www.nasonline.org/-Sackler\_evolution>www.nasonline.org/-">http://www.nasonline.org/-</a>

Sackler\_evolution. Registrations will be accepted only when the registration fee is included and in the order in which they are received. The registration fee is \$350, which includes the cost of meals, reception, and banquet. However, an early registration fee of \$250 (also including meals, reception, and banquet) is available to those posting their registration by October 15, 2006. A reduced all-inclusive registration fee of \$150 is offered to Graduate Students and Postdocs who register by October 15.

After submitting your online registration form and payment, you will receive an email confirmation including details for reserving a room at the Hyatt Regency Newport Beach at the discounted rate of \$110 per night. Please do not call the hotel directly for room reservations as the discounted rate is only available through the Academy's travel agency. After November 1, 2006, we cannot guarantee that a hotel room will be available. Shuttle bus service between the hotel and the Beckman Center will be provided free of charge at specified times.

Sincerely yours, John C. Avise and Francisco J. Ayala Colloquium Organizing Committee

Francisco J. Ayala 2001 National Medal of Science Laureate University Professor Donald Bren Professor of Biological Sciences University of California, Irvine Department of Ecology and Evolutionary Biology 321 Steinhaus Hall Irvine, CA 92697-2525, USA tel: +1-949-824-8293 fax: +1-949-824-2474 fjayala@uci.edu http://www.faculty.uci.edu/profile.cfm?faculty\_id=2134

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

#### KansasCity EcoGenomics Nov3-5

#### ECOLOGICAL GENOMICS SYMPOSIUM in Kansas City, Nov. 3 - 5, 2006

This is a friendly reminder that the deadline for discounted registration fees is Friday, September 29. After September 29, we will continue to welcome your registration to attend the 4th Annual Genes in Ecology, Ecology in Genes Symposium at a slightly higher cost. The Symposium will begin on Friday, November 3, at 7:30 p.m. and conclude on Sunday, November 5, at noon. For a complete brochure, schedule, registration, hotel, and poster abstract information, visit our Symposium website, www.ksu.edu/ecogen/symp2006.html.

Ecological Genomics combines genomic tools and ecological approaches to determine the functional significance of genes and genomes and their evolutionary and ecological context. The Symposium will feature lectures by scientists at the forefront of Ecological and Evolutionary Functional Genomics. Participants will also learn about the Ecological Genomics Institute at Kansas State University that includes 25 faculty members in seven disciplines.

#### FEATURED SPEAKERS:

Ian T. Baldwin, Max-Planck Institute for Chemical Ecology "Using transformed plants to study ecological interactions"

May R. Berenbaum, University of Illinois at Urbana-Champaign "Cytochrome P450 genes and genomics in insect-plant interactions: Necessity or nimiety?" Justin Fay, Washington University "Evolution of gene expression"

Maria J. Harrison, Cornell University "Towards an understanding of the arbuscular mycorrhizal symbiosis: Functional genomics approaches"

Michael W. Nachman, University of Arizona "The genetic basis of reproductive isolation in mice"

Katie Peichel, Fred Hutchinson Cancer Research Center "Genetics of reproductive isolation in sticklebacks"

Loren Rieseberg, Indiana University "Genomics of invasive sunflowers"

John H. Willis, Duke University "Genetic analysis of adaptation and reproductive isolation in Mimulus"

Patricia Wittkopp, University of Michigan "Genetic basis of regulatory variation"

#### POSTER ABSTRACTS:

Participants are invited to share their own research at poster sessions on Friday night and Saturday. Poster topics should be related to the field of Ecological Genomics. We are continuing to accept poster abstracts online. Abstract submission guidelines are available at:

#### http://www.k-state.edu/ecogen/-

PosterAbstractGuidelines2006.htm . Please share this announcement with colleagues and students who are interested in learning more about the integrative field of Ecological Genomics. If you have any questions, please contact us at (785) 532-3482 or ecogen@ksu.edu. Additional information about this interdisciplinary research initiative is available at www.ksu.edu/ecogen . DEADLINES:

9/29/06 Early Registration (https:/-/www.dce.ksu.edu/cgi-bin/conf/ecological\_genomics.cgi)

10/13/06 Hotel Reservations (http://www.starwoodmeeting.com/StarGroupsWeb/res?id05175165&keyë479)

11/3/06 Last day to Register - - Symposium begins

Funding for this symposium is provided by Kansas State University.

Ecological Genomics Institute Project Directors: Dr. Loretta Johnson and Dr. Michael Herman Kansas State University 116 Ackert Hall, Manhattan, KS 66506-4901 (785) 532-3482, www.ksu.edu/ecogen

dmerrill@ksu.edu dmerrill@ksu.edu

## KansasCity EcolGenomics Nov3-5 AbstractsDueSep15

Register now to attend the 4th Annual Ecological Genomics Symposium on November 3-5, 2006, at The Sheraton Hotel in the Overland Park area of Kansas City. The Genes in Ecology, Ecology in Genes Symposium will begin on Friday, Nov. 3, at 6:00 p.m. and conclude on Sunday, Nov. 5, at noon. For a complete brochure, poster abstract submission information, registration, and hotel reservations, visit our Symposium website, www.ksu.edu/ecogen/symp2006.html.

Ecological Genomics combines genomic tools and ecological approaches to determine the functional significance of genes and genomes and their evolutionary and ecological context. The Symposium will feature lectures by scientists at the forefront of Ecological and Evolutionary Functional Genomics. Participants will also learn about the Ecological Genomics Institute at Kansas State University that includes 25 faculty members in seven disciplines.

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Ian T. Baldwin, Max-Planck Institute for Chemical Ecology, "Using transformed plants to study ecological interactions"

May R. Berenbaum, University of Illinois at Urbana-Champaign, "Cytochrome P450 genes and genomics in insect-plant interactions: Necessity or nimiety?"

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Loren Rieseberg, Indiana University, "Genomics of invasive sunflowers"

John H. Willis, Duke University, "Genetic analysis of adaptation and reproductive isolation in Mimulus"

Patricia Wittkopp, University of Michigan, "Genetic basis of regulatory variation"

Poster Abstracts:

Participants are invited to share their own research at poster sessions on Friday night and Saturday. Please follow the abstract submission guidelines and submit online before September 15, 2006. A limited number of submitted poster abstracts will be selected for oral presentation. Poster topics should be related to the field of Ecological Genomics.

Please share this announcement with colleagues and students who are interested in learning more about the integrative field of Ecological Genomics. If you have any questions, please contact us at (785) 532-3482 or ecogen@ksu.edu. Additional information about this interdisciplinary research initiative is available at www.ksu.edu/ecogen.

DEADLINES:

9/15/06 Poster Abstracts due

9/29/06 Early Registration

10/13/06 Hotel Reservations

Funding for this symposium is provided by Kansas State University.

**Project Directors:** 

Dr. Loretta Johnson and Dr. Michael Herman

Doris Merrill, Program Coordinator

Ecological Genomics Institute

Kansas State University, Division of Biology

116 Ackert Hall, Manhattan, KS 66506-4901

(785) 532-3482, dmerrill@ksu.edu

www.ksu.edu/ecogen

### London SystemsBiol Oct18

'The Centre for Ecology and Evolution (CEE), the Centre for Integrative Systems Biology at Imperial College (CISBIC), and the Natural History Museum, are organising a one day symposium on \*Systems Biology and Evolution\* on Wednesday 18th October 2006, in the Flett lecture theatre, the Natural History Museum, London.

Speakers include Buzz Baum (Ludwig Institute for Cancer Research, UCL), Michael Akam (Cambridge), David Robertson (Manchester), David Fell (Oxford Brookes University), M. Madan Babu (LMB, Cambridge), Yitzhak Pilpel (Weizmann Institute, Israel), Joachim Hermisson (Munich) and Cyrus Chothia (LMB Cambridge).

For full details, please go to http://www.ucl.ac.uk/ucbtcee/cee/events.html <http://www.ucl.ac.uk/-%7Eucbtcee/cee/events.html> The meeting is free, but lecture theatre space is limited. To ensure a place, please register at bioinformatics@imperial.ac.uk

For other enquries, please contact Dr Michael Stumpf (organiser) on m.stumpf@ic.ac.uk.

Programme: 9:00 Welcome and Introduction 9:10 The Evolution of homeostasis and stem cell-like behavioiur in multi-cellular organisms Dr. Buzz Baum, Ludwig Cancer Institute, UCL 9:50 The evolving gene network underlying arthropod segmentation: Can we get at the systems biology? Prof. Michael Akam, University Museum of Zoology, Cambridge University

10:30 Tea & Coffee

11:00 Visualization and Reconstruction of PPI Network Evolution Dr. David Robertson, Bioinformatics, University of Manchester 11:40 Does the current structure of the metabolic network reveal anything about its early evolution? Prof. David Fell, Oxford Brooks University

#### 12:20 Lunch Break

14:00 Structure and Evolution of transcriptional regulatory networks Dr. M. Madan Babu, LMB, Cambridge 14:40 Regulation of translation efficiency and phenotypic divergence of yeast species. Dr. Yitzhak Pilpel, Weizmann Institute, Rehovot, Israel.

#### 15:20 Tea and Coffee

15:50 Canalization and hidden genetic variation Dr. Joachim Hermisson, Evolutionary Biology, University of Munich 16:30 Protein domain architecture and Biological Complexity Dr. Cyrus Chothia, LMB Cambridge

17:10 Discussion session

17:40 18:40 Drinks reception, Imperial college

g.hurst@ucl.ac.uk g.hurst@ucl.ac.uk

2007. First abstract deadline is Fri Sep 15th 2006 for talk and poster abstracts. For, although not limited to, the following sessions:

Roland Eils - DKFZ (German Cancer Research Centre) Gene regulation and profiling

Douglas Kell - University of Manchester, UK Metabolomics and machine learning: quantitative bioanalysis for systems biology

Nicolas Le Novere - European Bioinformatics Institute, UK Modeling and databases in systems Biology

Randy Rettberg - MIT (Massachusetts Institute of Technology), USA Synthetic Biology and iGEM

Herbert Sauro - Keck Graduate Institute, USA Herbert SauroModeling and modularity, tools for systems biology

Sarah Teichmann - Laboratory of Molecular Biology, Cambridge, UK Gene regulatory networks, Structural and Computational Genomics

Chris Voigt - UCSD (University of California, San Diego) USA Synthetic Biology

Registration Early bird: register and pay before Fri Oct 20th. You will be notified if your abstract has been accepted for a talk or poster on Mon Oct 16th 2006. (price after 20th Oct). £75 (£125) Student/postdoc, £125 (£175) Faculty, £200 (£250) Industry.

Abstract submission The best abstracts will be selected for publication in BMC Bioinformatics. The first abstract deadline is Fri Sep 15th 2006. See www.BioSysBio.com <<u>http://www.biosysbio.com</u>/> for more details.

Sponsors Academic sponsors: BBSRC, UKBF, SBF, MCISB Industrial Sponsor: Geneart, Computational Chemistry Group In association with: YBF, OpenWet-Ware, ISCB Student Council

– Dr Colin A. M. Semple Head of Bioinformatics MRC Human Genetics Unit Edinburgh EH4 2XU, UK Tel: +44 (0)131 332 2471 x4013 Fax: +44 (0)131 467 8456 Email: Colin.Semple@hgu.mrc.ac.uk Web: http://www.hgu.mrc.ac.uk/Users/Colin.Semple/ colins@hgu.mrc.ac.uk

### Manchester BioSysBio2007 Jan11-13

### Marseille 11thEvolBiol Sept19-21

Registration is now open for BioSvsBio 2007 < http://www.biosysbio.com/>, Manchester UK, Jan 11th-13th the 19 20 21 september 2007 best regards

The next evolutionary biology meeting will take place

 Pierre Pontarotti EA 3781 Evolution Biologique Université d'Aix Marseille I Centre St Charles
 Place Victor Hugo 13331 Marseille Cedex 3
 33491106489 http://www.up.univ-mrs.fr/evol We are organizing the 11th Evolutionary Biology Meeting at Marseille http://www.up.univ-mrs.fr/evol/congres/ Pierre.Pontarotti@up.univ-mrs.fr

#### Marseilles 10thEBM programme

The programme of the 10th Evolutionary Biology Meeting at Marseilles is available at the meeting web site http://www.up.univ-mrs.fr/evol-cgr/ all the best Pierre

 Pierre Pontarotti EA 3781 Evolution Biologique Université d'Aix Marseille I Centre St Charles
 Place Victor Hugo 13331 Marseille Cedex 3
 33491106489 http://www.up.univ-mrs.fr/evol We are organizing the 10th Evolutionary Biology Meeting at Marseille http://www.up.univ-mrs.fr/evol/congres/ Pierre.Pontarotti@up.univ-mrs.fr

## RoyalSocietyLondon ComparativeGenomics Nov10

Meeting Anouncement : Comparative Genomics and Diversity (Genetics Society Autumn Meeting)

Friday 10th November 2006, Royal Society London

This meeting will examine the impact of comparative genomics on the understanding of phenotypic and genetic diversity in many different areas of the tree (or net) of life. Areas explored will include pathogenic bacteria and protozoa, single celled, eukaryotes and multicellular organisms.

Confirmed speakers: Michael Ashburner (Genetics Society Medal Lecture), Jeff Bennetzen, Matt Berriman, Mark Blaxter, Monica J. Justice, Elliott Margulies, Svante Paabo, Chris P Ponting

Julian Parkhill, Jane Rogers (Sanger Institute) and Ewan Birney (EBI) are the scientific co-organisers for this meeting.

Registration for the meeting is now open, and can

be accessed via the Genetics Society website (http:/-/www.genetics.org.uk/home)

 $Brian\ Charlesworth\ < brian.charlesworth@ed.ac.uk>$ 

## SanDiego ConservationGenomics Jan13-17 CallForAbstracts

Call for abstracts - Oral and Poster presentations

Population and Conservation Genomics Workshop (http://www.intl-pag.org/15/15-workshops.html) XV Plant and Animal Genome Conference January 13-17, 2006 Town and Country Convention Centre, San Diego, California http://www.intl-pag.org/ A workshop on Population and Conservation Genomics will be held at the 15th Plant and Animal Genome conference. You are invited to attend this Workshop and submit an abstract for oral or poster presentations on any population and conservation genomics aspect of both plants and animals. The topics may include: population genomic diversity and structure; molecular evolution; adaptive molecular genetic variation; selection signatures; candidate-gene and genome-wide association studies; application of genomics in conservation and management of genetic resources; genomic effects of domestication, management practices, fragmentation, bottlenecks, climate change, and transgenic deployment; molecular breeding and gene conservation; etc.

Oral presentations Six oral presentations will be selected from the submitted abstracts. Each of the first six speakers will receive a \$100 discount in their registration fees. Please send your abstract of no more than 250 words by e-mail to Om Rajora (Om.Rajora@unb.ca) as an attached Word file no later than October 6th, 2006. You will be notified by October 10th whether your abstract has been selected for an oral presentation. Authors whose abstracts not selected for oral presentations are highly encouraged to present a poster at the PAG's Population and Conservation Genomics poster session.

Poster presentation If you wish to present a poster, please submit your abstract directly on-line using PAG's web site (http://www.intl-pag.org/15/15-abstracts.html). The deadline is October 2, 2006.

Inquiries For information and questions regarding the Population and Conservation Genomics workshop, please contact Om Rajora at the following coordi-

#### October 1, 2006 EvolDir

nates. Dr. Om P. Rajora, Canada Research Chair in Forest and Conservation Genomics and Biotechnology, Faculty of Forestry and Environmental Management, University of New Brunswick, Fredericton, NB E3B 6C2, Canada. Tel: (902) 494-2400 or (506) 453-4501 Fax: (902) 494-3736 or (506) 453-3538 E-mail: Om.Rajora@unb.ca

Dr. Om P. Rajora Professor and Senior Canada Research Chair in Forest and Conservation Genomics and Biotechnology Faculty of Forestry and Environmental Management P.O. Box 44555, 28 Dineen Drive University of New Brunswick, Fredericton, NB E3B 6C2 Canada

Tel: (902) 494-2400 or (506) 453-4501 Fax: (902) 494-3736 or (506) 453-3538 E-mail: Om.Rajora@unb.ca

Om.Rajora@unb.ca

## UArizona DrosophilaSpeciesID Oct26-29

Deadline for applications September 5

DROSOPHILA SPECIES IDENTIFICATION WORKSHOP 2006 OCTOBER 26-29, UNIVER-SITY OF ARIZONA

The Sixth Annual Drosophila Species Identification Workshop will focus on 1. The Species for which whole genome sequencing has been completed 2. The species for which BAC libraries are available 3. Four species groups: melanogaster, obscura, virilis, repleta 4. How to identify and utilize different species 5. FlyBase workshop 6. Field collection 7. Preparation of polytene chromosomes

Instructors include Patrick O'Grady, William Heed, Brant McAllister, Therese Markow, Nicolas Gompel, Steve Schaeffer, William Gelbart, Sergio Castrezana.

Registration fee of \$350 includes all instruction and materials, traditional Mexican dinner at home of Therese Markow, formal dinner at the Arizona Sonora Desert Museum with keynote speaker and time to roam the grounds. Morning and afternoon coffee, fruit, muffins.

On line registration at http://stockcenter.arl.arizona.edu/ Therese Ann Markow Regents' Professor Department of Ecology and Evolutionary Biology BSW 310 University of Arizona Tucson, AZ 85721 Office: 520 621 3323 Lab: 520 626 2772 FAX: 520 626 3522

tmarkow@arl.arizona.edu http://eebweb.arizona.edu/faculty/markow/index.htm tmarkow@public.arl.arizona.edu

## UCLosAngeles IntlSummitEvolChange Feb8-10 2

Evolutionary Change in Human-altered Environments An International Summit

February 8-10, 2007 Institute of the Environment University of California, Los Angeles

Organized by Thomas Smith and Louis Bernatchez.

Human activities are affecting the evolutionary processes that generate and maintain biodiversity. Climate change and deforestation are facilitating the evolutionary jump of animal diseases to humans. Fish farming has resulted in the spread of poorly adaptive genes to the wild. Introductions of exotic species are impacting native species and limiting their ability to adapt.

In response to this developing crisis, we are convening an international summit of evolutionary biologists, conservation practitioners, and policy makers to synthesize current knowledge and to begin to develop plans to mitigate the effects. The summit will feature talks from more than 40 leading evolutionary biologists, poster presentations, and working groups. A central goal of the summit is to bring the discussion beyond academic boundaries to frame real-world solutions to these problems. For more information and to submit an abstract for a poster go to:

http://www.ioe.ucla.edu/ctr/ioesymposium.html The deadline for poster abstracts is December 1, 2007.

Travel grants for students and post docs to attend are now available

tbsmith@ucla.edu

UCLosAngeles IntlSummitEvolChange Feb8-10 TravelGrants Evolutionary Change in Human-altered Environments An International Summit

Travel grants for students and post docs are now available!

February 8-10, 2007 Institute of the Environment University of California, Los Angeles

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http://www.ioe.ucla.edu/ctr/ioesymposium.html The deadline for poster abstracts is November 1, 2007.

#### GRANTS

The Institute of the Environment will be offering up to 40 grants to students and postdocs wishing to attend the summit. Grants will consist of free registration plus up to \$300 towards travel expenses. If you wish to apply for a grant, please send a short statement indicating your position (undergraduate student/graduate student/postdoc), your reasons for wishing to attend, and a brief supporting statement from your advisor. Also, if you will be presenting a poster, please include a poster abstract with your application. In general, applications from students or postdocs that are presenting posters will be favored.

Applications (and a supporting statement from

tbsmith@ucla.edu tbsmith@ucla.edu

### **ULausanne Genomics Oct5-6**

We would like to bring to your attention the Lausanne Genomics Days meeting in

Lausanne on October 5-6, 2006. The meeting is free.

The program is available on

http://www.cuso.ch/3e-cycle/biologie.html Best regards,

Laurent Keller

Laurent Keller Department of Ecology and Evolution Biophore University of Lausanne 1015 Lausanne Switzerland

http://www.unil.ch/dee/page7717\_en.html Laurent Keller <Laurent.Keller@unil.ch>

### UManchester PopGenet Jan9-12

#### ANNOUNCEMENT

The 40th annual meeting of the Population Genetics Group will be held at the University of Manchester from January 9th to January 12th 2007. PopGroup is an informal meeting which brings together scientists working in population genetics and evolutionary biology, mainly, but by no means exclusively, from the United Kingdom and other European countries. All areas of evolutionary biology are covered. Further details of the meeting are available from http://www.bioinf.man.ac.uk/-PopGroup2006/. Please direct any enquiries to Cathy Walton at cathy.walton@manchester.ac.uk.

Catherine.Walton@manchester.ac.uk Catherine.Walton@manchester.ac.uk

### UMassAmherst NEMEB2006 Nov4

The 2006 New England Molecular Evolutonary Biologists' annual conference (NEMEB XVII) will be held at the University of Massachusetts Amherst on Saturday, November 4.

NEMEB is a one-day meeting that traditionally attracts leading molecular evolutionary biologists from the major universities and research institutions of New England and New York.

There is no registration fee.

Our invited speakers this year will be:

Matthew Meselson, Harvard University Margaret Riley, University of Massachusetts Amherst Antónia Monteiro, Yale University Daniel Weinreich, Brown University

The deadline for registration is OCTOBER 18. Please register if you plan to attend, even if you do not plan to present a talk or a poster, so that we know how many people to expect.

The registration form is online at:

http://bcrc.bio.umass.edu/nemeb2006/node/3 Students and postdocs are particularly encouraged to present their work, either as a talk or a poster.

A detailed schedule will be posted on the website after October 18 when registration is completed:

http://bcrc.bio.umass.edu/nemeb2006/ Feel free to reply to this e-mail if you have questions about the meeting.

Benjamin Normark Department of Plant, Soil, and Insect Sciences Fernald Hall University of Massachusetts Amherst, MA 01003 USA

office phone and voice mail: 413-577-3780 fax: 413-545-2115

bnormark@ent.umass.edu bnormark@ent.umass.edu

## UWollongong MolluscConservation Dec6-8

Molluscs 2006 - Molluscs in Research, Conservation and the Economy

Triennial meeting of the Malacological Society of Australasia

6 - 8 December 2006, University of Wollongong, NSW plus two day pre and post conference workshops (4-5th Dec, 9-10 Dec)

The objective of this meeting is to bring together students, established researchers, naturalists and members of government and NGO agencies that have an interest in molluscs. The meeting will focus on current research involving molluscs in the Australasian area.

Molluscs are the second largest animal phylum and many are ecologically and economically important. They are dominant organisms in marine environments and have suffered more human-induced extinctions on land and in freshwaters than seen in all tetrapod vertebrates.

Themes:

\* Applied studies (aquaculture, fisheries, parasitology, invasive species) \* Conservation and ecology (including endangered species, indicator species, molluscs in experimental ecology, tracking environmental changes) \* Systematics (including taxonomy, phylogeny, evolution, faunistics, biogeography) \* Genetics and development (population genetics, evolution-development, larval development)

Venue: McKinnon Centre, University of Wollongong.

Wollongong is about 1.5 hrs by road or rail south of Sydney. Details on other options for travel to Wollongong from Sydney provided on the conference website: www.uow.edu.au/conferences/MOLLUSCS06/ <BLOCKED::http://www.uow.edu.au/conferences/-MOLLUSCS06/>

Registration: on line at www.uow.edu.au/conferences/MOLLUSCS06/ <BLOCKED::http:/-/www.uow.edu.au/conferences/MOLLUSCS06/>

Preconference Workshop

Dr Mark Norman and Dr Mandy Reid - cephalopod identification and biology (two days 4th - 5th Dec)

Postconference Workshop

Dr John Stanisic and Mr Michael Shea - land snails their identification, diversity and conservation (two days 9th - 10th Dec)

For more information contact:

Mark Norman: mnorman@museum.vic.gov.au <BLOCKED::mailto:mnorman@museum.vic.gov.au>

or

Winston Ponder: wponder@bigpond.net.au <BLOCKED::mailto:wponder@bigpond.net.au>

Please feel free to distribute this notice to other lists etc.

The Australian Museum. Australia's first - and leading - natural sciences and anthropology museum. Visit www.amonline.net.au Dr Don Colgan Research Branch The Australian Museum 6 College St. Sydney 2010 Australia

ph. 612-9320-6030 fax: 612-9320-6020

Don Colgan <Don.Colgan@austmus.gov.au>

## Vienna MuseumNatHist Systematics Feb20-23

Dear all,

We would like to call attention to the forthcoming annual meeting of the GfBS (Gesellschaft für Biologische Systematik). The meeting will take place from 20th to 23rd February, 2007 in Vienna at the Museum of Natural History. The deadline for submission of contributions will be the 31st October.

For further details please have a look at the internet site:

http://www.nhm-wien.ac.at/NHM/3Zoo/gfbs07home.htm <http://www.nhm-wien.ac.at/-NHM/3Zoo/gfbs07home.htm>

Priv.-Doz.Dr. Elisabeth Haring Museum of Natural History Vienna 1. Zool. Department Molecular Systematics Burgring 7 A-1010 Vienna Austria Tel. +43-1-52177332 Fax. +43-1-5235254

Haring Elisabeth <elisabeth.haring@NHM-WIEN.AC.AT>

# **GradStudentPositions**

ArizonaStateU MalarialParasitesEvol12
ETH Zurich MathVirology13
FrodhamU EvolBiol13
KansasStateU EcoGenomics14
LeidenU Fast evol14
Leipzig MicrobialBiodiversity15
MurdochU DolphinPopulations16
RoyalBotanicGardenEdinburgh BegoniaSystematics 17
RoyalBotanicGardenMadrid Biodiversity17
Smithsonian Panama TropicalResearch18
SwissFederalResInst GeneFlow
TU Braunschweig TadpoleEvolution19

## ArizonaStateU MalarialParasitesEvol

PhD position to study Evolutionary Biology of Malarial Parasites

#### Arizona State University

Malaria is a parasitic disease endemic in most of the tropical and subtropical ecosystems worldwide and ex-

UAdelaide EvolInvasiveness	. 19
UGlamorgan AdaptationToHeavyMetals	.20
UGlamorgan MolEvol	. 21
UNotreDame SpeciationRhagoletisFlies	.21
UToronto EvolGenetics	.22
UWindsor FishEvol	. 22
UZurich EvolBiol	. 23
UZurich EvolEcol	. 24
UZurich MolEvol	.24
UppsalaU EvolFuncGenomics	. 25
VrijeU Evol physio temp adaptation	.26

hibits great geographic diversity. My ongoing research focuses on investigating the mechanisms involved in the maintenance of genetic polymorphisms in natural populations of malarial parasites in primates (humans and non-human), assessing the evolution of specific proteins involved in the invasion of the host red blood cell, and the phylogeography of macaque malarias.

Applicants should comply with ASU requirements. The student is expected to learn both laboratory and computational skills. Knowledge in evolutionary biology and molecular biology at the level of undergraduate courses is expected. A course in general microbiology is desirable.

The school of Life Sciences in Arizona State University offers several graduate programs; please check the Integrative Graduate Education in the Life Sciences (iGELS) website for details (http://sols.asu.edu/grad/igels/index.php).

The graduate students at ASU have the opportunity of interacting with faculties from several disciplines. In addition to our diverse community at SOLS (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 University of Washington, UC Santa Cruz, and colleagues working in endemic countries. Assistantships are available conditional to admission in ASU.

#### Prospective Students please contact

Ananias A. Escalante School of Life Sciences Arizona State University PO Box 874501, Tempe AZ 85287-4501 E-mail: Ananias.Escalante@asu.edu Phone: (480) 965-3739 Fax: (480) 965-6899 http://sols.asu.edu/faculty/aescalante.php Ananias.Escalante <Ananias.Escalante@asu.edu>

#### ETH Zurich MathVirology

#### TWO PHD POSITIONS IN MATHEMATICAL IM-MUNOLOGY AND VIROLOGY AT THE ETH ZURICH, SWITZERLAND:

Two PhD positions are available in the group of Roland Regoes at the ETH Zurich (see www.tb.ethz.ch/people/regoes). In our group we study quantitative aspects of infectious diseases between and within hosts.

I am looking for a PhD student who is interested in studying the within host dynamics of viruses. Strong quantitative skills (population dynamical modeling, biostatistics, or computer simulations), or the will to acquire them, are an advantage because the work in my group is quite mathematical. The starting date can be as soon as possible, but should not be too much later than Feb 2007.

Specific questions, which the PhD students can study, are how Human-Immunodeficiency-Virus (HIV) enters its target cells and how its entry can be prevented by antibodies. Another set of questions revolves around the population dynamics of viruses and immune cells within hosts, for example the dynamics of Simian-Immunodeficiency-Virus (SIV) in different monkey species. Most of our research is done in close collaboration with experimental virology and immunology laboratories.

Our group is strongly linked with the theoretical biology group of Sebastian Bonhoeffer, the experimental ecology group of Paul Schmid-Hempel, and the experimental evolution group of Martin Ackermann at the Institute of Integrative Biology of the ETH Zurich (see http://www.ibz.ethz.ch/ for more details).

Zurich is a great place to live and to do research. It is the home of two big universites (the University of Zurich and the ETH), and is an attractive city in beautiful surroundings with a multinational population and many educational and recreational opportunities. The PhD salary is 33,600 Swiss Franks per year (pre-tax) which allows a decent standard of living.

To apply send a letter describing your interest in this position, a CV and the names and contact addresses of two referees to me, preferably by email: roland.regoes@env.ethz.ch. Informal enquires are also welcome.

Roland Regoes Institute of Integrative Biology, ETH Zurich ETH Zentrum, CHN H76.1 Universitaetsstr. 16 CH-8092 Zurich, Switzerland

tel: +41-44-632-6935 fax: +41-44-632-1271 email: roland.regoes@env.ethz.ch www.tb.ethz.ch/people/regoes/

### FrodhamU EvolBiol

The Department of Biology and the Louis Calder Center - Biological Field Station of Fordham University has a select number of research and teaching fellowships available for enthusiastic, highly qualified M.S. and Ph.D. students interested in ecology and field biology, with a broad range of research topics available (www.fordham.edu/Academics/ Office\_of\_Research/Research\_Centers\_\_In/The\_Louis\_Calder\_Cen/ Graduate\_Education\_12510.html).

Applications may be submitted online or requested from: www.fordham.edu/Academics/-Colleges\_Graduate\_S/Graduate\_Profession/-Arts\_Sciences/

Areas of emphasis for graduate research include: terres-

trial and aquatic microbial ecology (including vectorborne diseases, evolution of intracellular bacterial pathogens and mutualists, and mycorrhizae), community and ecosystem responses to local and regional disturbances (including fire, habitat fragmentation, invasive species, and urbanization), plant-pollinator interactions, algae in streams and rivers, global climate change, and winter ecology of small mammals. Two new faculty members specializing in conservation biology (of plants and animals) will be added to the program in fall 2007. Research projects in collaboration with staff at the Wildlife Conservation Society (www.wcs.org) and New York Botanical Garden (www.nybg.org) are also available for incoming graduate students.

- Students will have available the facilities of the Louis Calder Center - Biological Station (www.fordham.edu/calder\_center) as well as the biology department (www.fordham.edu/biology) for their studies. Students also benefit from small class sizes and active mentoring by faculty. The biology department is located at Fordham's Rose Hill campus in New York City, providing ready access to the diverse array of opportunities offered by the city. The Calder Center is located in suburban Westchester County, approximately 25 miles north of Rose Hill.

- Stipends begin at \$23,000 per year, plus full tuition remission.

- For any questions, please contact us by email (jdlewis@fordham.edu or wehr@fordham.edu) or at Graduate Ecology Admissions, Louis Calder Center -Biological Station, Fordham University, PO Box 887, Armonk, NY USA, 10504.

J.D. Lewis Associate Chair of Graduate Studies Department of Biological Sciences

Calder Center, Fordham University 53 Whippoorwill Road, Box 887 Armonk, N.Y. 10504 914 273 3078 ext. 24; fax: 914 273 6346 jdlewis@fordham.edu; http://www.fordham.edu/calder\_center jdlewis@fordham.edu initiative will link responses of living systems to environmental change at the genetic level. The overarching goal of this research initiative is to identify the genes that are involved in organismal responses to the environment.

This Ecological Genomics initiative takes advantage of existing strengths at Kansas State University in genetics and genomics, ecology and evolutionary biology to answer cross-cutting questions that lie at the interface of genomics and ecology. This collaborative research effort will cross disciplines (genetics and ecology) and departments (Agronomy, Biology, Entomology, Plant Pathology, Computing and Information Science). In addition, this initiative will also take advantage of experimental manipulations at the Konza Prairie Long-Term Ecological Research (LTER) site.

Research and education opportunities exist for Graduate Students to work towards an MS or PhD degree in this large collaborative and interdisciplinary effort. More information about the Kansas Ecological Genomics collaborative research groups at Kansas State University can be found at www.ksu.edu/ecogen. Twenty faculty with interests spanning from genetics and genomics of model organisms (Arabidopsis, C. elegans, Drosophila) to microbial, plant and animal organismic biology, and ecosystem ecology are involved in this research initiative. Applicants should have the interest and willingness to cross disciplines. Completed applications must be received by January 5, 2007.

For more information on how to apply, visit our website at: http://tinyurl.com/qkdwx or e-mail us at ecogen@k-state.edu.

Doris Merrill, Program Coordinator Ecological Genomics Institute Kansas State University, Division of Biology 116 Ackert Hall, Manhattan, KS 66506-4901 (785) 532-3482, dmerrill@ksu.edu www.ksu.edu/ecogen dmerrill@ksu.edu

### LeidenU Fast evol

### KansasStateU EcoGenomics

Ecological Genomics: Genes in Ecology and Ecology in Genes

Graduate Fellowships AVAILABLE for admission in Fall 2007 to participate in this newly emerging field at the interface of ecology and genomics. This research PhD position available (38 hours a week)

in the section Plant Ecology of the Institute of Biology (IBL) of Leiden University, for the project:

Biological invasions: The result of a fast evolution in new environments?

Senecio jacobaea is introduced introduction into Australia, New Zealand and the west coast of North America where it is a noxious weed. Previous research strongly suggests that a fast adaptive evolution towards a more weedy habit in S. jacobaea plants took place upon introduction. However, for a proper analysis of adaptive changes upon introductions the source populations of the native area need to be compared with the introduced environments. The candidate will therefore first focus on finding the source population(s) in the native area and reconstructing the path of introduction of S. jacobaea in Australia, New Zealand and North America with the aid of molecular techniques such as AFLP, microsatellites and TILLING.

To find evidence for a fast evolution upon introductions the source populations will be compared with the invasive populations in common garden experiments with regard to anti-herbivore-, growth and reproduction characteristics. Bioassays will be performed with a number of specialist and generalist herbivores.

Genetic variation in the traits of interest will be compared to genetic variation in neutral molecular markers to correct for bottlenecks.

Requirements: The candidate must have a degree (Drs./MSc) in biology or a related study and have a strong interest as well as expertise in evolutionary and molecular biology.

The appointment is for a period of 4 years and is expected to lead to the completion of a dissertation. The gross monthly salary is 1.877 in the first year and increases progressively each year to 2.407 in the fourth year. Salary and fringe benefits conform to the Collective Employment Agreement for Dutch Universities. We hope to fill the vacancy as soon as possible.

For further information you can contact Dr. Klaas Vrieling (+31-71-5275136; e-mail: K.Vrieling@Biology.leidenuniv.nl).

Written applications (mentioning SEC5-PhD and including a CV with marks obtained and the names and phone numbers of two references) should be submitted before August 30, 2006 to: Leiden University, Faculty of Mathematics and Natural Sciences, attn. Mr. S. Brandsma, Human Resource department, P.O. Box 9504, 2300 RA Leiden, The Netherlands.

s.brandsma@science.leidenuniv.nl

k.vrieling@biology.leidenuniv.nl

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Leipzig MicrobialBiodiversity
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The Department of Environmental Microbiology of the Center for Environmental Research Leipzig (Germany) is currently seeking a highly motivated

PhD student (m/f) with interest and experience in Microbial Ecology

from January 1st, 2007 for a period of three years.

The position is part of the UFZ Project SAFIRA II (Remediation Research in Regionally con-taminated Aquifers). The goal of SAFIRA is the development and step-by-step implementation of new low-energy and passive water treatment technologies for mixtures of organic contaminants (especially chlorinated aromatics), from a prototype to a full-scale technical application. One approach within the project is the use of constructed wetlands as passive mod-ules for enhanced microbial decontamination of formerly anoxic groundwater. The artificial wetlands serve as a platform to study the adaptation of microbial communities to organic contamination under (semi-)natural conditions along contamination gradients. To support the understanding of complex processes within the wetlands, controlled laboratory experiments will accompany the field research.

The successful candidate will conduct microbial biodiversity research integrating experimental and theoretical approaches. Moreover the candidate is expected to contribute to ongoing studies of functional diversity (across trophic levels, temporal and spatial scales) of microbial communities applying various approaches in close collaboration with different working groups and participating departments. A broad range of established methods will be used in the project. This includes aerobic and anaerobic cultivation, community fingerprinting (SSCP, T-RLFP, PLFA), high speed cell sorting, analyses of inorganic and organic compounds, the application of stable isotope techniques and various statistical methods for data interpretation.

We are looking for a highly motivated student with a strong background and interest in microbiology and ecology. Applicants should hold a corresponding Diploma or Master degree.

For questions and further information please contact: Prof. Hauke Harms (+49 341 235 2225; hauke.harms@ufz.de) or Dr. Ingo Fetzer (+49 341 235 3255; ingo.fetzer@ufz.de)

Salary will be according to the appropriate civil service level TVÖD (13/2).

The place of work is Leipzig, Saxony, Germany.

Physically handicapped person will be favored if they are equally qualified.

Women are explicitly encouraged to apply to increase their share in science and research.

Please send your complete application documents (curriculum vitae, references) under the code 65/2006 up to October 31th, 2006 to the Personal Department of the UFZ Centre for Environmental Research Leipzig-Halle, Permoserstraße 15, 04318 Leipzig, Germany.

#### – Dr. Ingo Fetzer

Helmholtz Centre for Environmental Research - UFZ Dep. Environmental Microbiology (UMB) Permoserstraße 15 04318 Leipzig Germany

Room 110 Tel.: +49 341 235 3255 Fax: +49 341 235 2247 Homepage: http://www.ufz.de/index.php?en=-5906

Ingo Fetzer <ingo.fetzer@ufz.de>

### MurdochU DolphinPopulations

Murdoch University, in collaboration with the University of New South Wales and University of Zurich/Switzerland, is about to commence a large dolphin research program, initially focussing on bottlenose dolphins off Bunbury, south-western Australia, about 160 km south of Perth. This is the first stage of a long-term commitment to research in the region by Murdoch University to preserve the balance between conservation of marine environments and sustainability of local dolphin tourism and industrial-port activities.

The overall aim of this first step is to assess the longterm viability of the bottlenose dolphin Tursiops sp. population around Bunbury by building an understanding of their ecology, biology, gene flow with other geographic areas and interactions with the environment, food resources and human activities. This research will commence with five synergistic projects, each associated with a Ph.D., and supervised by leading researchers in their fields.

The aim of Project 1 (supervised by Dr Lars Bejder and Prof. Stuart Bradley) is to gain an understanding of the abundance, ecology, biology and natural history of the local dolphin population in the waters around Bunbury. Results from Project 1 will provide fundamental information to all other projects. The aim of Project 2 (Drs Peter Spencer, Michael Kruetzen and Assoc. Prof. Bill Sherwin) is to estimate the genetic connectedness between various populations of Tursiops along the south-western WA coast from Albany to north of metropolitan Perth, with an emphasis on dolphins inhabiting the Bunbury area. Project 3 (Prof. Neil Loneragan and Dr Lars Bejder) examines the dynamics of dolphin prev species in relation to dolphin distribution and abundance and the environment. Research in this project will be carried out in close collaboration with the research in Project 1. Project 4 (Dr Lars Bejder and Prof. Stuart Bradley) investigates the impacts of human activities on dolphins (tourism, shipping, port development, recreation). Projects 1-4 will provide data to modify an existing demographic model of WA dolphins and to forecast the future growth or decline of the Bunbury population under a variety of impact and management scenarios for Project 5 (Assoc. Prof. Bill Sherwin and Prof. Stuart Bradley).

We are currently seeking applications from highly qualified candidates for the three Ph.D. projects ??? Project 2 (???dolphin genetics???), 3 (???dolphin prey???) and 4 (???impacts on dolphins???). Ph.D. students for Projects 1 and 5 have already been selected.

GENERAL REQUIREMENTS FOR ALL THREE Ph.D. POSITIONS:

As the overall project consists of five inter-related components, the successful candidates will be expected to be able to work independently but also in close collaboration with a team of interdisciplinary researchers. Applicants must enjoy working in a team and be willing to work with and lead small groups of volunteers.

Successful candidates will be team-orientated, selfmotivated, independent, enthusiastic, hard-working, organized and have strong communication and people skills. The ability to work relatively unsupervised, plan work, achieve results and demonstrate commitment will be looked upon favorably in the selection process.

SPECIFIC REQUIREMENTS FOR EACH Ph.D.

PhD Project #2: Dolphin genetics. Contact: Dr. Krützen (michael.kruetzen@aim.unizh.ch); cc: Dr. Bejder (l.bejder@murdoch.edu.au). See: http://www.aim.unizh.ch/Members/Kruetzen.html \*Qualifications:

Minimum qualifications for students for Project 2 are a BSc (Hons) or Masters degree.

Students with previous expertise in population genetics and/or evolutionary biology, as well as expertise in molecular lab-techniques (STR analysis, DNA sequencing) are especially encouraged to apply.

As part of the laboratory work will be carried out in Zurich/Switzerland, the selected candidate is expected to spend a significant amount of time overseas during the first one-two years of the PhD candidacy. Applicants are encouraged to address all of the above criteria, and keep applications as short and concise as possible. Applications in electronic format should be directed to Michael Krützen (michael.kruetzen@aim.unizh.ch).

PhD Project # 3: Dolphin prey. Contact: Prof. Loneragan (n.loneragan@murdoch.edu.au); cc: Dr. Bejder (l.bejder@murdoch.edu.au). see http:/-/wwwscieng.murdoch.edu.au/centres/fish/index.html \*Qualifications:

An undergraduate (first-class honors) or graduate (MSc) degree in biology, marine science, animal ecology, conservation or a related field.

Basic computer proficiency and Microsoft Access literacy. GIS experience is preferred. Skills in experimental design and statistics would be valuable.

A strong interest and background in analytical, quantitative and statistical techniques.

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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

## RoyalBotanicGardenEdinburgh BegoniaSystematics

A PhD scholarship is available at the Royal Botanic Garden Edinburgh and the University of Glasgow to study the systematics of Sulawesi Begonia. The project will start in March 2007 and run for 3 years, supervised by Dr. James Richardson and Dr. Mark Hughes from RBGE, and Dr. Rod Page from the University of Glasgow.

Begonia is one of the worlds largest angiosperm genera, and a core research group of the RBGE science strategy. The project will investigate the systematics of Begonia from Sulawesi, which has a geologically complex geological history and is separated from its nearest neighbour, Borneo, by the biogeographic division of Wallace's Line. The Begonia flora of the island is poorly known, with an estimated 50% of the species remaining to be described. In common with much of the islands biota, they are of enigmatic biogeographic origin.

The aims of the project are to: 1. Complete the Begonia species inventory for Sulawesi. 2. Explain their origin in terms of dispersal, migration and local speciation by using molecular phylogenetic techniques.

The research will involve classical herbarium techniques as well as molecular laboratory work. Candidates must be able to undertake several weeks fieldwork in Sulawesi.

Applicants must hold a good honours degree (2.1 or 1st) in a relevant Biological Science and be elegible to pay Glasgow University tuition fees at the home rate (UK / EU students). The stipend is £12,300 per year. The student will be registered at Glasgow University, and be based at the Royal Botanic Garden Edinburgh.

To apply, please send a CV, covering letter (as .pdf or .doc) and the names and contact details of two referees to Mark Hughes (m.hughes@rbge.ac.uk). The closing date is 1st November 2006. Please do not hesitate to contact me for further information.

http://www.rbge.org.uk/rbge/web/science/research/conservation/begonia.jsp M.Hughes@rbge.ac.uk

## RoyalBotanicGardenMadrid Biodiversity

POSITION: PhD contract upon Marie Curie Early-Stage PhD Researcher (European Union)

PROJECT: Understanding and Conserving the Earth's Biodiversity hotspots (HOTSPOTS)

JOB PLACE: Department of Biodiversity and Conservation, Royal Botanic Garden of Madrid, Spain (see http://www.rjb.csic.es/).

HOURS OF WORK: Full Time

JOB STATUS: 2,5 years Fixed Term Appointment.

PhD DETAILS: Working within a new European consortium for training in biodiversity research and conservation, you will be enrolled in a multi-disciplinary challenging PhD programme (HOTSPOTS). In particular, the PhD project will be on Contrasting evolutionary patterns between Mediterranean floristic regions (Mediterranean Basin-South Africa). Dianthus and Gladiolus will be the two chosen plant genera to be focused on.

STUDENT SKILLS AND INTEREST: We search for a student highly motivated in performing a PhD project on evolution, phylogenetics, plant-pollinator interactions using molecular techniques. It will be appreciated experience in the following techniques and methods: plant and animal identification, DNA extraction, PCR, sequencing, phylogenetic reconstructions, statistics, bioinformatics.

ESSENTIALS: You will have BSc/BA (or equivalent), with above-average grades, and excellent background knowledge in biology and/or bio-computing/statistics. You will also need to meet the eligibility criteria of the Marie Curie Actions: (1) you will be an early-stage researcher (less than 4 years of postgraduate research experience) and (2) you will not be a national of the country in which you will be appointed (trans-national mobility).

HOW TO APPLY: Once you have checked your eligibility criteria (see http://www.cordis.lu/mariecurieactions for details), send your curriculum vitae and two recommendation letters to vargas@rjb.csic.es. Your CV should include lists of courses, seminars, grades, and publications.

**PROJECT PARTNERS:** The European HOTSPOTS consortium will work towards increasing the knowledge and understanding of biodiversity hotspots, including the Mediterranean Basin and some European overseas territories. Applying field, molecular and bioinformatics approaches to flagship plants and animals, HOTSPOTS will train a new generation of biologists in state-of-the-art methods of evolution, ecology, and conservation. The PhD programme will comprise nine individual research projects, university training modules (France, Finland, Germany) and summer schools (UK & Africa). The European Commission provides funds to the host organisations to cover salary related costs for the Researchers (salaries depend on the country that will host the fellow. As an indication, in the UK, the fellow will receive a salary in the range of 20-23K p.a. incl. benefits).

Dr. Pablo Vargas Real Jardín Botánico de Madrid (CSIC) Plaza de Murillo 2, 28014 Madrid (Spain) Phone number: + 34 914203017 (225) Fax number: + 34 914200157

Jardin Botanico de Madrid: un paseo guiado Botanic Garden of Madrid: a guided walk http://www.arbas.org/grupos/tc/Jardin%20botanico%20con%20to-1.pdf Organism, Diversity and Evolution: http:/-/www.urbanfischer.de/journals/ Red Española de Diversidad Biologica, Evolución y Sistemática http:/-/redesmoleculares.csic.es/redesmoleculares/index.jsp Jardín Botánico de Madrid: http://www.rjb.csic.es Consejo Superior de Investigaciones Científicas (CSIC): http://www.csic.es Pablo Vargas <vargas@rjb.csic.es>

## Smithsonian Panama TropicalResearch

Graduate Fellowships in Tropical Biology

The Smithsonian Tropical Research Institute Short-Term Fellowship Program allows selected candidates to come to STRI year-round and is an excellent resource to provide support for graduate students and introduce them to tropical research. Although focused primarily on graduate students, awards are occasionally given to undergraduate and postdoctoral candidates. These fellowships enable selected candidates to work in the tropics and explore research possibilities at STRI. Deadlines: February 15, May 15, August 15 and November 15. For more information see http://www.stri.org/english/education\_fellowships/fellowships/stri\_programs.php or e-mail fellows@si.edu

Dra. Rachel Collin Director, Bocas Research Station Smithsonian Tropical Research Institute Apartado Postal 0843-03092 Balboa, Ancon, Republic of Panama

collinr@si.edu http://striweb.si.edu/collinlab/ Phone: +507-212-8766

Bocas del Toro Research Station http://www.stri.org/bocas Rachel Collin <collinr@si.edu>

## SwissFederalResInst GeneFlow

The Swiss Federal Research Institute WSL and its 500 staff members are committed to contribute to a landscape of high quality and to the protection of humans from natural hazards. In the Research Unit Ecological Genetics and Evolution, studies the historic and current gene flow, induced by wind pollination and birdmediated seed dispersal, in an Alpine Stone pine population. For this three-year project, starting January 1, 2007, funded by the Swiss National Science Foundation, we are offering the position of a

PhD candidate in population genetics

You are developing species-specific nuclear microsatel-

lite markers for parentage analysis of Stone pine seeds. In combination with chloroplast markers, you will assess paternal and maternal contributions to progenies recoverd after dispersal by nutcrackers. Artificial pollinations in the field and germination trials in a common garden experiment will complement the lab work, which in part will be carried out in the specialized lab of our project partner in Florence.

Your qualifications: a university degree in biology, environmental or forestry science, a strong background in population genetics, experience in organismic and population biology, as well as skills in molecular lab work. You are flexible, committed, and perserving. For the field work over several weeks, you should be experienced in moving around rugged terrain (karst area).

Our small, motivated team offers a well-equipped molecular laboratory and an excellent logistic support.

Interested? Please send your complete, written application, including photo, using reference number 455 to Mrs. Monika Huber, Swiss Federal Research Institute WSL, Human Resources, Zürcherstrasse 111, CH-8903 Birmensdorf, Switzerland. Further information can be obtained from Dr. Felix Gugerli, (Tel: +41-(0)44-739 25 90) or Dr. Kurt Bollmann (Tel: +41-(0)44-739 24 11).

Conference "Biodiversity Conservation - From Genes to Habitats" Davos (Switzerland), November 23/24, 2006

Visit the website for information and registration: http://www.wsl.ch/intrabiodiv Felix Gugerli, PhD Biologist / Group leader Swiss Federal Research Institute WSL Research Unit Ecological Genetics & Evolution Zuercherstrasse 111 CH-8903 Birmensdorf

#### SWITZERLAND

phone: +41-(0)44-739-2590 fax: +41-(0)44-739-2215 http://www.wsl.ch/staff/felix.gugerli/

felix.gugerli@wsl.ch

## **TU Braunschweig TadpoleEvolution**

vae (tadpoles) in Madagascar. The work is expected to combine aspects of tropical ecology and limnology, as well as molecular phylogenetics, DNA barcoding and classical morphological analysis. The main focus will be on systematically collecting ecological data and specimens in the field, analyzing these data statistically, and integrating the results with those obtained by other members of the research group. The overall goal is to understand how ecomorphological tadpole characters correlate with those of adults, and to trace the evolution of these characters along the phylogeny of the endemic Madagascan frog radiations.

We expect candidates to have (a) a strong background in conducting independent field research (if possible in tropical countries), (b) experience in analysis of ecological data (if possible by multivariate methods), and (c) expertise in amphibian biology and limnology. Good skills in English language (speaking and writing) are necessary, basic knowledge of French would be helpful.

To apply, please send a cover letter describing your research interests, a complete CV including a summary of your MSc/diploma dissertation, and the names and email addresses of two persons that can be approached for references, as hardcopy by mail, before 31 October 2006. Applications by e-mail are discouraged. Please do not send original documents but only printouts and photocopies as we will not be able to return the documents to you.

Applications from outside Europe are encouraged; however, please note that because of high travel costs for interviews, applications from abroad will only be considered if candidates fulfil the requirements outlined above particularly well.

Please send your application to:

Prof. Dr. M. Vences Technical University of Braunschweig Zoological Institute Department of Evolutionary Biology Spielmannstr. 8 38106 Braunschweig

For more information on the working group, see www.zoologie.tu-bs.de and www.mvences.de m.vences@tu-bs.de m.vences@tu-bs.de

#### PhD fellowship (3 years - BAT IIa/2) in Evolutionary Biology / Tropical Ecology

In the framework of a project funded by the German Research Foundation DFG we are seeking a highly motivated PhD candidate for studies on the evolution of the astonishingly diverse communities of amphibian lar-

# UAdelaide EvolInvasiveness

We require a highly motivated PhD student to carry out research aimed at characterising the potential for intraspecific and interspecific hybridisation and introgression involving adaptive genes between native species and invasive weeds. Genomic changes as a result of both hybridisation and introgression have been implicated in the evolution of invasiveness in several weed species, but direct evidence is often lacking. The student will be part of a multidisciplinary group, linked with other international projects, working to understand the molecular and ecological mechanisms underlying the evolution of invasiveness. The successful applicant will work on the case study Australian weed system, Senecio madagascariensis, which was introduced approximately 100 years ago and now hybridises with the native S. pinnatifolius complex. A combination of different techniques will be combined to assess this question, including: population genetic analysis to assess source of introduction, admixture potential and genetic diversity dynamics; molecular assignment tests to assess the extent of introgression in contemporary and historical (herbarium) population collections; adaptive gene markers (developed separately) will also be mapped genetically and assessed for evidence of selective sweeps to further understand micro-evolutionary changes during the invasion process. The student will be enrolled at the University of Adelaide, Australia, which has excellent molecular genetic and ancient DNA facilities. The student will be provided with a full stipend worth \$24000. Technical skills and experience required: 1. Bachelor Degree in evolutionary or biological sciences combined with an excellent Honours/Masters degree or equivalent. 2. An interest in using molecular methods and population modelling to understand the evolution of invasiveness in weed species. 3. Strong interest in the application of molecular tools to dissect and understand fundamental evolutionary processes at molecular and ecological levels. 4. Ability to work in a laboratory using aseptic techniques. 5. Ability to initiate and conduct original research. The position will remain open until a suitable applicant is found. Please contact Professor Andy Lowe for further details: email: Lowe.Andrew@saugov.sa.gov.au phone: +618 8222 9326

peter.prentis@adelaide.edu.au ter.prentis@adelaide.edu.au

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### UGlamorgan AdaptationToHeavyMetals

A 3 year PhD studentship is available at the University of Glamorgan, in the field of Molecular Ecology starting November 2006, studying adaptation and evolution within heavy metal contaminated environments.

Supervisor: Dr Georgina Harper, University of Glamorgan Co-supervised by Mike Bruford & John Morgan at Cardiff University

The project will be to investigate evolution and adaptation within populations of the earthworm species Lumbricus rubellus that are subject to high levels of Ni contamination in their environment. Heavy metal pollution such as this is increasingly an environmental hazard in industrialised countries, and research into the consequences is vital to understand the ecological impact. It will be part of a large collaborative project being carried out at Cardiff University, Glamorgan, and Imperial College. Specifically, the project will utilise molecular genetic markers (such as Microsatellites and Amplified Fragment Length Polymorphisms), and will investigate the relationship of this genetic data to phenotypic data, obtained via metabolomics (analvtical profiling of metabolites in biological samples. Collaborators at Imperial College, London will carry out the metabolomics work). The combination of these techniques will provide an exciting new level of understanding of adaptation and potential evolution in natural populations exposed to environmental change, since this may have major implications for the maintenance of genetic diversity in populations, potentially facilitating future adaptive evolution.

The successful candidate would be working in a worldclass research environment with a team of specialists in the fields of molecular ecology, conservation biology, terrestrial ecotoxicology, and metabonomics. The project will provide excellent experience in molecular techniques in a modern, well-equipped laboratory, including DNA sequencing, PCR, and DNA fingerprinting, plus many ecological techniques. The student will gain experience in the application of these to investigating ecological and environmental questions.

The studentship will be based at the University of Glamorgan. The studentship is fully funded for a UK student by the Leverhulme Trust. Applicants should have, or expect to obtain at least a 2:1 honours degree in a biological science, preferably with some experience in population genetics or molecular ecology.

For informal enquiries, full information and application forms contact Dr Georgina Harper, email glharper@glam.ac.uk, tel; 01443 482868. Completed application forms and a CV should be received no later than September the 14th, and should be sent to

Dr Georgina Harper School of Applied Sciences University of Glamorgan Pontypridd Mid Glamorgan CF37 1DL, UK

Tel: 01443 482868 e-mail: glharper@glam.ac.uk glharper@glam.ac.uk

# UGlamorgan MolEvol

MPhil/PhD Research Studentship at the University of Glamorgan Starting Autumn 2006 Faculty of Health, Sport and Science - Department of Science and Sport Background The Department of Science and Sport (part of the newly created Faculty of Health, Sport and Science) have a research studentship to offer a suitable candidate, in the area of molecular ecology.

Suitable candidates should be have an undergraduate degree (at 2.1 or above) in an appropriate scientific subject, experience of working within a scientific laboratory environment, have excellent oral and written communication skills, good organisational skills, be able to work alone under the supervision of academic members of staff, and an awareness of health and safety issues whilst working in the laboratory . The successful candidate will initially enrol on an MPhil/PhD programme and will have the opportunity to progress to a full PhD programme upon successful completion and transfer at the end of the first year on approval of the Faculty Research Committee.

Studentship will investigate the following project: To study the UK colonisation by an invasive alien alga species, Sargassum muticum (Japanese wire weed), to the shoreline of the UK, in particular the South Wales coast. The species is native to Japan and China, but since its introduction to the UK (probably via ballast water in ships, or the shellfish industry) in the 1970's, the species has spread along the South England coast. It has now taken hold in at least three sites on the coast of Wales, where it dominates low shores, resulting in the displacement of many native The student will use molecular tech-UK species. niques, such as DNA sequencing and microsatellites markers, alongside phylogenetic analysis to identify invasion routes, source populations and diversity in invaded areas. The project will be in association with the Countryside Council for Wales. (informal enquiries to Dr Tim Johnson, or Dr Georgina Harper). Successful candidates should have a first degree (2.1 or above)in an appropriate scientific subject, preferably in genetics or Biology. Informal enquiries should be made to Dr Georgina Harper (glharper@glam.ac.uk), or Dr Tim Johnson (tpjohnso@glam.ac.uk). Applications and Expressions of Interest Applications should be made formally in writing to one of the above members of staff at the Department of Science and Sport, Faculty of Health, Sport and Science, University of Glamorgan, Pontypridd, CF37 1DL by 15th September 2006.

glharper@glam.ac.uk

## UNotreDame SpeciationRhagoletisFlies

\*Graduate Ph.D. Fellowship Opportunity\*

The Ecology and Genetics of Sympatric Host Race Formation and Speciation in Rhagoletis Fruit Flies

Laboratory of Jeffrey L. Feder (jfeder@nd.edu) Dept. Biological Sciences, University of Notre Dame

Dear Students and Colleagues,

I would like to alert you to a graduate Ph.D. fellowship opportunity available to investigate the ecology and genetics of sympatric host race formation and speciation in the apple maggot fly, Rhagoletis pomonella, and/or related ecological genetics projects in my laboratory in the Department of Biological Sciences, University of Notre Dame. Ongoing research projects in the laboratory are studying the ecological, physiological, and genetic bases for diapause and fruit odor discrimination traits involved in the ecological adaptation of Rhagoletis flies to their respective host plants that result in reproductive isolation. We are also engaged in developing the molecular genomics of the fly through the characterization of gene expression patterns. The student will be eligible for a generous 5 year support package and enrolled in an active Ecology, Evolution and Environment program within the Department. The group recently received an IGERT grant from the National Science Foundation which I direct focusing on Global Linkages of Biology, the Environment, and Society (GLOBES). The GLOBES program provides students the opportunity to be involved in a number of new and unique interdisciplinary classes, symposium, conferences, and research and education activities of both national and international scope mentored by faculty across the Colleges of Science and Arts and Letters at Notre Dame (see our website at http://globes.nd.edu for more information about the program).

Feder webpage can be found at: http://www.nd.edu/-%7Ebiology/JeffreyFeder.shtml Feder lab page is:

#### http://www.nd.edu/%7Eaforbes/federlab.html

For more information contact:

Dr. Jeffrey L. Feder Department of Biological Sciences University of Notre Dame South Bend, Indiana, 46556-0369 (574)-631-4159 jfeder@nd.edu

The University of Notre Dame is an Equal Opportunity/Affirmative Action/Equal Access Employer

Ginna Anderson GLOBES Program Department of Biological Sciences Rm 180, Galvin Life Sciences University of Notre Dame Notre Dame, IN 46556-0369 tel: 574-631-3287 fax: 574-631-7413 email: vanderso@nd.edu http://globes.nd.edu

vanderso@nd.edu vanderso@nd.edu

### **UToronto EvolGenetics**

Graduate Student Positions in Evolutionary & Ecological Genetics University of Toronto, Department of Ecology & Evolutionary Biology http://www.eeb.utoronto.ca We are pleased to announce that the University of Toronto has recently formed a Department of Ecology and Evolutionary Biology (EEB), which is home to over 20 outstanding scientists in these fields. Research in evolutionary and ecological genetics is one of the strengths of EEB, comprised of an innovative community of faculty and students studying topical problems in population genetics, molecular evolution, quantitative genetics, experimental evolution, and comparative genomics. Faculty research utilizes both non-model systems and the classic model organisms, A. thaliana, C. elegans, and D. melanogaster. Recent faculty hires are currently recruiting graduate students, with positions available in the labs of:

Aneil Agrawal (http://www.zoo.utoronto.ca/afagrawal/) Asher Cutter (http://www.ashercutter.net) John Stinchcombe (http:/-/www.botany.utoronto.ca/ResearchLabs/-StinchcombeLab/) and many others (http://www.eeb.utoronto.ca/faculty/)

The graduate program in EEB provides training for students toward both M.Sc. and Ph.D. degrees and promotes excellence in research. The EEB department is located on the St. George campus of the University of Toronto in downtown Toronto, Ontario. Toronto is a vibrant, multicultural city on the shore of Lake Ontario, and is home to rich cultural options in the arts, music and film, ethnic cuisine, and a high quality of

life.

Interested students should contact faculty with a brief cover letter indicating their academic background and research interests and file an application with the department. Additional information about faculty research programs and graduate studies, as well as application instructions, is available on the EEB website (http://www.eeb.utoronto.ca). We welcome strong applicants from any country, and encourage Canadian citizens to apply for NSERC predoctoral fellowships (internal deadline Oct. 10, 2006) and US citizens to apply for NSF predoctoral fellowships (deadline Nov. 8, 2006), both of which can be supported at the University of Toronto. The deadline for new applicants in EEB is February 16, 2007.

asher.cutter@sympatico.ca asher.cutter@sympatico.ca

### **UWindsor FishEvol**

MSc Graduate Student Positions

Evolutionary ecology and conservation of genetic quality in fishes

Two MSc graduate student positions are available in the Department of Biology at the University of Windsor, working with Trevor Pitcher on the ecology, evolution, and conservation genetics of fishes. The lab<sup>1</sup>s research is broadly concerned with genetic quality in the context of sexual selection (see www.uwindsor.ca/pitcher for more details). The specific projects will likely involve salmon or live-bearing fish. This multidisciplinary work will provide training in evolutionary theory underlying sexual selection, the design and implementation of field and lab experiments, assessment of sperm quality, molecular analyses (microsatellites/sequencing), as well as research skills in experimental design, statistics, and scientific writing.

Qualifications: Equivalent of a honours degree in biology, and strong interests in evolutionary biology, molecular ecology, and conservation biology. Experience with molecular methods is an asset.

Application: Please send to the address listed below (1) a letter describing your interests in this position and your previous research experience, (2) your CV, (3) transcripts (unofficial copies are acceptable) and (4) names and contact information of two references. E-mailed applications are preferred.

Starting date: The positions will begin in January or

May 2007. Applications will be accepted immediately until the position is filled.

Trevor Pitcher Department of Biology University of Windsor Windsor, Ontario Canada, N9B 3P4 email: tpitcher(at)uwindsor.ca web: www.uwindsor.ca/pitcher tel: 519-253-3000 ext. 2710 fax: 519-971-3609

Trevor Pitcher <tpitcher@uwindsor.ca>

#### **UZurich EvolBiol**

Two Doctoral positions available in Evolutionary Biology and Biodiversity in the Zoological Museum at the University of Zurich in Switzerland

The research group in Evolutionary Biology and Biodiversity led by Professor Tony Wilson in the Zoological Museum (<<u>http://www.unizh.ch/-</u> zoolmus>www.unizh.ch/zoolmus) is seeking two wellqualified and highly motivated doctoral candidates for positions at the University of Zurich. These positions are for three years, beginning in January 2007, with a salary of 35-40,000 Swiss Francs. A Masters degree or equivalent is a prerequisite for acceptance into the Ph.D. program at the University of Zurich.

Our group concentrates on the role of sexual selection in the speciation process. Integrating molecular phylogenetic, population genetic and functional genomic approaches, our work spans a broad temporal scale in an effort to derive testable hypotheses on the evolution of taxonomic diversity. Over the past several years, our research has concentrated on syngnathid fishes (seahorses and pipefish), a group of particular interest due to specialized morphological adaptations for male parental care and female-dominated competition for access to mates. Our work involves ongoing collaborations with researchers in America, Europe and Australia.

The first PhD candidate will be involved in a study of the influence of fecundity selection on body size variation in populations of Syngnathus pipefish. Recent work indicates a positive association between ambient water temperature, body size and fecundity in nearshore pipefish species. Using a common garden labbased approach, the student will investigate the role of ambient water temperature on growth rates and development times of captive-reared pipefish. At the same time, high density temporal and spatial sampling will clarify fine-scale variation in body size and fecundity variation in the wild. The candidate will also have the opportunity to explore the use of otolith measurements for the aging of wild-caught pipefish, using lab-reared animals of known age.

The second PhD student will investigate the importance of major histocompatibility (MH) gene variation in mate choice and parasite resistance in Hippocampus seahorses. MH genes play an important role in the adaptive immune response and have been shown to be important for mate choice in teleost fishes. Recent research has identified 20 unlinked MH loci in the compact genome of Hippocampus abdominalis. The candidate will construct a genetic linkage map for a laboratory population of this species using a suite of 300 STR loci and, using a BAC library, characterize the distribution and variance of MH in the genome. These data will be used in a series of mate choice experiments and parasite trials led by two Masters students.

Our lab is equipped with three 5000L climate-controlled aquarium facilities for the culture of populations of Syngnathus and Hippocampus under controlled conditions. Our laboratory facilities include a MJ Tetrad PCR machine and an ABI 3100 sequencer, with access to a high-throughput ABI 3730 48-capillary machine. In addition, our Functional Genomics center (<http:/-/www.fgcz.unizh.ch/>www.fgcz.unizh.ch) offers extensive facilities for proteomics and bioinformatics. The core bioinformatics facility of the University consists of two 4 processor Opteron Servers and an 8 TB file system capable of running all Unix-based bioinformatics and phylogenetics software packages.

The University is one of the top comprehensive institutions in Europe and the Zoological Museum is a center of excellence in behavioural ecology, population genetics and evolution. With a critical mass of researchers in Ecology and Evolutionary Biology at the University and the neighbouring Swiss Federal Institute of Technology (ETH Zurich), Zurich offers an exceptional academic environment for research and study.

Zurich is an international city of 350,000 located at the heart of Europe, with world-class facilities for sport, music and theatre. With its location at the head of Lake Zurich and its proximity to the Swiss Alps, there are incredible opportunities for sailing, skiing, hiking and mountaineering in the region. For all of these reasons, Zurich has been ranked the top city in the world for quality of living.

Interested candidates should submit a Curriculum vitae and statement of research interests, along with a list of two references, by email or post to Rosemarie Keller, Institute Secretary (kellerro@zoolmus.unizh.ch) by October 15, 2006. In your application package, please indicate which of the two positions you are applying for. Any questions on the positions should be directed to Prof. Wilson

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### UZurich EvolEcol

PhD position on evolutionary ecology of amphibians University of Zurich, Switzerland

Two PhD positions are available at the University of Zurich, working with Josh Van Buskirk on the ecology, evolution, and conservation genetics of amphibians. Our research is broadly concerned with the demographic and genetic consequences of variation in habitat, population size, and population isolation. Questions concern the implications of these factors for quantitative genetic variation, species interactions, natural selection, and local adaptation. The specific project will depend partly on your interests.

The positions are funded by the Swiss National Science Foundation for a period of three years. We participate in the large and interactive Ecology Group directed by Prof. Uli Reyer, within which other projects address coexistence in hybridogenetic waterfrogs, demography and conservation of reed buntings, coevolution of aphids and their parasitoids, and other topics.

Qualifications: Equivalent of a masters degree in biology, and strong professional interests in evolutionary biology, molecular ecology, conservation, or landscape ecology. Experience with molecular methods is an asset.

Application: Please send to the address listed below (i) a letter describing your interests in this position and your previous research experience (diploma, masters, RA positions, etc.), (ii) your CV, and (iii) names and contact information of two references. E-mailed applications are preferred. I will begin screening candidates on 15 October 2006, and probably get back to you by late October. Students may begin as early as January 2007.

Josh Van Buskirk Institute of Zoology University of Zurich CH-8057 Zurich, Switzerland

jvb@zool.unizh.ch www.zool.unizh.ch/index\_en.html

### UZurich MolEvol

PhD thesis in mathematical epidemiology/molecular evolution of mobile DNA

Mobile DNA is DNA that can change its position within a genome. It is an integral component of most bacterial genomes, and also implicated in the spreading of drug resistance genes among pathogenic bacteria. Why does mobile DNA persist in genomes? On one hand, mobile DNA may be a very effective parasite, replicating itself at the expense of its host. On the other hand, mobile DNA can also have beneficial effects, such as occasionally beneficial mutations. An ongoing project in our group aims at resolving the question why mobile DNA is maintained in bacte-rial genomes. Despite thirty years of debate, the question still has no conclusive answer. The availability of hundreds of completely sequenced bacterial genomes provides a unique opportunity to remedy this situation. The project has a bioinfor-matics and a mathematical modeling component. We are searching for a Ph.D. student with experience in the mathematical modeling of epidemiological or population biological systems to work on this project.

The Wagner lab at the University of Zurich studies biological evolution on all levels of organization, from genes, genomes, and genetic networks to whole organisms. A sam-ple of our research can be found at http:/-/www.biochem.unizh.ch/wagner/.Lab members are a group with very diverse backgrounds and research projects, unified by their interests in evolution and /or fundamental organizational principles of life.

The successful candidate will have a strong background in applied mathematics, especially mathematical biology, with experience in the analysis of nonlinear differential equations, stochastic systems, and numerical analysis. For best considera-tion, a strong background in biology is also desirable, as well as fluency in a major scripting language such as perl. We are looking for an individual with a Masters Degree or equivalent, who is highly self-motivated and independent, and has dem-onstrated interests in problems of molecular evolution. The working language in the laboratory is English. German skills are not essential.

Zurich is a highly attractive city in beautiful surroundings, with a multinational population, and many educational and recreational opportunities. To be considered, please send a single (!) PDF file containing a CV including pub-lication list (if available), a scanned academic transcript (list of grades in university courses), a statement of research interests not exceeding two pages, and three references to jobs\_aw@bioc.unizh.ch. Please include the word MOBDNA in the sub-ject line. The application deadline is October 15, 2006.

We regret that we will not be able to consider candidates who currently reside in Asia, due to the prohibitive interview cost.

 Dr. Andreas Wagner Associate Professor of Biology 1 University of New Mexico MSC03 2020 Albuquerque, NM 87131-000

Phone: (505)- 277-2021 FAX: (505)- 277-0304 WWW: http://samba.unm.edu/ ~ wagnera PhD position in mathematical epidemiology/molecular evolution of mobile DNA

Mobile DNA is DNA that can change its position within a genome. It is an integral component of most bacterial genomes, and also implicated in the spreading of drug resistance genes among pathogenic bacteria. Why does mobile DNA persist in genomes? On one hand, mobile DNA may be a very effective parasite, replicating itself at the expense of its host. On the other hand, mobile DNA can also have beneficial effects, such as occasionally beneficial mutations. An ongoing project in our group aims at resolving the question why mobile DNA is maintained in bacte-rial genomes. Despite thirty years of debate, the question still has no conclusive answer. The availability of hundreds of completely sequenced bacterial genomes provides a unique opportunity to remedy this situation. The project has a bioinfor-matics and a mathematical modeling component. We are searching for a Ph.D. student with experience in the mathematical modeling of epidemiological or population biological systems to work on this project.

The Wagner lab at the University of Zurich studies biological evolution on all levels of organization, from genes, genomes, and genetic networks to whole organisms. A sam-ple of our research can be found at http:/-/www.biochem.unizh.ch/wagner/. Lab members are a group with very diverse backgrounds and research projects, unified by their interests in evolution and /or fundamental organizational principles of life.

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## UppsalaU EvolFuncGenomics

Graduate student position (Doktorand) at the Department of Evolutionary Functional Genomics Uppsala University http://www.genetik.uu.se/ One PhD position is available at the Department of Evolutionary Functional Genomics at Uppsala University starting autumn 2006. The department is part of the Evolutionary Biology Centre, EBC. A major focus of the department is the genetic basis of plant adaptation, combining information on gene function from model organisms with studies of variation in adaptive traits in different species. The aim is to identify genes that affect variation in traits such as flowering time and growth rhythm. Our strategy is to integrate traditional ecological and phylogeographic studies with genomics and population genetics, at both theoretical and experimental levels.

The successful applicant will take part in a project on evolutionary and functional genomics of adaptive traits in Norway spruce (Picea abies). The timing of budset in Norway spruce is a trait with high adaptive value. The trait has been extensively studied in quantitative genetic studies that have revealed a strong clinal variation and that a large part of the variation is under genetic control. The aim of the present project is to elucidate the molecular mechanisms controlling bud set, and to identify the genes that control the adaptive clinal variation for this trait. The general strategy is to combine functional studies of already identified candidate genes in Norway spruce and model species with association mapping experiments on the same genes in Norway spruce. Methods include gene expression studies, transformation of Norway spruce and Arabidopsis, analysis of DNA sequence variation, SNP genotyping and association mapping. The current project will mainly focus on functional characterization of candidate genes through expression and transformation experiments. The work will be conducted within a research group of currently 5 persons with both national (SLU) and international (Canada, Italy) cooperation.

We are looking for an applicant with a strong interest in molecular plant biology and evolutionary genetics. A Bachelor of Science or equivalent in molecular biology, genomics, genetics or a related subject is required and experience in molecular genetics (for example DNA sequencing, QTL mapping, RNA work or plant transformation) and bioinformatics is an advantage.

The application should include curriculum vitae, degree certificate, references, a short description of the applicant and his / her experience.

For further information contact: Niclas Gyllenstrand, 018-471 64 13 Niclas.Gyllenstrand@ebc.uu.se Ulf Lagercrantz, 018-471 64 18, Ulf.Lagercrantz@ebc.uu.se or Martin Lascoux, 018- 471 64 16, Martin.Lascoux@ebc.uu.se

Departmental home page: http://www.genetik.uu.se/ Union representatives: Anders Grundström, SACOrådet, tel 018-481 53 80, Carin Söderhäll, TCO/ST, tel 018-471 19 96 and Stefan Djurström, SEKO, tel 018-471 33 15.

Send your application to: Registrator, UFV-PA 2006/1989, Uppsala Universitet, Box 256, 751 05 Uppsala or fax 018-471 2000 no later than September 18 2006. If the application is sent by fax the original papers should be sent to the Registrator within a week of the deadline.

– Martin Lascoux Program in Evolutionary Functional Genomics EGS, EBC, Uppsala University Norbyvägen 18D, 75236 Uppsala Tel: 46 18 471 64 16 Fax: 46 18 471 64 24

martin.lascoux@ebc.uu.se

# VrijeU Evol physio temp adaptation

#### PhD student in Evolutionary Biology (f/m)

The department of Animal Ecology, within the Faculty of Earth and Life Sciences, Vrije Universiteit Amsterdam, The Netherlands has a PhD position vacant for the project:

"Evolutionary physiology of temperature adaptation"

The goal of the project is to obtain a physiological understanding of individual variation in metabolic response to temperature, also known as thermal phenotypic plasticity. Experimental work using existing isogenic lines will include quantification of thermal phenotypic plasticity for various life history traits, biochemical analysis, and expression profiling of candidate genes for individuals with genetic differences in thermal phenotypic plasticity. The adaptive importance of biochemical and genetic differences will be evaluated in thermally distinct habitats in the field. The project may start very shortly.

Tasks - Executing scientific research as detailed in the project description. - Publication of results of the research in scientific journals as well as in a thesis. - Assisting in undergraduate courses given within the Institute of Ecological Science. - Following the PhD educational programme as prescribed by the institute.

Required skills and education - MSc degree in Biology. - Advanced courses in evolution, molecular ecology, genetics, animal physiology, or equivalent are desirable. -Proficiency in both written and spoken English. - Excellent social skills, ability to work independently and high motivation will be assets.

Details The appointment will initially be for 12 months. After a successful evaluation the contract will be prolonged with 36 months. The employment will have to result in a written thesis. Our fringe benefits of employment can be found at www.vu.nl/vacatures . Salary Gross monthly salary, based on experience, amounts to 1.933,- Euro during the first year up to 2.472,- Euro during the last year.

Information and applications Upon request, applicants can obtain the complete project description from Désirée Hoonhout (tel. +31 20 5987004; desiree.hoonhout@falw.vu.nl). Further information can be obtained from Prof. Dr. J. Ellers (tel. +31 20 5987076; jacintha.ellers@falw.vu.nl). Please, send your application with Vacancy number: 1.2006.00187, including your expression of interest (with a brief statement of your personal research aims and interests), a detailed resume, and two reference names before 12 September 2006 addressed to Dr. J.M.R.M. Neutelings, managing director Faculty of Earth & Life Sciences, Vrije Universteit. You may also send your application by e-mail at: falw-vacatures@falw.vu.nl <mailto:falwvacatures@falw.vu.nl>

jacintha.ellers@falw.vu.nl jacintha.ellers@falw.vu.nl

# Jobs

#### BowdoinCollege EvoDevo

The following advertisement is currently being posted in various places. Individuals with an "EvoDevo" background would be welcome to apply.

#### DEVELOPMENTAL BIOLOGY Tenure-track Position Bowdoin College

The Biology Department at Bowdoin College invites applications for a tenure-track position in Developmental Biology at the Assistant Professor level beginning Fall 2007. We are seeking candidates who will demonstrate excellence in both teaching and research. Postdoctoral experience preferred. Typical teaching responsibilities each year include one laboratory course in developmental biology (with a lab instructor), one course at the non-majors or introductory biology level and one ad-

UCaliforniaRiverside Bioinformatics	. 41
UCaliforniaRiverside LabAssist	.42
UCalifornia Riverside PlantEvolGenomics	. 43
UColorado EvolBiol	. 43
UDurham MolBiodiversity LabTech	
UEdinburgh EvolGenetics	
UHouston 2 EvolBiol	
UIIlinoisUC EvolGenomics	. 44
UIowa EvolEcolGenet	
UKentucky QuantPopCompGenomics	
UMiami EvolBiol	
UMontreal StatGenetics	.47
UPotsdam AnimalEvol	. 47
UPotsdam Theor Pop Genetics	. 48
URochester ComparativeFunctionalGenomics	.48
USussex EvolBiol	. 49
UTexasArlington EvolBiol	.49
UTexas Austin LabTech	
UToronto TheoBiol	50
UWashington MarineFishGenomics	.51
UWesternAustralia PlantBiodiversity	. 52
UWisconsinEauClaire FuncGenomics	. 53
UniversityCollegeLondon ResearchTechnician	. 53
VanderbiltU EvolOfDiseaseVectors	. 54
WashingtonStateU PlantEvolGenet	.54
WesternWashingtonU QuantGenet	

vanced course in one's area of research. The successful applicant is expected to pursue an active research program that involves undergraduates.

Review of applications will begin November 1, 2006 and will continue until the position is filled. Please send a curriculum vitae and a description of your research interests and teaching philosophy, and arrange to have three letters of reference sent to: Search Committee Chair, Biology Department, 6500 College Station, Bowdoin College, Brunswick, ME 04011-8465. For further information about the college, the department, and the program, please see our website: http:/-/academic.bowdoin.edu/biology/ Bowdoin College is committed to equality through affirmative action and is an equal opportunity employer. We encourage inquiries from candidates who will enrich and contribute to the cultural and ethnic diversity of our college. Bowdoin College does not discriminate on the basis of age, race, creed, color, religion, marital status, gender, sexual orientation, veteran status, national origin, or disability

status in employment, or in our education programs.

Michael Palopoli Department of Biology Bowdoin College 6500 College Station Brunswick, ME 04011

(207) 725-3657 mpalopol@bowdoin.edu

Michael Palopoli <mpalopol@Bowdoin.Edu>

# CalPolySanLuisObispo BehavioralEvolutionist

**BEHAVIORAL ECOLOGIST - The Biological Sciences** Department within the College of Science and Mathematics at Cal Poly, San Luis Obispo, California is seeking a Behavioral Ecologist with expertise and training in Evolutionary Biology for a full-time, academic vear, tenure-track position at the assistant professor rank beginning September 2007. Teaching responsibilities may include Animal Behavior, Behavioral Ecology, Evolution, Introductory Biology, a graduate level course in Population Biology, and other courses as appropriate to background and training. The successful candidate must have a strong commitment to undergraduate teaching, curriculum development, and implementation of a student-centered research program. Ph.D. in related field required at time of hiring. Postdoctoral or equivalent experience is desirable. Salary is commensurate with qualifications and experience.

To apply, visit WWW.CALPOLYJOBS.ORG, complete a required online faculty application and submit to Requisition #101038; attach your curriculum vitae, statement of teaching philosophy, and statement of professional goals. Also mail a hard copy of the above noted documents and arrange to have official graduate transcripts, and three letters of recommendation sent to: Dr. Michael Yoshimura, Chair, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA 93407-0401. Review of applications will begin October 13, 2006. Applicants are strongly encouraged to have all materials submitted by October 13; applications received after this date may be considered. For questions, contact the Biological Sciences Department at (805) 756-5242. Cal Poly is strongly committed to achieving excellence through cultural diversity. The university actively encourages applications and nominations of all qualified individuals. EEO.

fvillabl@calpoly.edu

## CaliforniaStateU Fresno PopGenet

Population Geneticist, Tenure-Track

The Department of Biology at California State University, Fresno is hiring a tenure track population geneticist. The successful candidate is expected to develop a research program that involves both undergraduate and graduate students, to pursue the external funding necessary to maintain a successful research effort, and to teach upper division core courses and undergraduate or graduate courses in their area of specialization. A Ph.D. in Genetics or other relevant field is required. Postdoctoral experience is preferred.

Send completed application, including form available at http:// www.csufresno.edu/aps/vacancy/sc1.pdf, a cover letter, curriculum vitae, statements of teaching and research philosophy, and three current letters of reference (dated within the last 12 months) to: Dr. Paul R. Crosbie, Committee Chair, Department of Biology, California State University, Fresno, 2555 E. San Ramon Avenue M/S SB73, Fresno, CA 93740-8034, or to pcrosbie@csufresno.edu, Phone: (559) 278-2074, Fax: (559) 278-3963. For full consideration, all materials must be received by 23 October 2006.

California State University, Fresno is an Equal Opportunity Employer.

Dr. Madhusudan Katti Assistant Professor Department of Biology, M/S SB73 California State University, Fresno 2555 E. San Ramon Ave. Fresno, CA 93740-8034

559.278.2460 mkatti@csufresno.edu http://-zimmer.csufresno.edu/~mkatti

## ChicagoBotanicGarden PlantSystematics

#### SENIOR PLANT SCIENTIST

The Chicago Botanic Garden (CBG), in collaboration with Northwestern University, invites applications for a SENIOR PLANT SCIENTIST position beginning no later than September 2007. Applicants should be broadly trained in plant biology or ecology in a subfield that will complement some aspect of our current research expertise in restoration ecology, conservation biology, soil ecology, population genetics, plant systematics and economic botany. The new Senior Plant Scientist will join a team of eleven Ph.D. researchers and participate in an innovative joint Master<sup>1</sup>s program in Plant Biology and Conservation with Northwestern University. We seek to appoint an individual who will take a leadership role in helping to expand the existing Master<sup>1</sup>s program into a unique new doctoral program, develop a productive and creative research program, advise graduate students and interns, serve as an adjunct faculty member and teach courses in his or her area of specialty at Northwestern University.

Candidates must have a Ph.D. in biology or related discipline, a strong record of scholarship, an excellent extramural funding record for research, experience advising students at the doctoral level, and a commitment to undergraduate and graduate education. Please send a curriculum vitae, statements of research plans and teaching interests, examples of scholarly writing and three letters of reference (mailed directly from referees) by December 15, 2006, to:

Senior Plant Scientist Search Committee Attn: Chicago Botanic Garden Luanne Janikowski 1000 Lake Cook Road Glencoe, IL60022 or ljanikow@chicagobotanic.org (electronic correspondence preferred)

CBG is situated on a 385-acre campus north of Chicago and showcases 23 different demonstration gardens as well as native areas that include woodlands, prairies and aquatic habitats, each featuring native and endangered Illinois flora (http://www.chicagobotanic.org).

The Chicago Botanic Garden and Northwestern University are Equal Opportunity/Affirmative Action Employers. Applications from women and minority candidates are encouraged.

nzerega@chicagobotanic.org

#### **ClarkU EvolGenomics**

As seen in the 01 September issue of Science:

Faculty positions in (1) evolutionary and functional genomics and (2) microbiology. The Department of Biology at Clark University, Worcester, Massachusetts (website: http://www.clarku.edu/- departments/biology/), invites applications for two tenure-track appointments at the rank of ASSISTANT PROFESSOR, to begin fall 2007. Successful candidates will have research space in the newly constructed Lasry Center for Biosciences and will be expected to develop externally funded research programs involving Ph.D. and undergraduate students. Postdoctoral experience and evidence of success in obtaining extramural funding are desired. Promise of teaching excellence at undergraduate and graduate levels is expected. Evolutionary and functional genomics: The candidate will conduct research in comparative genomics and contribute to the evolutionary and molecular biology components of our curriculum. Microbiology: The candidate will conduct research in any area of microbiology, will teach microbiology, and contribute to the pre-health curriculum. Applicants should submit curriculum vitae, a summary of research interests, a statement of teaching interests, and three key publications, and should arrange to have three letters of reference submitted electronically to the: Search Committee for Evolutionary and Functional Genomics (e-mail: genomics@clarku.edu) or Microbiology (e-mail: micro@clarku.edu). Follow up hardcopy is not required. Letters can also be mailed to the Chair of the appropriate Search Committee, Clark University, 950 Main Street, Worcester, MA 01610-1477. E-mail enquiries may be directed to sfoster@clarku.edu Review of applications begins October 15, 2006. Affirmative Action/Equal Opportunity Employer. Minorities and women are especially encouraged to apply.

– David S. Hibbett Associate Professor Biology Department Clark University 950 Main Street Worcester MA 01610 U.S.A. tel: (508) 793-7332 fax: (508) 793-7174 lab homepage: http://www.clarku.edu/faculty/dhibbett/index.html dhibbett@clarku.edu

> CollegeWilliamMary ConservationBiol

#### CONSERVATION BIOLOGY

The Department of Biology at the College of William and Mary invites applications for a tenure track position at the Assistant Professor level in CONSERVA-TION BIOLOGY. The position is open to applicants conducting research in any field or scale of conservation biology that contributes to existing departmental strengths in molecular and ecology/evolutionary biology. The ideal candidate will have strong quantitative skills, a sustained research focus in conservation biology, and the ability to integrate approaches across diverse levels of biological organization. The successful candidate is expected to maintain an externally funded research program involving both undergraduate and master's degree students. Teaching expectation is an upper-level conservation biology course with lab, and an introductory biology lecture course (genetics, organisms, ecology and evolution) to alternate with another course in the candidate's area of expertise (one course per semester). Postdoctoral research experience is required, and previous experience teaching undergraduate courses will be viewed favorably.

Review begins October 12, 2006 and will continue until an appointment is made. Submit a letter of application, curriculum vitae, statements of research plans and teaching philosophy, a list of courses taken/ taught relevant to conservation biology, and three letters of reference to:

Conservation Biology Search Committee Department of Biology, The College of William and Mary P.O. Box 8795 Williamsburg, VA 23187-8795.

Information on the biology department and this position may be obtained at www.wm.edu/biology . The College is an EEO/AA employer.

George W. Gilchrist Email: gwgilc@wm.edu Director of Graduate Studies Phone: (757) 221-7751 Department of Biology, Box 8795 Fax: (757) 221-6483 College of William & Mary Williamsburg, VA 23187-8795 http://gwgilc.people.wm.edu/ gwgilc@wm.edu gwgilc@wm.edu

#### GeorgiaInstTech SystemsBiol

The School of Biology seeks outstanding junior and senior faculty to complement existing strengths in systems biology, molecular/cellular biology, microbiology and experimental ecology (http://www.biology.gatech.edu/). Georgia Institute of Technology, one of the consistently top ranked educational/research institutions in the country, has experienced dramatic growth in biology, and is committed to continued growth in the biological sciences.

Chaired Professorship in Experimental Systems Biology: We are searching for an individual with an outstanding record of research accomplishments and with

the desire to provide intellectual leadership in areas of experimental systems biology/regulatory networks. We are particularly interested in identifying individuals that will complement existing strengths in computational systems biology in the areas of protein-protein interactions, pathway analysis, networks, and cell signaling. Contact: Professor and Chair John McDonald

Geneticist: We are searching for outstanding candidates in all areas of genetics and epigenetics. We are particularly interested in experimentalists applying system approaches to the study of cell regulation, genome dynamics and molecular evolution. Contact: Geneticist, Associate Professor Dr. Yury Chernoff

Microbiologist: We are searching for a microbial geneticist and/or physiologist. We are particularly interested in candidates whose research programs will integrate with growing strengths in microbial systems biology. Contact: Microbiologist, Associate Professor Dr. Patricia Sobecky

Experimental Ecologist: We are searching for an experimental ecologist who will complement a growing program in aquatic/marine ecology, chemical ecology, ecological genomics, and behavior. Contact: Ecologist, Professor Mark Hay

Candidates should forward a letter of application, full curriculum vitae and contact information for four references to the contact individuals indicated

School of Biology Georgia Institute of Technology 310 Ferst Drive Atlanta, GA 30332 Review of Applications will begin October 15, 2006

Georgia Tech is a unit of the University System of Georgia and an Affirmative Action/Equal Opportunity Employer and requires compliance with Immigration Control Reform Act of 1986.

J.T. Streelman Assistant Professor School of Biology The Georgia Institute of Technology 310 Ferst Drive Atlanta, GA 30332-0230 404-385-4435 (office) 404-385-4436 (lab) 404-894-0519 (fax) E-mail: todd.streelman@biology.gatech.edu http://www.biology.gatech.edu/faculty/todd-

streelman/ todd.streelman@biology.gatech.edu todd.streelman@biology.gatech.edu

HampshireCollege EvolBiol

**Evolutionary Biologist** 

Hampshire College, an independent, innovative liberal arts institution and member of the Five College Consortium, is accepting applications for an Assistant Professor of Evolutionary Biology in the School of Natural Science. Applications are invited from candidates with training in contributing disciplines such as anthropology, ecology, genetics, population biology, and genomics.

The successful candidate will have opportunities to develop teaching and research collaborations with colleagues in a broad range of areas including bioarchaeology, computer science, ecology, entomology, epidemiology, genetics, immunology, mathematics, microbiology, and molecular biology. Consideration will be given to those who show a clear ability to contribute to our innovative undergraduate teaching and engage students in genuine research at the introductory and advanced levels. Active laboratory work is expected and a field component is a plus. We also seek applicants who can contribute to our Women In Science Program.

Hampshire College offers a competitive salary and comprehensive benefit program. Visit the web site of the School of Natural Science at http://ns.hampshire.edu and faculty application guidelines at http://www.hampshire.edu/cms/index.php?id=4261.. <http://www.hampshire.edu/cms/index.php?idB61> Hampshire College is committed to building a culturally diverse intellectual community and strongly encourages applications from women and minority candidates.

Review of applications begins October 15, 2006. Ph.D. is required at time of appointment, July 1, 2007. Please send a letter of application, vitae, descriptions of potential courses and research activities for students, ideas for research and interdisciplinary collaboration with other faculty, and three letters of reference to:

\* Evolutionary Biology Search Committee School of Natural Science 893 West Street Hampshire College Amherst, Massachusetts 01002-5001 \*

 $eac NS@hampshire.edu\ eac NS@hampshire.edu$ 

successful candidate must have a Ph.D. at time of appointment, the desire to develop an externally funded research program, and most importantly the ability and desire to teach and involve undergraduates in an exciting area of research. Expectations for this position are that 75% will be devoted to classroom teaching with 25% devoted to student research, with a 50/50 split the first year while initiating the research program. Hendrix will provide start up funds and space for research in the modern DW Reynolds facility. Specific courses taught must include at least one core course and an appropriate upper-level course complementary to our current offerings (see www.hendrix.edu).

The proposed starting date will be August 2007 with the possibility of starting in January 2007.

Consideration of applications will begin November 1, 2006 and continue until a successful candidate is hired. The Biology Department website (www.hendrix.edu/-biology/) will continue to post this ad and provide up-to-date information until the position is filled.

Applicants must submit a CV, a statement of teaching interest, a statement of research interest, provide phone and email contact information of referees, and arrange for three letters of reference to be sent. Please send all materials electronically to Shaw@Hendrix.edu or hardcopies to

Evolutionary Biologist Position Dr. Bruce Haggard, Chair Biology Department 1600 Washington Ave. Conway, AR 72032

Hendrix is a distinguished liberal arts college with an endowment of \$160 million, sheltering a chapter of Phi Beta Kappa, located in Conway, Arkansas, thirty miles from Little Rock at the foothills of the Ouachita Mountains. The College, related to the United Methodist Church, has a strong commitment to excellence in teaching liberal arts. Hendrix is an equal opportunity employer. Women and members of minority groups are especially encouraged to apply. Please visit our website at www.hendrix.edu . Agnew@hendrix.edu Agnew@hendrix.edu

### HendrixCollege EvolBiol

Hendrix College Biology Department is seeking an outstanding early career scientist with research expertise in some aspect of evolutionary biology for a tenure-track faculty position at the assistant professor level. The

## **IndianaU EvolGenetics**

Ecological/Evolutionary Genetics Department of Biology Indiana University, Bloomington

The Department of Biology invites applications for an open-rank position in Ecological and Evolutionary Genetics. We are especially interested in candidates investigating genetic variation in natural systems for any type of organism(s), individuals conducting experimental evolution on model organisms, or who creatively bridge traditional boundaries in evolutionary biology. For information about the Biology Department and for links to the campus and the Bloomington community. see http://www.bio.indiana.edu. For the graduate program in Evolution, Ecology and Behavior see http://www.bio.indiana.edu/gradprograms/EEB/index.html Candidates should send a curriculum vita, a statement of research and teaching interests, and representative reprints to Curt Lively, Ecological/Evolutionary Genetics Search, Department of Biology, Indiana University,1001 E. Third Street, Bloomington, IN 47405-3700. Un-tenured candidates should also arrange to have three letters of recommendation sent to the same address, or by email to jebennet@indiana.edu. Review of applications will begin 1 November 2006.

Indiana University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

Lynda Delph <ldelph@indiana.edu>

### LundU SystematicBiol

Lund University announces the following vacancy:

UNIVERSITY LECTURER IN SYSTEMATIC BOTANY: Evolutionary processes in cryptogams

at the Department of Ecology (Section for Plant Ecology and Systematics)

#### Ref. no: 4478

Description: The Department of Ecology has more than 200 employees, of whom approximately 80 are PhD students. The Department is comprised of six Sections, including the Section for Plant Ecology and Systematics, which represents a substantial part of the plant research carried out within Lund University (http://www.planteco.lu). A number of lecturers within the Section have recently retired or will retire within the next few years. We are interested in recruiting an enthusiastic plant systematist, with a research profile within the area of cryptogam evolutionary processes and diversity, who will play a central role in the long-term development of undergraduate teaching and PhD supervision within the Section. Job description: The position is full-time and the duties of the lecturer will include research, undergraduate and graduate teaching, supervision of PhD students and administration. We would like to appoint a lecturer whose research lies within the subject area of cryptogam evolution and diversity. Approximately half of the lecturer's time will be devoted to teaching (in both Swedish and English) and half to research/administration. Teaching duties and the balance between teaching and other activities may vary over time. The lecturer will initially be expected to contribute to basic undergraduate courses in systematic botany (including both angiosperm and cryptogam systematics), to advanced undergraduate/Masters courses in cryptogam biology and plant evolution/biodiversity, and to courses for graduate students. The lecturer's research should focus on mosses, lichens or ferns and the evolutionary processes that are involved in differentiation between populations and species. Topics of particular interest include gene diversity/gene flow and phylogeography / phylogeny. Experience of research collaboration with ecologists will be regarded as a merit. Because the Science Faculty in Lund has limited resources for research funding, the successful applicant will be expected to seek external funding to cover their research costs and at least 25% of their salary.

Qualifications: Applicants should have a PhD in systematic botany or within a comparable subject, with a high level of competence in cryptogam biology/systematics. They should have good postdoctoral scientific merits - as a minimum "Docent-competence" or postdoctoral experience commensurate with Swedish docent-competence (a strong postdoctoral portfolio of research and publication).

The successful applicant will have a well-developed research record. She/he should be a competent and enthusiastic teacher, with appropriate pedagogical training and experience of course planning and course administration. Experience of supervising graduate students is a requirement. We especially value the ability of the applicant to finance their research with external funds, attract co-workers and successfully cooperate with other scientists and national and international teachers. The lecturer will be expected to be able to teach in Swedish (alternatively in Danish or Norwegian) within one year of taking up her/his appointment.

The qualifications required for appointment to the position of university lecturer are a doctoral degree, or equivalent scientific qualifications, and pedagogic qualifications (as specified in Chapter 4, paragraph 7 of the Higher Education Ordinance). In the appointment of lecturers and professors, the same attention will be paid to pedagogic as to other qualifications. The University Board has decided that, to be appointed for a permanent (without time-limit) position as university lecturer or professor, the applicant must have undergone a university pedagogical education of at least five weeks - or in other ways have acquired comparable competence. Applicants are thus urged to describe and document their teaching experience thoroughly.

The basis for the assessment of qualifications in the appointment of university teachers is laid out in Chapter 4 of the Higher Education Ordinance (SFS 1998:1003). (An English translation can be found at: http://utbildning.regeringen.se/inenglish/pdf/heo\_jan03.pdf) The Faculty Board's recommendations as to how applicants should present their pedagogical qualifications are available at http://www.naturvetenskap.lu.se/o.o.i.s/2319 or can be obtained from The Faculty Office, Margareta Millestam, PO Box 118, SE-221 00 Lund, Sweden, or E-mail: Margareta.Millestam@kanslin.lu.se.

Those who have not previously held a position as a university lecturer may initially be subject to a one-year probationary period of employment.

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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

### MuseumNaturalis Leiden AssocDirector

The National Museum of Natural History / Naturalis Leiden (The Netherlands), invites applications for an Associate Director of Research (full-time). (closing date 30 September 2006). Read the advertisement at: www.naturalis.nl/vacature or below in plain text.

The Netherlands National Museum of Natural History in Leiden was established in 1820 and is known to the general public as Naturalis since 1998. Naturalis curates about 15 million specimens of animals, fossils, minerals and rocks. The museum's collection are particularly rich in material from the Netherlands and adjacent areas, Southeast Asia, the Netherlands Antilles and Suriname; other highlights are geological collections from Spain, reptiles and amphibians from the Amazon Basin and Lake Victoria cichlids. The 140 tenured staff includes 21 research scientists. Research at Naturalis has a wide scope, ranging from coral reef biodiversity to gemmology, and research closely interacts with the collection. The Associate Director is assisted in the management of the sector by the heads of the departments of Geology, Zoology and Entomology.

The museum is closely co-operating with other organizations in the Netherlands and abroad. Merging of Stichting Naturalis with several other large biodiversity collection and research facilities into the Netherlands Centre for Biodiversity Research (NCB) is foreseen in the near future. The NCB will become the national collection and research organization for systematic biology and geology, with more than 50 scientists and c. 40 million specimens.

Naturalis seeks applicants for the position of Associate Director of Research (full-time), who will set the agenda of scientific research at Naturalis, to guide its development and implementation, and to ensure significant external funding together with the three departmental heads. The candidate should be able to position the wide-ranging taxonomic expertise of the research scientists in multidisciplinary research programmes, as well as in multinational programmes with other European taxonomic facilities.

Naturalis also expects a successful candidate: \* To encourage and develop a more active interaction of research and education at Naturalis with universities and other research institutions in the Netherlands. \* To utilize the combined resources of Naturalis, with 250,000 visitors annually, and other institutions in the fields of the Earth and life sciences to develop public outreach and stimulate student interest. \* To play a prominent role in national and international initiatives in Earth and life sciences; \* To shape the research agenda of the Netherlands Centre of Biodiversity Research (NCB), in co-operation with the partners,

The successful candidate has: \* At least ten years of research experience and proven management capabilities with a broad vision on Earth and Life Sciences and an affinity with biological systematics, a PhD degree is required; \* A track record of, and drive for, attracting and leading research projects and programmes in an innovative and multi- disciplinary context; \* Excellent communicative skills in English and Dutch, or the willingness to learn the Dutch language within two years of appointment, to be able to communicate both in scientific and governmental circles as well as in front of a general audience; \* An affinity with the other main activities of Naturalis (collection management, exhibitions, university teaching and other educational programmes); \* The ability to 'build bridges', thus encouraging scientists to work together in innovative ways,

and leading to a more effective collaboration among scientists, managers and non-governmental organisations; \* The resourcefulness to contribute to the general management of Naturalis.

Naturalis offers a competitive salary commensurate with qualifications and experience. The institute is an affirmative action/equal opportunity employer. Because of the ongoing process establishing the NCB, the position of director of research will be offered a temporary contract of three years. However, as the process is coming forward, the successful candidate could be a strong candidate for one of the leading science positions.

For more information on current research, research facilities and this position see the Naturalis website. Any additional information can be requested from the address below.

Candidates should submit a curriculum vitae, a clearly focused vision on research (content, context and management; maximum 2 pages-single spaced), and the names and addresses (incl. telephone and e-mail) of three potential referees by e-mail (preferably as a single PDF file) or by mail to Mrs. S.S. Liefhebber, Human Resources Advisor, P.O. Box 9517, 2300 RA LEIDEN. E-mail: liefhebber@naturalis.nl.

Reprints/copies (PDF file) of the five most recent significant publications and additional information may be requested at a later

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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 1, 2007, or as negotiated, pending administrative approval. Candidates using high throughput approaches and computational methods to investigate biological regulatory mechanisms and their evolution at the level of systems and networks are especially encouraged to apply. Candidates will be expected to have or develop active, externally funded research programs and to participate in the department's teaching activities at both the undergraduate and graduate levels. The Center and the Department (http://www.nyu.edu/fas/dept/biology) offer an outstanding and collegial research environment and opportunities for active collaborations with other related divisions within the university including the NYU Courant Institute's Departments of Math and Computer Science and with genomic consortia formed with other New York institutions.

Applications should include cover letter, research statement, curriculum vitae, and three letters of reference. Electronic applications as PDF files should be sent to biology.recruitment@nyu.edu

Chair of the Search Committee New York University Center for Comparative Functional Genomics Department of Biology New York University 1009 Silver Center 100 Washington Square East New York, N.Y. 10003

Closing date: Nov 30, 2006.

NYU is an Equal Opportunity/Affirmative Action Employer.

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

## NewYorkU CtrComparativeFuncGenomics

New York University (A private university in the public service)

FACULTY POSITIONS Department of Biology NYU CENTER FOR COMPARATIVE FUNCTIONAL GE-NOMICS

As part of a multi-year hiring plan, New York University's Center for Comparative Functional Genomics in the Department of Biology invites applications for multiple faculty positions (rank open) to begin September

## OklahomaStateU HeadZoology

Head, Department of Zoology

Oklahoma State University

The Department of Zoology at Oklahoma State University (OSU) invites applications for the position of Department Head. We recently reorganized and seek a dynamic and visionary leader to help us increase our national prominence in our selected research areas: (1) Ecology & Evolutionary Biology and (2) Environmental Stress. The starting date will be on or after 1 August

2007 and is flexible.

The ideal candidate will have the academic rank of Professor, a nationally recognized research program consistent with our research foci, demonstrated success in obtaining extramural grant support, significant administrative experience, a commitment to supporting innovative teaching, and a vision for curricular reform that will produce students highly qualified for careers in research, teaching, and other professional positions.

OSU is a land-grant institution with 24,000 students located in north-central Oklahoma, 70 miles from Oklahoma City and Tulsa. Currently, the Department of Zoology has approximately 400 undergraduate and 50 graduate students, 4 staff, and 11 faculty with a long history of democratic governance.

Oklahoma State University encourages applications from qualified women, minorities, and persons with disabilities. Applicants should submit a letter of application, statements of research, teaching, and administrative philosophies, a curriculum vitae, and four letters of reference testifying to the applicant's leadership and administrative skills to: Dr. Robert V. Miller, Chair, Department Head Search Committee, Department of Zoology, 430 LSW, Oklahoma State University, Stillwater, OK 74078-3052. Telephone: 405/744-6243; E-mail: bob.miller@okstate.edu. Informal inquiries to Dean Peter M. A. Sherwood of the College of Arts and Sciences are welcome (Telephone: 405/744-5663; email: peter.sherwood@okstate.edu <mailto:ailto::peter.sherwood@okstate.edu> ). Application review will begin 1 November 2006 and will continue until the position is filled. For further information about the position, Department, and OSU, please see http://zoology.okstate.edu <http://zoology.okstate.edu.

gertie.mulder@okstate.edu gertie.mulder@okstate.edu

## PennStateU WebDevelop EvolGenomics

Web Application development for Evolutionary Genomics

The Center for Comparative Genomic and Bioinformatics at Penn State University seeks an experienced and agile software engineer for the development of "Galaxy", a web based platform for large-scale genomic biology (http://g2.bx.psu.edu). Responsibilities include providing technical direction to a team of 3-5 other developers, and working with biologists and bioinformaticians to understand and support their scientific needs. Biology experience, though not required, would be helpful – more important is a willingness to learn. Qualified candidates should have experience with dynamic languages (especially Python), and development of web applications with emphasis on usability, performance, and scalability. Salary is competitive and based on experience.

Software tools developed by the world-class research team at the Center for Comparative Genomics and Bioinformatics are used by thousands of users worldwide. These include PipMaker, MultiPipMaker, blastZ, multiZ, TBA, Sim4, Galaxy and many others. Join the team to develop the new generation of web applications for genome biology.

Contact: Anton Nekrutenko E-mail contact: anton@bx.psu.edu Web: http://g2.bx.psu.edu Anton Nekrutenko Assistant Professor Department of Biochemistry and Molecular Biology Center for Comparative Genomics and Bioinformatics 505 Wartik Building PennState University University Park, PA 16802 814 865-4752 814 863-6699 FAX anton@bx.psu.edu http:/-/www.bx.psu.edu/~ anton http://g2.bx.psu.edu anton@bx.psu.edu anton@bx.psu.edu

### ProvidenceCollege PlantEvolBiol

Position Available Providence College (Providence, Rhode Island) Biology: Assistant Professor (tenuretrack) Department: Biology

Title: Assistant Professor of Biology

Length: Tenure-track, beginning September 2007

Requirements: Applications are invited for a tenuretrack position in Plant Biology at Providence College beginning September, 2007. Applicants are required to have a Ph.D. (post-doctoral experience preferred) and a sustainable research program that will include undergraduates. Candidates should have a strong commitment to undergraduate education, and be able to foster a collaborative atmosphere among students and faculty in keeping with the Mission of Providence College. The successful applicant will teach biology majors in courses such as General Biology, Introductory Botany, and Field Botany, and non-science majors in courses such Ethnobotany and Environmental Biology. Although emphasis is on systematic and organismic levels, additional background in molecular/cellular studies and electron microscopy will enhance the application but will not disqualify the candidate who lacks such experience.

Application Procedure: Applicants should submit a curriculum vitae, transcripts, a statement of teaching philosophy and research interests, and three letters of recommendation by October 15, 2006 to:

Dr.C.B.Wood, Chair Department of Biology Providence College Providence, RI 02918-0001

For further information, please go to our department web site at: http://www.providence.edu/bio/ Providence College is a Roman Catholic four-year liberal arts college conducted under the auspices of the Dominican Friars and seeks candidates who can affirm and contribute to its mission. An AA/EOE, the College especially encourages the application of women and persons of color.

Elisabeth Arevalo <earevalo@providence.edu>

### QueensU ConservationBiol 2

CONSERVATION BIOLOGIST The Department of Biology at Queen<sup>1</sup>s University invites applications for the Baillie Family Chair in Conservation Biology. We are seeking candidates with a record of excellence in research and a commitment to teaching in any area of conservation biology (behavioural, landscape, evolutionary, population or community ecology, or biogeography), involving the study of birds in the field. The chairholder<sup>1</sup>s research program is expected to be centred at the Queen<sup>1</sup>s University Biological Station (see QUBS website at http://biology.queensu.ca/~qubs), an excellent field research facility on the shores of Lake Opinicon, about 50 km north of our main campus (http://www.queensu.ca). QUBS comprises about 2800 hectares (7000 acres) of woodland, field and freshwater habitats with a rich diversity of animal and plant life. The chairholder will develop field courses and contribute to programs aimed at conserving biodiversity at QUBS. This is a tenure-track or tenured position available at the level of Assistant or Associate Professor. Review of applications will begin 15 October 2006 and will continue until the position is filled; expected date of appointment is 1 July 2007. Applicants must submit (by post, fax or email) a curriculum vitae, a statement of research interests (especially with respect to plans for research at QUBS), a statement of teaching interests, and a list of three scientists (with postal and email addresses) that we may contact for letters of reference.

Submit applications to Dr. R.M. Robertson, Head, Dept of Biology, Queen<sup>1</sup>s University, Kingston, ON K7L 3N6, Canada (FAX 613-533-6617; EMAIL mailto:biohead@biology.queensu.ca). All qualified individuals are encouraged to apply, but Canadians and Permanent Residents will be given priority. The academic staff at Queen's University are governed by a Collective Agreement between the Queen's University Faculty Association (QUFA) and the University which is posted at http://www.qufa.ca <http://www.qufa.ca/-> . Queen<sup>1</sup>s is committed to employment equity and diversity in the workplace and welcomes applications from women, visible minorities, aboriginal people, persons with disabilities and persons of any sexual orientation or gender identity.

Robert Montgomerie Department of Biology Queen's University Kingston, Ontario K7L 3N6 Canada

EMAIL: montgome@biology.queensu.ca WEB: http://biology.queensu.ca/~montgome PHONE: (613) 533-6127 FAX: (613) 533-6617

Bob Montgomerie <montgome@biology.queensu.ca>

## RoyalBotanicalGardensKew EvolAnatomyAssistant

Anatomy Assistant

16 month fixed term appointment

Working in the Micromorphology section in the Jodrell Department, you will prepare, examine and analyse wood samples using various microscopy techniques, including transmission electron, light, scanning electron and atomic force microscopy and x-ray computed tomography. You will also carry out physiological experiments such as gold-flushing, air-seed measurements and dye-injection.

With at least two A levels or equivalent, preferably including Biology and/or English, you will have an interest in plants and plant structure and be computer literate with good keyboard skills. Methodical and organised, you will work well as part of a team and be able to make sound judgements and decisions in order to investigate and solve problems. Accuracy, numeracy and some flexibility are also required for the various tasks involved.

Salary is ?14,714 per annum and benefits include a choice of final salary or stakeholder pension, generous annual leave and a stunning work environment.

Application packs are available from the Kew website:

{ HYPERLINK "http://www.kew.org" http://www.kew.org" Alternatively, please contact the HR Department, RBG Kew, on 020 8332 5184/5150 (24 hour answerphone). Please quote Ref 1280.

Closing date: 10am, 21 September 2006.

Interview date: week commencing 2 October 2006.

Dr. Steven Jansen Jodrell Laboratory Royal Botanic Gardens, Kew Richmond, Surrey, TW9 3DS, U.K. Email: s.jansen@kew.org Tel.: +44-(0)208 332 5316 Fax: +44-(0)208 332 5310 http://www.iawa-website.org Steven Jansen <s.jansen@rbgkew.org.uk>

Clara University, 500 El Camino Real, Santa Clara, CA 95053. The applicant should also request at least two letters of reference be sent to this address as well. Applications, inquiries, and reference letters can also be sent by email to Biology@scu.edu. Applications must be received by Nov. 3, 2006. Santa Clara University is the Catholic, Jesuit university of Silicon Valley, with a 155 year tradition of educational excellence. For more information about the Biology Department and Santa Clara University, see http://www.scu.edu/biology. Santa Clara University is an Equal Opportunity/Affirmative Action employer, committed to excellence through diversity, and, in this spirit, particularly welcomes applications from women, persons of color, and members of historically underrepresented groups. The University will provide reasonable accommodations to all qualified individuals with a disability.

Elizabeth Dahlhoff, Ph. D. Associate Professor of Biology Santa Clara University Santa Clara, CA 95053

Elizabeth Dahlhoff <EDahlhoff@scu.edu>

## SantaClaraU EvolBiol

Santa Clara University - Assistant Professor Evolutionary Biology

The Biology Department of Santa Clara University is seeking applicants for a tenure-track Assistant Professor position. We seek a scientist with research and teaching interests in evolutionary biology. The candidate should be utilizing molecular-based approaches The SCU Biology Department in their research. offers well-equipped, modern facilities for classroom and laboratory teaching and research. Teaching responsibilities for this position may include a majors course in evolutionary biology with laboratory and/or field components, participation in the evolution/ecology/biodiversity segment of our introductory series for biology majors, and a non-majors evolution course. People with research or teaching interests relevant to plant systems are especially encouraged to apply. This position requires a PhD, postdoctoral experience, and a strong commitment to mentoring undergraduates of diverse backgrounds. Applicants should provide a current CV, and a cover letter or separate statements describing: 1) research interests that would be pursued at SCU, 2) teaching philosophy and courses of interest, and 3) contributions the candidate would make to Santa Clara as a diverse and inclusive institution. Applications should be sent to Evolutionary Biology Search Committee, Biology Department, Santa

#### SimmonsCollege EvolMarineBiol

Assistant Professor (Tenure Track), Evolutionary Marine Biology - Simmons College, Boston MA.

#### Summary:

Evolutionary Marine Biologist: Simmons College Department of Biology seeks a tenure-track Assistant Professor to begin in the fall of 2007. Candidates should have a Ph.D. and expertise in evolutionary biology and marine biology, post-doctoral experience, and a commitment to excellence in teaching. The candidate is expected to teach evolutionary biology, marine biology, zoology and related courses and to involve undergraduates in research. The candidate is also expected to be involved in the newly established Colleges of the Fenway Environmental Science Program and should be willing to teach interdisciplinary courses. This position is contingent upon funding approval.

#### Requirements:

Candidates should have a Ph.D. and expertise in evolutionary biology and marine biology, post-doctoral experience, and a commitment to excellence in teaching.

To apply for this position, please go to our online employment site at: http://jobs.simmons.edu/applicants/Central?quickFind=50470. Any questions can be addressed to:

Vladimir Douhovnikoff Assistant Professor Biology Department Simmons College 300 The Fenway Boston, MA. 02115

vlad@simmons.edu http://web.simmons.edu/douhovni/Home.html Vladimir Douhovnikoff <vlad@simmons.edu>

## SouthAfrica Volunteers SmallMammalEvol

Please forward the following advertisement to all that might be interested Succulent Karoo Research Station in South Africa:

Volunteers as field assistants needed:

Field assistants needed for the project:

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

What kind of people needed? Biolare ogy/zoology/veterinary students with  $\mathbf{a}$ BSC/ Vordiplom or equivalent are preferred as candidates. Applicants must have an interest in working in the field and with animals. Whereas the research is mainly non-invasive, this is no job for extreme animal right persons (we take tissue and blood samples). 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. Work during nights might also be necessary. Work in the field will be done for 5-6 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 and rats; 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.

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 500 (around 75 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 1300 or 200 Euro/month). Including extras, you should expect to

pay about 300-400 Euros per month.

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).

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.

When and how long: One position gets available in January 2007 and more open positions from February to December 2007. Volunteers should stay for a minimum of 2 months and up to six months.

How to apply? Send a short motivation letter stating why and for which period you are interested and your CV via email to info@stripedmouse.com.

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

## SouthernIllinoisU EvolParasitology

Parasitologist, broadly defined, Tenure Track

The Department of Zoology at Southern Illinois University Carbondale invites applications for a tenuretrack position as an Assistant Professor with a start date of August 16, 2007. The successful candidate will enhance and complement existing programmatic strengths in the areas of ecology, environmental biology, conservation, biodiversity, and evolutionary biology with a basic research program in some aspect of parasite biology such as host-pathogen interactions or co-evolution, host defense mechanisms, host specificity, epidemiology, biogeography, population dynamics, responses to environmental factors, or development of methods and agents to combat parasites. The successful applicant is expected to teach an introductory parasitology course, help teach animal diversity, and teach an advanced graduate course in an area of expertise, or other courses as the program requires.

Southern Illinois University Carbondale is a large, public, comprehensive research-intensive university situated in a pleasant small-town setting southeast of St. Louis. The Department of Zoology, with a faculty of 25, offers B.S., M.S. and Ph.D. degrees in Zoology <<u>http:/-</u> /www.science.siu.edu/zoology/>. Review of applications will begin October 15, 2006 and continue until the position is filled. Applicants should submit a curriculum vitae, a statement of teaching and research interests, and the names and addresses of at least three references, to: Parasitology Search Committee Chair, Department of Zoology, Mailcode 6501, 1125 Lincoln Dr., Southern Illinois University Carbondale, Carbondale, IL 62901. E-mail: zoology@zoology.siu.edu SIUC is an affirmative action/equal opportunity employer that strives to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are encouraged and will receive consideration.

rthomas@zoology.siu.edu rthomas@zoology.siu.edu

#### StonyBrookU EvolGenomics

#### ECOLOGY AND EVOLUTIONARY GENOMICS

Stony Brook University???s Department of Ecology and Evolution seeks to fill two positions at the Assistant Professor level, although exceptional candidates at other levels will be considered. Ecology: Required: Ph.D. in Ecology or related field; demonstrated excellence in research and a strong commitment to teaching. We welcome applications from candidates whose work concerns ecosystems and/or communities. Evolutionary Genomics: Required: Ph.D. in Evolutionary Biology or related field; demonstrated excellence in research and a strong commitment to teaching. We welcome applicants who use computational, experimental, comparative, functional or statistical approaches and who work on either model or non-model systems, including humans. For both positions strong skills in mathematical modeling and/or statistics are desirable. Applicants should send a CV and statements of research interests and teaching interests/philosophy, and also have three

letters of recommendation sent, to: Ecology Search or Evolutionary Genomics Search, Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY 11794-5245, Fax: (631) 632-7626. Deadline for applications is October 31, 2006.

Equal Opportunity/Affirmative Action Employer.

For more information or to apply online, visit www.stonybrook.edu/cjo Walter F. Eanes Professor Dept. of Ecology and Evolution Stony Brook University Stony Brook, New York 11794

weanes@notes.cc.sunysb.edu

## SwissOrnithologicalInst BirdMigration

The Swiss Ornithological Institute is an independent private foundation for research and conservation of birds, covering fundamental research, applied research and application (see www.vogelwarte.ch <<u>http://www.vogelwarte.ch></u>). Bird migration is a traditional research field at the Vogelwarte.

After the retirement of the current head, Prof. Dr. Bruno Bruderer, the Swiss Ornithological Institute wishes to appoint a new leader of the migration research group.

We wish to appoint an innovative researcher who will develop and pursue ecological questions of bird migration (including the non-breeding season) with a small group and integrate his/her research into the other ecological research of our institute. There are possibilities to guide master and doctoral theses.

You should have a relevant PhD and a good record of independent research experience. You should be capable of innovative research planning, to guide a small team and to integrate into the team of the institute. We expect that you look for external funds and wish that you develop contacts with Swiss universities (lecturing welcomed).

The post is available from 1 January 2007 or as agreed.

For more details contact Dr. Lukas Jenni, Schweizerische Vogelwarte Sempach, +41-41 462 97 00, lukas.jenni@vogelwarte.ch.

Send your application until 31 October 2006 to: Schweizerische Vogelwarte, Betriebsleitung, 6204 Sempach, christian.marti@ vogelwarte.ch. Lukas.Keller@zoolmus.unizh.ch Lukas.Keller@zoolmus.unizh.ch

## UAdelaide MarineAlgaeEvol

#### THE UNIVERSITY OF ADELAIDE

RESEARCH FELLOW/SENIOR RESEARCH FELLOW

Marine Botanist - Level B-D

School of Earth and Environmental Sciences

This position is a joint initiative of the University of Adelaide, the State Department of Environment and Heritage and SARDI Aquatic Sciences. The position has been established to provide leadership and participate in research on marine algae and provision of advice on systematics, evolution, ecology and biogeography of marine flora (algae in particular) and to manage the phycological unit in the State Herbarium of South Australia. You will be based mainly at the State Herbarium but will maintain a presence on the North Terrace campus of the University.

You will maintain working relationships with staff and volunteers of the State Herbarium, staff of the Biological Survey and Monitoring and Biodiversity Conservation Programmes branches, Coast and Marine Branch, Natural and Cultural Heritage Directorate, SARDI Aquatic Sciences, South Australian Museum, research and survey personnel and units in government across the State, nationally and internationally.

You will be expected to develop partnerships with Government and research agencies and individuals for furthering knowledge of the taxonomy, distribution and ecology of marine flora. You will also participate in activities to promote research in and survey of marine benthic flora.

You should have:

a PhD in relevant science discipline (plant systematics, evolutionary biology, molecular ecology of algae)

the ability to undertake research on systematics, evolution, biogeography and ecology of marine benthic flora (algae, sea grasses)

the ability to undertake, promote and supervise research in taxonomy, evolution and molecular ecology

For appointment as a Senior Research Fellow (Level C), in addition to the above, you should have: extensive experience in identification using morphological and/or molecular techniques

well developed conceptual, analytical and research skills

For appointment as a Senior Research Fellow (Level D), in addition to the above, you should have:

demonstrated ability to undertake research on systematics, evolution, biogeography and ecology of marine benthic flora (algae, sea grasses)

proven distinction in research demonstrated by record of publication in relevant field (systematics, ecology, marine survey)

Salary: (Level B) \$63,487 - \$75,392 per annum

Salary: (Level C) \$77,768 - \$89,677 per annum

Salary: (Level D) \$93,642 - \$103,163 per annum

Plus an employer superannuation contribution of 17% applies. The successful applicant will be appointed at an appropriate level depending on qualifications and relevant experience.

This fixed-term position is available immediately for a period of three years. Further information, including the role statement and selection criteria (Level B), (Level C), (Level D), may be obtained from Professor Andrew Lowe, telephone: 8222 9308 or email: <andrew.lowe@adelaide.edu.au>.\_\_

Applications, addressing the selection criteria, quoting the reference number \*\*, and including residency status, names, addresses and/or email details of three referees, should be forwarded in duplicate to Ms Carolyn Gadd, School of Earth and Environmental Sciences, The University of Adelaide, South Australia 5005, or email: <carolyn.gadd@adelaide.edu.au> by\* 4 October 2006\*.

carolyn.gadd@adelaide.edu.au

## UBritishColumbia PlantEvol

# TENURE TRACK ASSISTANT PROFESSOR IN TERRESTRIAL PLANT ECOLOGY

The Department of Botany, University of British Columbia (www.botany.ubc.ca), seeks applications for a tenure track position in terrestrial plant ecology. All areas of plant ecology will be considered, and preference will be given to candidates with a field-based component to their research. The successful applicant will develop a strong research program, teach courses in ecology or organismal biology in the UBC Biology Program, and interact with the UBC Biodiversity Research Centre (www.biodiversity.ubc.ca). Salary will be commensurate with experience. Appointment will be at the assistant professor level and is subject to final budgetary approval.

Applicants should send a curriculum vitae, a summary of research interests, a statement of teaching philosophy, reprints of key publications, and should arrange to have three letters of reference sent directly to the Department. Applications should be addressed to the Chair, Ecology Search, Department of Botany, University of British Columbia, 6270 University Boulevard, Vancouver, BC, Canada, V6T 1Z4. Electronic applications to ecology@interchange.ubc.ca are preferred, but paper applications will be accepted. Application deadline is November 1, 2006

The University of British Columbia hires on the basis of merit and is committed to employment equity. All qualified applicants are encouraged to apply; however, Canadian citizens and permanent residents of Canada will be given priority.

- Tier II Canada Research Chair in Conservation Biology & Assistant Professor Departments of Botany & Zoology & Biodiversity Research Centre University of British Columbia (UBC) Vancouver, BC, Canada V6T 1Z4 http://www3.botany.ubc.ca/vellend/ Mark Vellend <mvellend@interchange.ubc.ca>

## UCLA PlantEvol

REMINDER: September 30 is target date for application review for tenure track position in plant ecology, broadly defined. Plant Ecology Faculty Position

The Department of Ecology and Evolutionary Biology at UCLA invites applications for an OPEN RANK, TENURE-TRACK, FACULTY POSITION in Plant Ecology. This is one of several new hires that the department expects to make in the next few years. The expected start date is September 2007. Candidate must have a Ph.D.; postdoctoral experience is desired. Salary is commensurate with education and experience. Successful candidates are expected to maintain a rigorous externally- funded research program, to contribute to the intellectual activities of the department, and to participate in both undergraduate and graduate teaching. UCLA has outstanding academic support for faculty, including access to the UC Natural Reserve System, the Institute of the Environment, the Center for Tropical Research, the NSF Center for Embedded Networked Sensing (CENS), and the NSF Institute of Pure and Applied Mathematics (IPAM). Interested applicants should submit a CV, statements of research and teaching interests, and names and addresses of three references online to <www.eeb.ucla.edu/ plantecology>. For additional information, please contact Search Committee Chairman Phil Rundel (rundel@biology.ucla.edu) or Department Chair Victoria Sork (eebchair@eeb.ucla.edu). Reviews of applications will begin September 30, 2006. UCLA is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

For more information about the department, please see our department website: www.eeb.ucla.edu Victoria Sork Professor and Chair, Dept of Ecol & Evol Biology Professor, Institute of the Environment

UCLA Department of Ecology & Evolutionary Biology BOX 951606 Los Angeles, CA 90095-1606

"Victoria Sork, Chair, Ecol & Evo Biol" <eebchair@eeb.ucla.edu>

## UCaliforniaRiverside Bioinformatics

FACULTY POSITIONS IN BIOINFORMATICS and COMPUTATIONAL BIOLOGY (3)

College of Natural and Agricultural Sciences University of California, Riverside

The College of Natural and Agricultural Sciences at the University of California, Riverside invites applications for three new faculty members in Bioinformatics and Computational Biology. Appointments will be made at the ASSISTANT, ASSOCIATE and FULL PROFESSOR levels. Successful candidates will join an innovative and multidisciplinary<http:/-/www.genomics.ucr.edu/> Institute of Integrative Genome Biology (IIGB) that connects theoretical and experimental researchers from different departments in Life, Physical and Mathematical Sciences, Engineering and various campus based Centers, e.g., the <<u>http://-</u> cepceb.ucr.edu/>Center for Plant Cell Biology. The Center for Plant Cell Biology and IIGB have a vibrant faculty and excellent state-of-the-art facilities with advanced instrumentation and technical support

in genomics, proteomics, microscopy and imaging, and bioinformatics.

Each individual will become a member of a major academic department in his/her area of expertise with opportunities for a secondary appointment in a variety of departments and colleges. Ideal candidates will develop state-of-the-art research on integrative data analysis and interpretation using mathematical and statistical models in biological systems. Such individuals will be catalysts to initiate and strengthen multidisciplinary collaborations addressing fundamental biological questions in model and non-model organisms. The research emphasis should be on integrative approaches, such as systems biology, networks analysis, comparative genomics, computational chemical genomics and structural bioinformatics.

Successful candidates will be expected to establish and maintain vigorous, innovative and collaborative research programs, have a strong commitment to excellence in teaching at the undergraduate and graduate levels, and participate in departmental and interdepartmental graduate programs. Applicants must hold a Ph.D., with a minimum of one year postdoctoral experience or equivalent preferred.

To Apply: Review of applications will begin on December 16, 2006, and continue until the position is filled. Interested individuals should send: (1) a curriculum vitae, (2) a statement of research interests, and (3) letters from three references (Assistant Professor) or names of three references (Associate or Full Professor) to:

Sherice Underwood Department of Botany & Plant Sciences University of California, Riverside, CA 92521 or email application materials to: instsearch@ucr.edu FAX (951) 827-4437

For additional information, visit <<u>http://cnas.ucr.edu>http://cnas.ucr.edu</u>, <u>http://www.genomics.ucr.edu/</u> and <<u>http://cepceb.ucr.edu/</u>><u>http://cepceb.ucr.edu/</u>. The University of California is an Equal Opportunity/Affirmative Action Employer.

David Reznick <david.reznick@ucr.edu>

## UCaliforniaRiverside LabAssist

Lab Assistantship: I am seeking a lab assistant who is interested in starting in the immediate future. The position is part of an NSF sponsored research program, is available for up to three years and pays from \$2,200 to \$2,600 per month, depending on experience. This position is ideal for someone who has just finished a bachelors or masters degree and is looking for an appointment of a year or more while deciding what the next step in your career will be.

The assistant will manage a fish lab in which we are maintaining breeding populations of 20 species of fish in the family Poeciliidae. Responsibilities will include maintaining lab stocks, maintaining ongoing experiments, managing a team of undergraduates who assist in lab maintenance and interacting with graduate students and the PI in the execution of experiments. The assistant will also be encouraged to join in general lab activities with the large and highly interactive graduate group associated with this research program.

We are investigating the evolution of placentas in this family. We have found that the functional equivalent of a placenta has evolved at least six times within the family. There are often close relatives that either lack a placenta or have a placenta in intermediate stages of development. The lab work on live fish includes generating descriptions of the life histories of the fish and executing experiments that characterize the consequences of having a placenta. Other facets of the project include molecular phylogenetics, field research and the description of life histories based on the dissection of field-collected fish, and preliminary studies of the genes that underlie the evolution of the placenta.

Please submit a CV and the names and contact information for three referees to:

David Reznick

david.reznick@ucr.edu Department of Biology

University of California

Riverside, CA 92521

Project Summary: An unanswered question in biology is how do complex traits evolve?. This question endures as an area of controversy because of a paucity of empirical evidence and because the process unfolds on a time scale that is far longer than human experience. We propose developing a model system for the evolution of complexity by studying the evolution of the placenta in the fish subfamily Poeciliinae. This group of fish offers a unique opportunity to study the evolution of complexity because placental adaptation exhibits: 1) dynamic variation: placentas appear to have evolved five or more times in the family, 2) serial variation: in several cases, closely related species exhibit either no placentas, intermediate stages, or highly developed placentas, and 3) quantitative variation: an objective criterion for pre-versus post-fertilization maternal provisioning exists which provides an index of placental performance. Furthermore, these fish are readily reared and bred in captivity, are easily studied in nature, and have an excellent prior history as subjects in laboratory and field studies. Here we will use a combination of molecular and morphological systematics to define relationships within the subfamily and the relation of the subfamily to the remainder of its order. We will describe the life histories of these fish so that we can combine life history and phylogeny data, then apply statistical methods that will allow us to infer the patterns of evolution of life histories in the subfamily. We will also use these methods to develop hypotheses for how and why the placenta evolved. Finally, we propose a series of laboratory experiments that test predictions and assumptions derived from recently developed theory for the evolution of placentas.

david.reznick@ucr.edu

## UCalifornia Riverside PlantEvolGenomics

hold a Ph.D with a minimum of one year of postdoctoral experience. Applications will be accepted until the position is filled.

Interested individuals should submit the following: (1) a curriculum vitae, (2) a brief statement of research and teaching interests, (3) samples of relevant publications, and (4) have three letters of recommendation sent to: Chair, Plant Evolutionary Genomics Search Committee c/o Department of Botany and Plant Sciences 2118 Batchelor Hall University of California, Riverside Riverside, CA 92521-0124 Email: bpssearch@ucr.edu FAX (951) 827-4437

Information about the Department is available at http://www.plantbiology.ucr.edu/ (see alsohttp://www.plantbiology.ucr.edu/ and http://www.evolution.ucr.edu). The University of California, Riverside has an active career partner program, and is an Affirmative Action equal opportunity employer committed to excellence through diversity.

ellstrand@ucr.edu ellstrand@ucr.edu

UColorado EvolBiol

Position Announcement

Faculty Position Assistant Professor Plant Evolutionary Genomics University of California, Riverside

The Department of Botany & Plant Sciences at the University of California Riverside invites applications to fill a tenure-track 9-month position at the assistant professor level in Plant Evolutionary Genomics. Possible areas of specialization include plant molecular population genetics, molecular evolution, genome evolution, evolutionary genetics, and comparative genomics. The research could focus on topics such as, but not limited to, molecular analysis of adaptations, the nature and rate of evolutionary change in genes and genomes, molecular genetic analysis of plant speciation or plant domestication, hybridization, or evolution of invasiveness. Applicants interested in theory, modeling and data mining, as well as those conducting experimental or descriptive studies will be considered. The candidate will hold a faculty position as well as a joint appointment in the Agricultural Experiment Station. The successful candidate will be expected to establish and maintain a vigorous, innovative research program, and have a strong commitment to excellence in teaching at both the undergraduate and graduate levels. The review of applications will begin November 15, 2006, with appointment as early as July 1, 2007. Applicants must

EVOLUTIONARY BIOLOGY

The Department of Ecology and Evolutionary Biology at the University of Colorado seeks to fill two positions at the Assistant Professor level in Evolutionary Biology. Individuals working in any area of the discipline are encouraged to apply and will be expected to pursue active research programs as well as to teach in their areas of expertise. Applicants should submit a current curriculum vitae, statements of research and teaching interests, and the names and addresses of four references to: Evolutionary Biology Search Committee, 334 UCB, University of Colorado, Boulder CO 80309. Review of applications will begin on October 13, 2006. The University of Colorado at Boulder is committed to diversity and equality in education and employment.

Pamela K. Diggle Professor Department of Ecology and Evolutionary Biology University of Colorado Boulder, CO 80309-0334 USA

office 303-492-4860 fax 303-492-8699

http://spot.colorado.edu/ Pamela.Diggle@colorado.edu diggle/

## UDurham MolBiodiversity LabTech

Laboratory Technician (35 month term)

School of Biological and Biomedical Sciences University of Durham, Durham, UK

£17,461 per annum

A Laboratory Technician is required to work in the Durham Molecular Ecology Group. The technician will contribute to a project on molecular biodiversity at the mid-Atlantic ridge in the North Atlantic (funded by the NERC).

Applicants must be skilled in DNA extraction, PCR amplification and cloning associated with the development of genomic libraries in plasmid vectors, and their screening for microsatellite DNA loci, and should also have skills associated with effective database and lab management.

Closing date: 16 October 2006. Please quote reference number: 1582.

Further details of the post and how to apply are available by visiting the Durham vacancies website: https:/-/jobs.dur.ac.uk/default.asp a.r.hoelzel@durham.ac.uk

## **UEdinburgh EvolGenetics**

University of Edinburgh Chair of Genetics

The School of Biological Sciences is seeking to appoint, in its Institute of Evolutionary Biology (IEB), a distinguished scientist with an established research reputation in either statistical genetics or evolutionary genetics to contribute to the Institute's existing strengths, which include theoretical and experimental aspects of quantitative and population genetics, as well as molecular and evolutionary genomics.

IEB has strong collaborative relationships with the University's College of Medicine and Veterinary Medicine and the MRC Human Genetics Unit, as well as the Roslin Institute and the Scottish Agricultural College.

Further information from http://www.jobs.ed.ac.uk Vacancy reference: 3006300 Informal enquiries to Professor Andrew Leigh Brown, Institute of Evolutionary Biology, University of Edinburgh (A.Leigh-Brown@ed.ac.uk)

A.Leigh-Brown@ed.ac.uk A.Leigh-Brown@ed.ac.uk

## UHouston 2 EvolBiol

# TWO FACULTY POSITIONS IN ECOLOGY AND EVOLUTIONARY BIOLOGY

The Department of Biology and Biochemistry at the University of Houston invites applications for two tenure-track Assistant, Associate or Full Professor positions in the Division of Ecology and Evolution. Candidates are welcomed from all areas of Ecology and Evolutionary Biology including those using theoretical, molecular, field, or experimental approaches. Each position requires an earned doctorate and postdoctoral experience. The successful candidates are expected to maintain nationally competitive externally funded research programs and participate in graduate and undergraduate teaching. The Department has spacious laboratories and offers competitive startup packages. Please submit curriculum vitae, list of publications, statement of research interests, and arrange for three letters of recommendation to be sent directly to: Dr. Dan Graur, Search Committee Chair, Department of Biology and Biochemistry, University of Houston, Houston, TX 77204-5001. Review of applications will begin on November 1, 2006.

Please address enquiries to dgraur@uh.edu

UH is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

Dan Graur <dgraur@uh.edu>

## **UIIIinoisUC EvolGenomics**

POSITION ANNOUNCEMENT Evolutionary Genomics University of Illinois at Urbana-Champaign

Position: Assistant Professor Full Time Tenure-Track Position (9 months) in Evolutionary Genomics in the Department of Animal Sciences. Qualifications: Ph.D. and postdoctoral or related experience demonstrating evidence to establish externally funded research program.

Proposed Start Date: January 16, 2007

Responsibilities: This search is part of a campus interdisciplinary initiative in genomic biology, and more specifically, evolutionary genomics associated with the Institute for Genomic Biology (IGB). The appointment of the successful candidate will be in the Department of Animal Sciences with both teaching and research responsibilities. It is expected that the successful candidate will continue the development of an internationally recognized research program emphasizing computational and evolutionary biology, direct graduate students and postdoctoral fellows, advise and interact with undergraduate students, contribute to the teaching needs of the departments in appropriate areas, compete effectively for private and public research funds, and participate in the public service mission of the university.

Salary: Commensurate with qualifications and experience.

Location: University of Illinois at Urbana-Champaign

Resources: The University of Illinois at Urbana-Champaign is a world-class institution with quality academic units including a center of excellence in biotechnology and a national supercomputing center. Successful candidates will be provided with excellent laboratory facilities, and substantial start-up funds.

Closing Date: To ensure full consideration, applications must be received by October 31, 2006.

Applications: Applicants should submit a curriculum vitae with a complete list of publications, a concise summary of research accomplishments and future plans, and three letters of reference. Applications in the form of a single PDF file should be submitted to: http:/-/www.ansci.uiuc.edu/jobs/searches/evo\_genomics/ Questions can be directed to Dr. Lawrence B. Schook, Chair of the Search Committee, at 217-265-5326 or schook@uiuc.edu. Additional information about the Department and University can be found at http:/-/www.ansci.uiuc.edu <http://www.ansci.uiuc.edu/and http://www.ansci.uiuc.edu/> <http://-> www.ansci.uiuc.edu/>. The University of Illinois is an Affirmative Action, Equal Opportunity Employer.

Larry Schook <schook@uiuc.edu>

#### **UIowa EvolEcolGenet**

## TWO FACULTY POSITIONS: EVOLUTIONARY ECOLOGY & GENETICS

In the Department of Biological Sciences and the Roy J. Carver Center for Comparative Genomics at The University of Iowa

Applications are invited for two tenure-track positions at the Assistant Professor level beginning fall 2007:

1. EVOLUTIONARY ECOLOGY: We are seeking candidates who are addressing fundamental problems at the interfaces of ecology, evolution, and genetics using molecular/genomic approaches. Areas of particular interest include but are not limited to environmentally relevant phenotypic variation, speciation, species interactions, and the evolution of sex.

2. GENETICS: We are seeking candidates who are addressing fundamental problems in genetics at the molecular and/or developmental level. Areas of particular interest include but are not limited to the molecular basis of chromosome behavior, regulation and gene expression.

The Department has seen significant growth over the last five years, including establishment of the Roy J. Carver Center for Comparative Genomics, and additional growth is anticipated during the next five years. Additionally, the Department has a tradition of supporting the career development of its assistant professors. To obtain information about the department and its faculty, visit <<u>www.biology.uiowa.edu</u>>. To learn more about the Center for Comparative Genomics go to <www.biology.uiowa.edu/ccg>. Successful candidates should have post-doctoral experience, a recognized record of accomplishment as reflected in publications in leading journals, evidence of ability to establish and maintain an extramurally-funded research program, and excellent teaching skills. The Department of Biological Sciences is located in recently renovated space and provides competitive salaries and benefits along with strong infrastructure support for research.

Applicants should submit a curriculum vitae, statement of research objectives and teaching interests, selected reprints, and the names of three references to: Genetics or Evolutionary Ecology Faculty Search Committee c/o Ms. Becky Birch, Department of Biological Sciences, 143 Biology Building, The University of Iowa, Iowa City, Iowa 52242-1324. Formal screening of applications will begin November 1 and continue until the positions are filled.

The University of Iowa is a large public university in a friendly, culturally diverse community and is an affirmative action/equal opportunity employer. Increasing gender and ethnic diversity of faculty and students at the University of Iowa is a major goal; women and underrepresented minorities are strongly encouraged to apply.

John M. Logsdon, Jr. Assistant Professor 319 335 1082 office University of Iowa 319 335 1083 lab Department of Biological Sciences 319 335 1069 FAX Roy J. Carver Center for Comparative Genomics 310 Biology Building Iowa City, IA 52242-1324

email	<john-logsdon@uiowa.edu>	web	<http: -<="" th=""></http:>
/www.biology.uiowa.edu/ccg/>			<http: -<="" td=""></http:>
euplotes.biology.uiowa.edu>			

## UKentucky QuantPopCompGenomics

#### Assistant Professor

Genomics: Quantitative, population, or comparative

The Biology Department at University of Kentucky seeks a tenure-track Assistant Professor with expertise in genomics. Candidates that integrate experimental and computational approaches to study populations, complex traits, or genomes are especially encouraged to apply. The Department will consider applications from a wide range of specializations, including but not limited to bioinformatics, development, neurobiology, evolution, genetics, and ecology. Applicants must provide evidence that they will develop an active, independently funded research program. A commitment to teaching and student training is expected. Applicants should submit a CV and a statement detailing their current and future research plans, and arrange for submission of three letters of recommendation. Please address applications to Randal Voss, Chair Genomics Search Committee, Department of Biology, University of Kentucky, 101 TH Morgan Bldg, Lexington, KY 40506. Applications must be received by October 15, 2006 to ensure full consideration.

#### UMiami EvolBiol

Senior Research Associate III, Department of Biology, University of Miami, Florida.

Minimum qualifications: M. S. degree and five years relevant research and lab management experience, but a Ph.D. is desirable as an indication of significant training in molecular genetics. Expertise must include familiarity with ABI (Applied Biosystems) genetic analyzers (ABI 310, 3130XL), as well as experience in sequencing, genotyping, rtPCR, in situ hybridization, and Northern, Southern, and Western blotting. Good interpersonal, organizational and administrative skills are essential.

Duties: This individual will be responsible for oversight and management of the departments core facility in molecular genetics, including training and supervising others in experimental practices, running methods workshops for students and faculty, as well as developing and implementing new facility operational procedures in concert with the faculty and chair. Duties will include working with faculty and graduate students on molecular genetics research projects including supervising or conducting sample testing, compiling and interpreting results, collaborating on proposals and publications.

This is a full-time, twelve month research professional position. Salary is competitive and commensurate with qualifications. Send application materials, including letter of application, CV, and 3 letters of reference to Dr. Kathryn Tosney, Department of Biology, University of Miami, P.O. Box 249118, Coral Gables, FL 33124-0421; or via email ktosney@bio.miami.edu; phone 305-284-3988. Review of applications will begin immediately and continue until position is filled.

Dr Alex Wilson Assistant Professor Department of Biology University of Miami 1301 Memorial Drive Coral Gables, Florida 33146-0421 USA

Phone: (305) 284 2003 Office: Cox Science Room 234 http://www.bio.miami.edu/acwilson/home.htm Tenure Track Faculty Positions Department of Biology University of Miami at Coral Gables

As part of a significant expansion, the Department of Biology seeks junior and senior tenure-track candidates in Developmental Biology who use non-mammalian model genetic organisms such as zebrafish, fly, worm, urchin or chick to investigate fundamental problems. Preferred candidates will be able to interface with one another and with the broader research community that has strong foci in neuroscience, behavior, and ecology. For the current recruitment season, application review will begin immediately and close December 4, 2006. The successful candidates will be expected to maintain innovative, externally funded research and to teach graduate and undergraduate students. Ph.D. and postdoctoral work is required. Send a curriculum vitae, representative reprints, statements of research and teaching interests, and have three letters of reference sent to Professor Kathryn Tosney, Search Committee, Department of Biology, University of Miami, P. O. Box 249118, Coral Gables, FL 33124-0421. Electronic submissions are welcome: email to BioSearch@bio.miami.edu. The University of Miami is an equal opportunity/affirmative action educator and employer.

Dr Alex Wilson Assistant Professor Department of Biology University of Miami 1301 Memorial Drive Coral Gables, Florida 33146-0421 USA

Phone: (305) 284 2003 Office: Cox Science Room 234 http://www.bio.miami.edu/acwilson/home.htm

#### **UMontreal StatGenetics**

Dear Colleagues,

The following position was advertised in Science (August 24th, 2006)

The University of Montreal and Sainte-Justine Hospital Research Center seek applications for a Canada Research Chair in Statistical Genetics and Epidemiology (Tier II, university appointment at the assistant professor level). Candidates must have strong academic background in statistics and/or computer science, a PhD degree plus 2-4 years of postdoctoral experience in the field, an interest in medical and human population genetics, as well as knowledge of contemporary genomic research tools. The successful applicant will develop his/her own competitive research program and also collaborate with existing research groups utilizing genetic methodologies. Post-graduate teaching will be encouraged.

French language skills are not required upon hiring, but should be developed during the first three years. International applicants are welcome. Applications will be considered beginning September 1, 2006 until the position is filled. Applicants should send a current CV plus a statement of research interests, either by email or mail, and arrange to have three letters of recommendation sent to

Dr Damian Labuda Selection Committee Sainte-Justine Hospital Research Center 3175 Cote Sainte-Catherine Montreal, QC H3T 1C5 Canada

Damian.Labuda@UMontreal.ca copy to: Dominika.Kozubska@Recherche-Ste-Justine.qc.ca

damian.labuda@umontreal.ca

#### UPotsdam AnimalEvol

The University of Potsdam has opened an Associate Professorship (W2) for Animal Ecology. Applicants are expected to establish an internationally competitive research group which combines own empirical/experimental work with advancements in ecological theory and complements the activities of current faculty at the Institute of Biochemistry and Biology. Teaching is expected to cover all major aspects of animal ecology. The successful applicant will also be responsible for teaching in human biology.

The deadline for application is 29th of September 2006. For further detail, please refer to the official announcement (in German) at

http://www.uni-potsdam.de/verwaltung/dezernat3/stellen/61\_sammel\_7\_professuren.html#ank7 Should you need further information (or explanations on any aspect of the German advertisement), please do not hesitate to contact me.

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

tiedeman@rz.uni-potsdam.de

## **UPotsdam Theor Pop Genetics**

A 9-month position for a senior visiting scientist experienced in theoretical population genetics and/or evolutionary theory is available at the University of Potsdam (close to Berlin/Germany). The position will start on 1 December 2006 and forms part of the Marie Curie Transfer of Knowledge Project FEMMES (FEedback Mechanisms in Models for Ecological forecastS). FEMMES aims to develop innovative models that describe how dynamic feedbacks between different hierarchical levels (from genotypes to communities) affect the response of ecological systems to environmental change. The project will run over a period of 4 years, comprises a total of five positions for visiting scientists, and is jointly hosted by the Department of Plant Ecology and Nature Conservation, and the Department of Ecology and Ecosystem Modelling.

The visiting fellow will be based at the Department of Plant Ecology and Nature Conservation, a research group with broad experience in the development of individual-based and spatially-explicit ecological models (e.g. Grimm et al. 2005 Science 310: 987-991). In collaboration with host scientists and a FEMMES Postdoc, the fellow will develop a concept for incorporating feedbacks between the dynamics of populations and genotypes into such process-based ecological models. Details of the research to be conducted at Potsdam are open to discussion and should be linked to previous experiences and current research interests of the fellow and the host. Ongoing research projects of the host combine theoretical and empirical work on the response of genotypes, populations, species and communities to habitat fragmentation, the ecology and evolution of invasive plant species, the ecological dynamics of populations and species under climate change, and the spread of transgenes in populations of crop plants and trees (see also http://home.wtal.de/koechy/AG/index.html).

Applicants should have at least 10 years of research experience, should be non-German, and should not have resided in Germany for more than 1 year during the past 3 years. Germans are eligible if they have resided outside the EU for at least four of the last five years (for details see http://ec.europa.eu/research/fp6/-mariecurie-actions/action/knowledge\_en.html). Applicants should be fluent in English, but knowledge of Ger-

man is not required. Salary is in accordance with the EU payscale for more experienced researchers, and includes social security contributions. Additionally, fellows receive travel and mobility allowances.

The Department of Plant Ecology and Nature Conservation resides in the picturesque Park of Sanssouci, a UNESCO World Heritage Site. Potsdam is a pleasant town a mere 20 minutes from Berlin with its rich cultural life.

Applications will be considered until the position is filled. For enquiries and applications please contact by e-mail: Dr. Frank Schurr (schurr@uni-potsdam.de) or by mail: Prof. Dr. Florian Jeltsch, Universität Potsdam, Maulbeerallee 3, D-14469 Potsdam, Germany.

schurr@rz.uni-potsdam.de schurr@rz.uni-potsdam.de

## URochester ComparativeFunctionalGenomics

The Department of Biology at the University of Rochester is continuing its hiring initiative. It is our goal to continue to build a research and graduate education environment that encourages interactions across biological disciplines and integrative approaches to biology. This year we intend to fill a tenure track position at either the assistant or associate level in Genomics. Highly qualified candidates in all areas, including functional and comparative genomics, are encouraged to apply. Our research and graduate programs are integrated into a larger research campus, which includes Computer Sciences, Brain and Cognitive Sciences, Biomedical Engineering, and the School of Medicine and Dentistry. Please send CV, a statement of research interests, three letters of reference, and 1-2 reprints to: Faculty Search Committee, Department of Biology, University of Rochester, Rochester, NY 14627-0211. Applications may also be submitted as PDF files to ynkr@mail.rochester.edu . Review of applications will begin November 1. The University of Rochester is an Equal Opportunity Employer.

John (Jack) Werren Professor of Biology University of Rochester Rochester, NY 14627 Office: 585-275-3694 Lab: 585-275-3889 Fax: 585-275-2070 web:

http://www.rochester.edu/College/BIO/labs/-WerrenLab/index.html werr@mail.rochester.edu

#### USussex EvolBiol

Dear Colleagues,

This is to let you know that The University of Sussex has now advertised a post in Evolutionary Biology. The ad is online (at http://www.sussex.ac.uk/-Units/staffing/personnl/vacs/vac494-497.shtml), and it should be out in Nature on 21 September. The closing date for applications is 13 October.

The post is open in terms of area of research, and the level of the appointment. We would like to encourage applications from people at all levels - from experienced postdoctoral fellows to full professors.

The University of Sussex is an exciting place to be an evolutionary biologist, with a diverse set of evolutionary researchers who interact extensively both with each other, and with researchers from around the University. Our co-workers come from a variety of fields including animal behaviour, genetics, neuroscience, evolutionary robotics and artificial life.

The University is close to the sea, in an officially designated "Area of Outstanding Natural Beauty." We are located in Brighton, one of the UK's most vibrant cities, which is less than one hour from Central London (by rail).

If you would like more information about the posts or about the University, then please feel free to contact one of the following faculty members:

Joel Peck (j.r.peck@sussex.ac.uk)

Adam Eyre Walker (a.c.eyre-walker@sussex.ac.uk)

David Waxman (D.Waxman@sussex.ac.uk)

Yours, Joel Peck School of Life Sciences The University of Sussex

j.r.peck@sussex.ac.uk j.r.peck@sussex.ac.uk

#### UTexasArlington EvolBiol

TWO JOBS AT THE UNIVERSITY OF TEXAS AT ARLINGTON: EVOLUTIONARY BIOL-OGY/ECOLOGY, MICROBIOLOGY The Department of Biology at the University of Texas at Arlington seeks one evolutionary biologist or ecologist and one microbiologist to contribute to active research groups in these areas. We are very interested in candidates whose research is at the interface of genetics or genomics, and evolution or ecology. Salaries and start-ups will be highly competitive. The Department offers both M.S. and Ph.D. degrees, and the majority of our graduate students (about 70 in total) conduct research in evolution and ecology. The Department is very research-oriented, is well equipped for molecular work with a major expansion in this area (new labs and state-of-the-art equipment, including core sequencing and microarray facilities), has an extensive animal care facility, and offers ample laboratory space. UTA is the second-largest and fastest-growing component of the University of Texas system, with approximately 27,000 students, including about 1,500 undergraduate Biology majors.

Arlington is a medium-sized city of about 300,000, located midway between Dallas and Fort Worth. It has a wide diversity of neighborhoods and housing styles, is safe and family-friendly, and the cost of living is very low relative to the vast majority of comparable metropolitan areas in North America. Arlington lies at the center of the Dallas/Fort Worth metroplex, about a 20 minute drive from DFW International Airport, 20 minutes from downtown Fort Worth, and 30 minutes from downtown Dallas. Dallas and Fort Worth each have very distinct characters; both are vibrant cities that offer extensive cultural and recreational opportunities.

The following ad for these positions will appear online in Science shortly.

#### EVOLUTIONARY BIOLOGY/ECOLOGY MICRO-BIOLOGY

The University of Texas at Arlington

The Department of Biology invites applications for two tenure-track positions at the rank of Assistant Professor to complement existing research strengths in ecology, evolution, and genomics. Participation in the Quantitative Biology doctoral program is expected.

An evolutionary biologist/ecologist: Research interests may include but are not limited to population/community ecology, ecological genomics or population/quantitative genetics. Dr. Laura Gough, Chair of Evolutionary Biology/Ecology Search

A microbiologist: Research interests may include but are not limited to microbial ecology, virology, genomics, or systematics and evolution. Participation in the undergraduate Microbiology Degree program is expected. Dr. Thomas Chrzanowski, Chair of Microbiology Search

Applicants must have a Ph.D. and a demonstrated record of research productivity. Successful candidates will be expected to establish vigorous, extramurally funded research labs and participate in both graduate and undergraduate programs. Located in the Dallas/Fort Worth metropolitan area, UT Arlington is a fast-growing, comprehensive university in The University of Texas System. Additional information is available at http://www.uta.edu/biology/. Applicants should submit curriculum vitae; copies of up to five publications; statements of research and teaching interests; and the names, e-mail addresses, and telephone numbers of four persons who can provide letters of reference. Send applications to the appropriate Search Chair at Department of Biology, University of Texas at Arlington, Box 19498, Arlington, TX 76019-0498. Review of completed applications will begin 9 October 2006, and will continue until the positions are filled. Hiring will be contingent on the completion of a satisfactory criminal background investigation for security sensitive positions. UT Arlington is an Equal Opportunity/Affirmative Action Employer.

Paul Chippindale

esosorum@sbcglobal.net

#### UTexas Austin LabTech

Lab technician, University of Texas at Austin

A two-year lab technician position is available at the University of Texas at Austin. We are looking for a highly motivated individual with a M.S or B.S degree and with the demonstrated ability to manage labs and carry out research. The individual will be responsible for implementing experiments and high-throughout genotyping of plant material, as well as upkeep of lab equipment, ordering lab supplies, and training students in the lab. The successful candidate must have experience in high-throughput genotyping and a strong background in molecular biology. Preference will be given to candidates with the some of the following skills including DNA and RNA extraction from plant tissue, experience with robotics in PCR setup, DNA sequencing, quantitative RT-PCR, and SNP genotyping. We also emphasize the ability to interact and work collaboratively with others, as the technician will work closely with post-docs, graduate students, and undergraduate researchers. Additional information about the lab and our research can be found at

https://webspace.utexas.edu/tjuenger/www/ Application review begins immediately and will continue until the position is filled. Applications should include a brief cover letter outlining qualifications and interests, curriculum vitae, and the names and email addresses of two references (please send all materials as a single PDF file). Send applications to

Tom Juenger Section of Integrative Biology University of Texas at Austin 1 University Station C0930 Austin, Tx 78712 512-232-5751

or via e-mail to tjuenger@mail.utexas.edu. Preferred start date will be Fall 2006.

The University of Texas at Austin is an affirmative action, equal opportunity employer committed to excellence through diversity.

tjuenger@mail.utexas.edu tjuenger@mail.utexas.edu

### UToronto TheoBiol

Theoretical Biologist Tenure-track Faculty Position University of Toronto at Mississauga The University of Toronto at Mississauga (UTM), Department of Biology, invites applications for a tenure track faculty position at the level of Assistant or Associate Professor, effective July 1, 2007. The area of specialization is open but we are searching for a theoretical biologist who is asking cutting edge questions in ecology and evolutionary biology. We are particularly interested in cross-disciplinary approaches designed to produce a more broadly integrated conceptual framework. The successful candidate may use computer modeling, laboratory manipulations, or field-based experiments (or a combination) to answer those questions. Greatest wight, however, will be given to the scope and novelty of the question or questions being asked. Excellent opportunities exist for collaboration both within the Department of Biology, and in other departments with strong research ties to biology. UTM offers a broad spectrum of programs where theoretical biology is relevant and teaching responsibilities could involve modeling related to evolution, ecology, genetics, or phylogenetic analysis. The successful applicant will have a Ph.D., and outstanding academic record, and evidence of excellence in teaching. Salary will be commensurate with qualifications and experience. The

appointee will be located in the Department of Biology, University of Toronto at Mississauga (UTM), and will also be a member of the appropriate graduate Department: Ecology and Evolutionary Biology or Cell and Systems Biology. The graduate departments are University-wide, inluding UTM, the downtown (St. George) and Scarborough campuses. Applicants should provide a curriculum vitae, statement of teaching philosophy and interests, an outline of their proposed research, and should arrange to have three confidential letters of recommendation sent on their behalf to: Professor Robert Reisz, Chair, Department of Biology, University of Toronto at Mississauga, Mississauga, Ontario, Canada L5L 1C6. rreisz@utm.utoronto.ca. Closing date for submissions is November 15, 2006. For more information on the department go to http://www.utm.utoronto.ca/~w3bio/homepage/ 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. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

Prof. Peter Abrams, F.R.S.C. Dept. of Ecology & Evolutionary Biology University of Toronto, Zoology Bldg. 25 Harbord St. Toronto, Ontario M5S 3G5 Canada 416-978-1014 fax 416-978-8532 abrams@zoo.utoronto.ca

abrams@zoo.utoronto.ca

### **UWashington MarineFishGenomics**

POSITION AVAILABLE Research Technician Marine Molecular Biology Laboratory School of Aquatic and Fisheries Sciences University of Washington, Seattle, WA, USA

Adaptation to a Changing World: Molecular Evidence for Selective Mortality in Walleye Pollock Larvae PIs: Lorenz Hauser (School of Aquatic and Fisheries Sciences, University of Washington) Mike Canino, Kevin Bailey (Alaska Fisheries Science Center, NOAA, Seattle, WA) Funding: North Pacific Research Board

Background The impacts of climate change are an issue of global concern, especially where ecosystems or species are already stressed due to anthropogenic influences. Exploited fish stocks may be particularly vulnerable to climate change as slight changes in larval and juvenile survival may affect recruitment and subsequent stock biomass. Mortality rates are typically very high during sensitive periods in the early life history stages of many fish species, and may greatly affect the strength of the resulting year class. However, despite a general understanding of environmental effects on year class strength, it is still unknown whether larval and juvenile mortality are entirely random, or whether specific genotypes are favored under certain conditions. Here, we will use modern techniques of population genomics to assess the extent of selective mortality during early larval stages of walleye pollock. Specifically, we will assess the relative success of different genotypes by estimating temporal and spatial genetic differentiation in two years with contrasting environmental conditions, in particular temperature. We will identify molecular markers under selection that can be used to (i) estimate selection coefficients, (ii) assess the scope for adaptation to changing climates, and (iii) estimate rates of exchange between pollock populations in different ecosystems.

Job Description The research technician will be expected to carry out AFLP (amplified fragment length polymorphism) surveys on pollock larvae already collected by the Alaska Fisheries Science Center. Specifically, the duties would include optimization and routine implementation of DNA extraction, restriction, ligation, PCR and fragment scoring on a MegaBace1000 automated sequences. Experience with molecular laboratory work is therefore essential, preferably with AFLP markers. A good BS degree in biology or related disciplines is required, and an MS degree is desired. As part of a large research group (Marine Molecular Biology Laboratory, <a href="http://depts.washington.edu/-">http://depts.washington.edu/-</a> mmbl/>http://depts.washington.edu/mmbl/), the successful candidate is expected to work well in a team and to collaborate closely with the PI and the existing laboratory technician on the project. For more information on research projects in Dr Hauser's group see <http://fish.washington.edu/people/hauser/>http:/-/fish.washington.edu/people/hauser/. The position is initially funded for 18 month at a salary range of up to \$3,500 / month plus benefits depending on qualifications.

For further information, contact Dr Lorenz Hauser, School of Aquatic and Fishery Sciences, University of Washington, e-mail: <u>lhauser@u.washington.edu</u>, Tel: (206) 685 3270

Dr Lorenz Hauser Assistant Professor School of Aquatic and Fishery Sciences University of Washington 1122 NE Boat Street, Box 355020 Seattle, Washington, 98195-5020 Tel: (206) 685 3270, Fax: (206) 685 6651 http://www.fish.washington.edu/people/hauser/ Lorenz Hauser <lhauser@u.washington.edu>

## UWesternAustralia PlantBiodiversity

Research Associate (Plant Molecular Ecophysiology) - 5 year appointment - University of Western Australia / Kings Park and Botanic Garden, Perth, Western Australia

RESEARCH ASSOCIATE (REF: 1500) SCHOOL OF PLANT BIOLOGY

â 5 year appointment â Salary Range: Level A AUS\$46,345 - \$62,892 p.a. - minimum starting salary for appointee with PhD will be AUS\$58,590 p.a. â Closing date: Friday, 13 October 2006

The Australian Research Council (ARC) funded Linkage project: A molecular ecophysiological assessment of the importance of using local provenance seed in plant biodiversity restoration

The project: The rehabilitation of diverse plant communities following disturbance is an increasingly important enterprise nationally. Best practice recognises the importance of using local seed but accurate guidelines defining appropriate seed transfer zones and an assessment of the consequences of using non-local seed, are lacking. For key species, we will (i) utilise molecular tools and landscape genetic analysis to delineate local seed transfer zones, (ii) compare the ecophysiological performance of local and non-local genotypes through field and glasshouse trials, and (iii) assess the consequences of mating between local and non-local genotypes. Working with restoration practitioners will ensure a more effective restoration industry. Applicants must have a PhD or equivalent in a relevant field in plant biology.

This project bridges the research disciplines of ecological genetics, restoration ecology and ecophysiology to address the critical issue of seed sourcing for ecological restoration of degraded landscapes. A focus on novel research opportunities, practical outcomes from research and strong linkages with industry are features of this project, with support and participation from Kings Park and Botanic Garden, Alcoa World Alumina Australia, Worsley Alumina Pty Ltd and Greening Australia.

For further information regarding the position or to ob-

tain a copy of the ARC-Linkage proposal, please contact Professor Hans Lambers on 6488 7381 or email hans.lambers@uwa.edu.au; or Dr Siegy Krauss on 9480 3673 or email skrauss@bgpa.wa.gov.au.

Application Details: The position description follows. Applicants must address the selection criteria. Written applications quoting the reference number, personal contact details, qualifications and experience, along with contact details of three referees should be sent to Director, Human Resources, The University of Western Australia, M350, 35 Stirling Highway, Crawley WA 6009 or emailed to jobs@uwa.edu.au by the closing date.

Further	details	$\operatorname{at}$	https://-
www.his.adr	nin.uwa.edu.au/j	obvacs/	exter-
nal/academi	c/ads.htm (ref 1	500).	

National Employer of Choice for Women

THE UNIVERSITY OF WESTERN AUSTRALIA

#### POSITION DESCRIPTION

POSITION IDENTIFICATION Faculty: Natural and Agricultural Sciences School/Admin Dept: School of Plant Biology Centre: Section: Position Number: 305818 Position Title: Research Associate Position Classification: HEE Level A.6 Supervisor Title: Professor Supervisor Position Number: 303031

ROLE STATEMENT The appointee is expected to conduct research on an ARC-Linkage funded research project, âA molecular ecophysiological assessment of the importance of using local provenance seed in plant biodiversity restorationâ. Appointment at this level requires a PhD and an interest and willingness to collaborate with other researchers and restoration practitioners, and to participate in postgraduate student supervision.

#### KEY RESPONSIBILITIES

 $\hat{\mathbf{I}}$  Characterise population genetic variation and structure for key species using molecular markers.  $\hat{\mathbf{I}}$  Establish and monitor reciprocal transplant experiments to assess the importance of home-site advantage in disturbed and undisturbed sites.  $\hat{\mathbf{I}}$  Assess the ecophysiological performance of local and non-local seedlings in reciprocal transplant experiments.  $\hat{\mathbf{I}}$  Conduct handpollination experiments to assess the extent of outbreeding depression for key species.  $\hat{\mathbf{I}}$  Participate in post-graduate student supervision.  $\hat{\mathbf{I}}$  Manage regular communication between all project stakeholders Other duties as directed

## THE UNIVERSITY OF WESTERN AUSTRALIA POSITION DESCRIPTION

POSITION IDENTIFICATION

Faculty: Natural and Agricultural Sciences School/Admin Dept: School of Plant Biology Centre: Section: Position Number: 305818 Position Title: Research Associate Position Classification: HEE Level A Step 6 Supervisor Title: Professor Hans Lambers Supervisor Position Number: 303031

PREREQUISITES: (Minimum requirements fundamental and indispensable to the duties, e.g. Certificate of Secondary Education). â Applicants who fail to meet prerequisite requirements will not be interviewed. PhD or equivalent in a relevant field in plant biology

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## UWisconsinEauClaire FuncGenomics

Two open tenure-track positions at the University of Wisconsin-Eau Claire:

Molecular Biologist (pdf of full description in link below) http://www.uwec.edu/Biology/mainpage/-Positions.htm The Biology Department at the University of Wisconsin-Eau Claire, a comprehensive liberal arts-based university with national acclaim for its excellence in faculty-undergraduate research, invites applications for a tenure track Assistant Professor in Molecular Biology to begin August 20, 2007. The department seeks candidates who are committed to teaching excellence and to maintaining an active research program involving undergraduates. The department also seeks individuals who will bring diverse cultural and ethnic perspectives or experiences to campus. The department is particularly interested in candidates doing research in functional genomics of plant or animal systems and whose research interests complement those of current faculty and which support the curriculum.

Developmental Biologist (pdf of full description in link below) http://www.uwec.edu/Biology/mainpage/-Positions.htm The Biology Department at the University of Wisconsin-Eau Claire, a comprehensive liberal arts-based university with national acclaim for its excellence in faculty-undergraduate research, invites applications for a tenure track Assistant Professor in Developmental Biology to begin August 20, 2007. The department seeks candidates who are committed to teaching excellence and to maintaining an active research program involving undergraduates. The department also seeks individuals who will bring diverse cultural and ethnic perspectives or experiences to campus. Although the particular area of research within developmental biology is open, the department seeks candidates whose research interests complement those of current faculty and which support the curriculum.

Please send application materials and queries to the name/address in the job ads, not to me.

Thanks,

Chris

Chris H. Floyd, Ph.D. Assistant Professor Department of Biology Phillips Hall 354 University of Wisconsin-Eau Claire Eau Claire, WI 54701 Phone: 715-836-4163 Fax: 715-836-5089 floydch@uwec.edu

> UniversityCollegeLondon ResearchTechnician

#### RESEARCH TECHNICIAN

Applications are invited for an experienced research technician, who will carry out research work and maintain transgenic fly stocks in Professor Linda Partridge's Drosophila Research Group at University College London. The aim of the research in the Centre for Evolutionary Genomics is to use model organisms to discover genes and mechanisms that determine fitness-related traits. The technician will participate on an NERCfunded research project on the role of microRNAs in phenotypic plasticity to environmental change.

The position will be available for a period of 18 months, starting as soon as possible.

The ideal candidate will have experience of molecular biology techniques and will have worked with Drosophila previously. The main duties include experimentation in molecular biology, biochemistry, genetics and insect biology, as well as meticulously carrying out routine fly work.

You will have excellent organisational and research skills, and a positive attitude to learn and troubleshoot new methods.

The salary will be on Grade 7 - GBP 25,633 plus GBP 2,472 London Weighting.

For a full Job Description, Person Specification and information about the application process please visit http://www.ucl.ac.uk/~ucbtcee/cee/job1.html Closing date for completed applications: Friday 20th October 2006.

Dr. Bregje Wertheim Department of Biology University College London Darwin Building Gower Street London WC1E 6BT United Kingdom e-mail: b.wertheim@ucl.ac.uk e-mail: b.wertheim@ucl.ac.uk

#### VanderbiltU EvolOfDiseaseVectors

#### Postion Open:

The Department of Biological Sciences and the Institute for Global Health at Vanderbilt University seek candidates to fill an assistant professor, tenure-track faculty position in Vector Biology, Medical Entomology and/or Vector-Borne Diseases. The central criteria for this position are excellence in research and the ability to teach undergraduate and graduate students with a high level of effectiveness. Research specialties may include epidemiology, ecology, behavior, physiology, population genetics or molecular genetics of medically important arthropods. Candidates with interests in vector/pathogen/host relationships, vector ecology and population biology as well as in novel molecular/ecological intervention methods for vectorborne disease control are particularly encouraged to apply. For information about the Biological Science faculty and the Department, visit our website (http:/-/sitemason.vanderbilt.edu/biosci). The successful candidate will be an active participant in the Institute for Global Health (http://www.mc.vanderbilt.edu/root/vumc.php?site=global\_health).

Applicants should send a letter of application together with a curriculum vitae, a statement of current and future research interests, three letters of recommendation, teaching evaluations, if available, and selected reprints to: Vector Biology Search Committee, Department of Biological Sciences, Vanderbilt University, VU Station B 351634, Nashville, TN 37235-1634 U.S.A. Review of applicants will begin October 1, 2005, and will continue until the position has been filled. Vanderbilt University is an Affirmative Action / Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

Dr. L. J. Zwiebel Professor of Biological Sciences Center for Molecular Neuroscience Programs in Developmental Biology & Genetics Institute for Chemical Biology Suite 6260 Biological Sciences/Medical Research Building III Vanderbilt University

for regular mail please use: VU Station B 351634 Nashville, TN 37235-3582 USA

Office Tel: (+1)615-343-1894(direct)/615-936-0104(David Rinker-for assistance) Laboratory Tel: (+1)615-343-3718 Fax: (+1)615-936email: l.zwiebel@vanderbilt.edu 0129 http://www.cas.vanderbilt.edu/zwiebel/ Address for FedEx/UPS/Express Mail and Hand Deliveries: Department of Biological Sciences 6260 BSB/MRBIII Vanderbilt University 465 21st Ave. South Nashville, TN 37232. USA

LJ Zwiebel <l.zwiebel@vanderbilt.edu>

#### WashingtonStateU PlantEvolGenet

#### WASHINGTON STATE UNIVERSITY

PLANT EVOLUTIONARY GENETICS ASSIS-TANT/ASSOCIATE PROFESSOR (with correct link to Notice of Vacancy)

The School of Biological Sciences at Washington State University in Pullman, WA invites applications for a full-time tenure-track position in Plant Evolutionary Genetics to begin August 2007 at the Assistant or Associate Professor level. Applicants should have ability and potential for outstanding teaching and for maintaining a strong empirical research program in plant evolutionary genetics, focusing on questions that complement our faculty's strengths in population and ecological genetics, evolutionary ecology, molecular evolution, systematics, ecology, and physiology. Candidates pursuing rigorous, theory-driven empirical research on plant evolutionary genetics using sophisticated quantitative skills are particularly encouraged to apply, as are individuals who are effective communicators with broad knowledge of plant biology and interests in collaborative research and training. Required qualifications include an earned doctorate at time of application, a record of research accomplishment commensurate with rank in plant evolutionary genetics, and a commitment to teaching excellence in undergraduate and graduate courses. Successful candidates will be expected to develop and maintain a vigorous, independent research program supported by extramural funding, train graduate and undergraduate students, participate in graduate and undergraduate teaching including a graduate course in population genetics and shared responsibilities for undergraduate courses in general genetics or evolution, and advance the college's commitment to diversity and multiculturalism.

To apply, send a letter of application addressing qualifications, curriculum vitae, statements of research and teaching interests, and a list of names, addresses, and telephone numbers of at least three references. Arrange for at least three letters of reference to be sent directly to the Search Committee. These letters of reference should clearly address your research potential, teaching and communication skills. Send all materials by November 13, 2006 to:

Plant Evolutionary Genetics Search Committee c/o Linda Larrabee School of Biological Sciences P.O. Box 644236 Pullman, WA 99164-4236 larrabee@wsu.edu Phone: (509) 335-5768 Fax: (509) 335- 3184

Full notice of vacancy can be viewed at www.sci.wsu.edu/sbs/ index.php3. EEO/AA/ADA

Richard Gomulkiewicz gomulki@wsu.edu PHONE:
(509) 335-2527 FAX: (509) 335-3184 http://www.wsu.edu/~gomulki/ Department of Mathematics;
P.O. Box 643113 or School of Biological Sciences; P.O. Box 644236 Washington State University Pullman,
WA 99164 USA

gomulki@wsu.edu gomulki@wsu.edu

#### WesternWashingtonU QuantGenet

Assistant Professorships in Biology Western Washington University The Biology Department at Western Washington University, a regional comprehensive university located between Seattle and Vancouver B.C., invites applications for two tenure track, assistant professor positions, beginning September 2007. We seek individuals committed to undergraduate and MS education who will establish vigorous research programs that involve students. Quantitative Geneticist: Ph.D. in genetics or evolutionary biology and postdoctoral experience required. Applicants must have training in quantitative genetics and provide evidence of the ability to teach upper-level courses in general genetics and evolutionary biology. Applicants who investigate evolutionary or ecological questions using quantitative genetics are of particular interest. Cell Physiologist: Ph.D. and postdoctoral experience in cell physiology required, preferably in an animal system. The applicant must provide evidence of the ability to teach introductory and advanced courses in cell biology and physiology. Applicants who investigate structure-function relationships or integrated regulation of function at the cell, tissue, or organ level are of particular interest. See full position announcements, including all required qualifications, at http:/-/biol.wwu.edu/biology/.To apply, submit curriculum vitae, statements of teaching and research interests, and three letters of reference. Review begins 11/1/06. All materials should be sent to the attention of Dr. Carol Trent, Chair: Quantitative Geneticist Search Committee; Dr. David Leaf, Chair: Cell Physiologist Search Committee; Biology Department, Western Washington University, 516 High St., Bellingham, WA 98225-9160. AA/EOE

Joann J. Otto Professor and Chair Department of Biology, MS 9160 Western Washington University 516 High St. Bellingham, WA 98225-9160

360-650-4044	Fax	360-650-3148	email:
Joann.Otto@ww			

Joann Otto <Joann.Otto@wwu.edu>

## Other

AncientDNA PVPP56
Barbarea vulgaris samples56
Capillary Electrophoresis Fluorescent SSCP $\dots 56$
ESTIM 1 0
Freeware software for ABI files57
Genetic Algorithm reference
Genetic Distance from Microsatellites
Halocyprididae samples
Hummingbird Microsatellites
Joining seq fragments
LinkageAnalysis program58
MJ PTC-200 ThermalCyclers
Micro Tree Software
MicroDist for Polyploids
Microsat phylogenies
Msvar program question60

## AncientDNA PVPP

Hi, I have some 500 year old fish bones that I want to recover DNA from and judging by the colour of them (dark brown) they're likely to be pretty full of humic acid. I was thinking of adding PVPP to the extraction buffer to bind the humic acid, prior to concentrating the DNA with a column (ie centricon 10kD) and then cleaning it up with a Qiagen kit (QIAamp Micro kit or Dneasy). I know that PVPP is often used to clean up soil samples but has anyone tried it with bones or teeth, or can comment on this approach generally. Thanks in advance for any help you can give. Regards, Bill

Dr Bill Hutchinson Molecular Ecology & Fisheries Genetics, Biological Sciences, Hull University, HULL HU6 7RX United Kingdom

Tel:- 01482 465804 office 01482 465536 lab Fax:-01482 465458 http://www.hull.ac.uk/biosci/staff/hutchinson.html http://www.hull.ac.uk/ GAS/ http://www.microchecker.hull.ac.uk/ w.f.hutchinson@hull.ac.uk w.f.hutchinson@hull.ac.uk

#### Barbarea vulgaris samples

Can you help us? We are searching for seeds or leaf material of Barbarea vulgaris from its European range.

No individuals from haplotype seqs60
Organutan conservation
PAML dNdS60
Primate YChromosome STRs61
RBINS Brussels TravelGrant61
Relatedness program61
SAS 64bit61
Sequence concatenation61
Sequence concatenation answers62
SexSpecific Markers Cottidae62
Software Arlequin ver 3 163
TeachingEvol ComputerPrograms64
TeachingEvol ComputerPrograms answers64
microsat software distance answers
r8s program problems66

We are especially interested in material from Scandinavia, but also from central and southern Europe.

The material will be used for a study of population structure. In Denmark we find populations that are mostly resistant or non-resistant to herbivory from a Phyllotreta beetle, and in the present project we want to test if the resistant populations have a different evolutionary history and range than the non-resistant. The project is part of a larger Danish - Dutch collaborative study on the plant - insect interactions.

Many thanks in advance,

Thure P. Hauser, Ph.D., Associate Professor Department of Ecology Royal Veterinary and Agricultural University Rolighedsvej 21 DK- 1958 Frederiksberg Denmark +45 3528 2818 tpha@kvl.dk www.ecol.kvl.dk

> Capillary Electrophoresis Fluorescent SSCP

Dear EvolDir users,

Have anyone of you tried to genotype samples using fluorescent SSCP (Single Strand Conformation Polymorphism) markers with the help of a Beckman Coulter automatic sequencer (e.g. CEQ 2000XL or 8000)? I know there are protocols for this technique (that's what they call Capillary Electrophoresis SSCP or CE-SSCP) to be used with ABI sequencers, but I didn't find papers or protocols for Beckman machines. Does anyone have any informations? Thanks a lot Davide Perini Universita' degli Studi di Davide Perini PostDoc, Università degli studi di Mi-Milano, Milano, Italy davide.perini@unimi.it

davide.perini@unimi.it

lano, Milano, Italy davide.perini@unimi.it

Genetic Algorithm reference

## ESTIM 10

Does anyone know the current whereabouts of Estim 1.0, a program described in this paper: Vitalis, R., and D. Couvet. 2001. ESTIM 1.0: a computer program to infer population paramaters from one- and two-locus identity probabilities. Molec. Ecol. Notes 1:354-356.

The download site given in the paper is no longer functional and Vitalis is also proving hard to find.

(A passing point - shouldn't journals maintain access to programs they publish program notes for? Presumably their sites are more long-lived than most. Just like on-line supporting material).

Thanks, Mike

Reply to:

mgr@st-and.ac.uk

Mike Ritchie Phone 0 (44 outside UK) 1334 463495 Environmental & Evolutionary Biology Fax 0 (44 outside UK) 1334 463366 Dyers Brae House University of St Andrews E-mail mgr@st-andrews.ac.uk St Andrews, Fife Scotland KY16 9TH

Website: http://biology.st-and.ac.uk/staff/ritchie.html Research website via: http://tiree.st-and.ac.uk/cegg/research.html mgr@st-andrews.ac.uk

#### Freeware software for ABI files

Dear EvolDir users,

I need to analyse output data (fragments) i got from an ABI 3100 sequencer (.fsa file) in order to correctly score and call the peaks of microsatellite analyses. Unfortunatelly I can't use any ABI softwares for opening and reading the files and so i am looking for a freeware software that can do that. Have you got any suggestion?

thank you very much, looking forward to hearing from vou

I am looking for the reference to a paper which did an in-vitro genetic algorithm that selected its components so that the system incorporated specific, but nonstandard amino acids into a growing peptide chain. Thanks for sending the reference to me.

Cheers Walter

wfitch@uci.edu

Genetic Distance from **Microsatellites** 

Question for the readers of EvolDir

I am examining phylogeographic and population genetic structure between populations of sailfin molly fishes that range throughout the Yucatan peninsula of Mexico. I am interested in comparing the pattern of neutral genetic divergence (based on allelic variation at nine microsatellite loci) to that of population divergence in morphological traits (Mahalonobis distance) and mating behaviors (principal components and Euclidian distance). My question is: which is the most appropriate genetic distance measure to compute based upon my microsatellite data to use in Mantel and spatial autocorrelation comparisons of genetic distance with morphological or behavioral distance? Thanks for any suggestions as to which type of genetic distance (e.g., Nei's, DA, chord, etc.) would be best for these types of analyses and why. Please email responses to shankis@clemson.edu -

Shala J. Hankison shankis@clemson.edu Clemson University Biological Sciences 132 Long Hall Clemson, SC 29634

Shala Hankison <shankis@CLEMSON.EDU>

### Halocyprididae samples

Dear colleagues: I will start my MSc thesis at the Station Biologique de Roscoff, in France, building a molecular phylogeny of pelagic ostracods (Myodocopa: Halocyprididae) under the supervision of Drs. Colomban de Vargas and Martin Angel.

I have got some material from the Sargasso Sea to start with, but I would like to gather more material especially from the Indian and Pacific Oceans (but also from other parts of the Atlantic), and from different depths.

I would greatly appreciate if you have plankton samples preserved in EtOH (suitable for DNA analyses) to share with me. I can sort the ostracods out of the samples and send the samples back, and of course preserved specimens would be even greater.

Your help will allow analyzing most of the worldwide diversity, which would be a great benefit for my work.

If you have samples to share, we could work on a protocol to send them to Roscoff, and we will provide a Fedex account # so that no cost is involved on your side,

Thanks a lot for your help and please dont hesitate to contact me for any question,

Best regards,

Ruth Castillo rutycastillo@hotmail.com

gions, and possibly for kinship studies within populations.

I have been unable to find any known mircosatellite markers for hummingbird s in any of the following databases: The Sheffield Molecular Genetics Facility, GenBank Sequence Database, Molecular Ecology Notes Primer Database, and the Table of microsatellite DNA loci and their use as heterologous primers from The Alaska Biological Science Center. (Scribner, K. T., and J. M. Pearce. 2000)

Regards

Ida Bacon

 $s0674467 @sms.ed.ac.uk\ s0674467 @sms.ed.ac.uk$ 

## Joining seq fragments

Hello,

I am trying to find software that will allow me to put sequence fragments together. I am currently doing ancient dna research and have broken down the sequences that I'm looking at into <200bp fragments and I need to have a good way to join them back together before aligning them. I've been putting some together manually using excel but I haven't been able to find a good program to use to do it for me.

Any suggestions?

Thanks,

Mark Whitten Royal Veterinary College London <mailto:mwhitten@rvc.ac.uk>

#### Hummingbird Microsatellites

Does anyone know of anyone who has developed any microsatellite markers for hummingbirds, or is hoping to do so?

I am starting a PhD on The population structure and breeding ecology of Rufous Hummingbirds (Selasphorus rufus)at the Institute of Evolutionary Biology at the University of Edinburgh (Working with Sue Healy) and hope to do 4-5 months field work in Canada during the breeding season.

I would like to use mircrosatellite markers to compare the relatedness of populations breeding in different re-

## LinkageAnalysis program

Hi,

We're analyzing variation in uptake signal sequences (USS), a class of very abundant repeated sequences in bacterial genomes. You can see a sequence logo representation of the consensus here: http://rrresearch.blogspot.com/2006/09/first-good-searches-for-uss-motifs.html. Our analysis is generating aligned sets of about 1000 sequences, usually about 40bp long, and we'd like to use a program to look

#### October 1, 2006 EvolDir

for evidence of sites that are correlated in their evolution. We were thinking a program that calculates levels of linkage disequilibrium or is able to identify compensatory substitutions (as would be done when analyzing the evolution of RNA molecules) would be most appropriate. We're hoping that an evoldir reader will be able to point us to a suitable program for this analysis (Mac or Unix preferred).

Thanks,

Rosie Redfield

Dr. Rosemary J. Redfield redfield@interchange.ubc.ca

Associate Professor Department of Zoology Office: (604) 822-3744 Univ. of British Columbia Lab: (604) 822-6323 Vancouver, B.C. V6T 1Z4 Fax: (604) 822-2416 Canada

We're now in the Life Sciences Centre (RJR office 2551, lab 2520; email us for directions)

IMPROVED! Now with favicons! Web site: http://www.zoology.ubc.ca/~redfield\_NEW! Research blog: http://rrresearch.blogspot.com

#### MJ PTC-200 ThermalCyclers

Our lab has recently purchased 3 ABI 9700 duel block thermal cyclers. All of our pervious pcr's have been done on MJ PTC-200 thermal cyclers. We were hoping that conditions would not change between the two machines but of course that is not the case. The ABI machines seem to be less intense and sometimes even nonexistent when run side by side. The ramping rates are both 1/sec. Does anyone know of a standard change in program (i.e. 5 more cycles for the ABIs) or anything else we could try?

Thanks for any input,

Jennifer Von Bargen Molecular Genetics Lab Washington Dept. Fish and Wildlife (360) 902-2823 vonbajfv@dfw.wa.gov Hello all, I am in search ONE program that will - calculate genetic distances from microsatellite allele frequency data, -construct a phylogenetic tree based off of these microsatellite-based distances -perform bootstrapping by replacing loci to test robustness.

I am trying to construct a microsatellite-based phylogenetic tree. I have been using the software packages MSA (microsatellite analyzer) and Phylip for generation of genetic distances based on allele frequencies and construction of the tree respectively. I have not been able to find a program that will perform bootstrapping for this data-set yet.

The use of two programs is quite cumbersome so if anyone knows of a program that will compute all three calculations for microsatellite data, or any suggestions for the programs I am using, that would also be much help.

Thanks in advance! Amanda Seyfert aseyfert@indiana.edu

aseyfert@indiana.edu

## **MicroDist for Polyploids**

Dear all,

Here's a question about the method Bruvo et al. (2004) described regarding: "calculating microsatellite genotype distances irrespective of ploidy level".

I was wondering whether someone has automatized this method.

Best regards and thanks in advance,

Philippe Helsen.

Philippe Helsen University of Antwerp - Campus Groenenborger Dept. of Biology - Evolutionary Biology Group Groenenborgerlaan 171 B-2020 Antwerp Belgium

philippe.helsen@ua.ac.be

phone: xx-32-3-265.34.70 fax: xx-32-3-265.34.74

Microsat phylogenies

Micro Tree Software

Hello all;

I have a set of microsatellite data (6 loci) for a number of populations. I want to see the phylogenetic relationships between the indv of these popts. So, my questions are:

How do I calculate delta-mu ^2 distances using arlequin (or in a software you recommend)and use these measures to build a network or a tree?

Thanks very much in advance...

Omur Kayikci

OMUR KAYIKCI <kayikci@duke.edu>

#### Msvar program question

Dear Evoldir,

I have been running MCMC simulations in Msvar program with different priors to estimate population size changes in cows. I have plotted the density in BOA (Bayesian Output Analysis) but I can't figure out how to plot the prior distribution on the same curves as requested by one referee. How do I get this priors plotted on the same density curves? I cant figure this out since the priors in Msvar are just figures, how do I generate or get the prior distribution. I would be very grateful if someone could help me do this in BOA for R. I am realy a novice in the field of Bayesian analysis.

Best, Opio NARO, Uganda

Opio Achot <opioachot@yahoo.co.uk>

#### No individuals from haplotype seqs

Do you know of any software that calculates the number of individuals of an invasive species, that invades a new area, based on haplotype sequences?

Thank you for your time. Best regards, Joana Garcia

Name: Joana Garcia e-mail address: jucpgarcia@gmail.com

Joana Garcia <jucpgarcia@gmail.com>

#### **Organutan conservation**

I would like to announce the recent creation of the "Pongo Foundation", whose mission is to stimulate and promote research on orangutans and other primates in a conservation perspective. More information can be obtained in www.orangutan.nl saranlcarvalho@gmail.com

### PAML dNdS

Dear EvolDir members,

I work on complete genome of two species with 70% of homology in amino acid. Some people say that I'm at the limit to use PAML and that I may have substitution saturation. I work with the 3.15 PAML version (novembre 2005). I first run a pairwise analysis runmode = -2 (because I run 2 aligned sequences at once). I run about six thousand pair of aligned sequences (but one pair at once). Unfortunatly, I found a very high dS value (>50) for the main part of my sequences. So, the results have no real meaning. I try with runmode = 2 (autmoatic analysis) to test different model of evolution (NSsites). I run PAML wih NSsites = 2 (selection model, M2a). I obtained some results but I don't understand what they represent. For example I obtained at the end of the main output file :

"stage 0: (1, 2); lnL(ntime: 2 np: 7): -1079.894991 3..1 3..2 19.54493 19.55404 7.33163 -0.20254 -1.62772 0.00344 37.70754"

Is some one abble to tell me what represent the different values ? Could you help me to understand the PAML results ? Maybe I use the bad parameters ? Best regards

Severine Jancek

severine.jancek@obs-banyuls.fr

synthesys@naturalsciences.be Next deadline: 30 March 2007

isab972@yahoo.co.uk

## Primate YChromosome STRs

Dear Friends,

I am planning to use Promega Powerplex Y System in case of Macaques. I would like to know if anyone has used it for the same purpose and if yes, then also about its performance. Please let me know if any published material is available online. I also welcome anyother suggestion concerning the project.

Thanks in advance.

 $\operatorname{Deb}$ 

– Debapriyo Chakraborty Laboratory III

Debapriyo Chakraborty <debapriyo@ncbs.res.in>

## **RBINS Brussels TravelGrant**

Unique opportunity to study the Taxonomical Collections of the Royal Belgian Institute of Natural Sciences, Brussels; Royal Museum for Central Africa, Tervuren; National Botanic Garden, Meise and their facilities.

SYNTHESYS enables researchers based in Europe to access the earth and life science collections, facilities and taxonomic expertise at the 19 institutions organised in 11 national Taxonomic Facility Consortia (TAFs).

All necessary information is available on the Internet at: http://www.synthesys.info Next deadline for submitting applications: 30 March 2007

Dr Van de Velde Isabella SYNTHESYS BE-TAF Administrator EDIT Team Leader WP8 - Training

Royal Belgian Institute of Natural Sciences Vautierstraat 29, B-1000 Brussel Tel.: 32 2 627 43 34 Fax: 32 2 627 41 13 E-mail: Isa.Vandevelde@naturalsciences.be synthesys@naturalsciences.be http://www.naturalsciences.be SYNTHESYS enables researchers based in Europe to access the Earth and life science collections, facilities and taxonomic expertise at the Royal Belgian Institute of Natural Sciences; Royal Museum for Central Africa; National Botanic Garden. For more information contact:

#### **Relatedness** program

Hello Brian,

I'm a Biology graduate student at Wesleyan University and I'm looking for a program that will help me determine relatedness in my zebra finch colony. Carol Mariani, who is doing my fragment analysis, suggested posting a request for suggestions on your website. I know GeneMapper will do the trick, but It's too fancy for what I need. I'm hoping to find something fairly straightforward and easy to use since I'm very new to the molecular world, and this is just a small part of a larger project.

Thanks, Meyesa Tetreault mtetreault@wesleyan.edu

#### SAS 64bit

EvolDir,

I have found myself in a quandary. I have a data set that is too large for normal 32-bit SAS operations and do not have the hardware necessary to upgrade to their new 64-bit Itanium version. Does anyone know where I could find a facility that has 64-bit SAS capabilities?

Thanks,

Ken Jones

Kansas State University Division of Biology 264 Chalmers Hall Manhattan, KS 66506 Office/Lab: (785) 532-6773

Email: KenJones@k-state.edu

Sequence concatenation

Hello all:

I have several multiple sequence alignments that I need to concatenate. Because each one is around 1000-1500 nucleotides in length using a word processor would be a very laborious option. Does anyone out in Evol-dirland know of a reasonably efficient program or protocol for doing this? I<sup>1</sup>ve been poking around in MacVector and GeneDoc without any real success. Any help would be greatly appreciated.

Cheers, Kurt Wollenberg, Ph.D. Phylogenetics and Sequence Analysis Consultant Biocomputing Research Consulting Section Bioinformatics and Scientific IT Program (BSIP) NIH/NIAID/OTIS Contractor, MSD Inc.

wollenbergk@niaid.nih.gov

#### Sequence concatenation answers

#### Greetings:

Thank you to everyone who took the time to reply to my recent posting asking for programs or methods for concatenating multiple sequence alignments into one overall alignment. Several individuals asked that I share the results of my query regarding concatenating multiple sequence alignments (MSAs). First and foremost, many reminded me to make sure that the sequences in each MSA were in the same order (i.e., if MSA one contained sequences from Human, Chimp, Mouse, and Chicken in that order, the sequence in all other MSAs had to be in the order Human, Chimp, Mouse, Chicken). Second, for several of the most efficient methods to work, the sequences in the different MSAs need to have the same sequence ID as most of the programs use this information to match and stitch together the sequences.

The most common and generally simplest recommendation was to append each MSA one below the other in one file and then input this into PHYLIP or PAUP as interleaved sequence. For PAUP (and MacClade and Mesquite and MrBayes) this will require that the file be a nexus-format file. For PHYLIP the file will need to be in the standard PHYLIP format. With this method the program will concatenate the sequences in the process of reading them into the analytical pipeline. PAUP and MacClade (and possibly Mesquite?) can then export the processed input file as sequential data and in several formats.

Another sequence analysis program recommended by

several responses was DAMBE, which has a concatenation function among its features. DAMBE can be downloaded from http://dambe.bio.uottawa.ca/software.asp. DAMBE is a Windows program, but presumably it can work in an emulator (Virtual PC) or virtual machine (Parallels desktop).

Still more individuals recommended using a Perl script and/or Perl and BioPerl modules to perform the concatenation. If one is running Mac OS X then perl is an available option.

Another interesting alternative was to use Excel. One can open the alignment file as text so that the sequences are in individual cells. Though not absolutely required the individual MSAs can then be copied and pasted into one spreadsheet. Then the function concatenate() can be used to concatenate the cells with the appropriate sequences. While it<sup>1</sup>s not necessary to have the sequences in the MSAs in the same order with this method it would be much easier to implement if they were.

Other programs mentioned that can perform concatenation were ProSeq v 3.0 (latest development version can be downloaded from http:/-/helios.bto.ed.ac.uk/evolgen/filatov/proseq.html), the bioinformatics workbenches CLC Gene, Protein, and Combined (fully functional demos available from http://www.clbio.com), Genious (7-day trial available from http://www.genious.com), the Se-Al alignment editor ( available from http://evolve.zoo.ox.ac.uk/software.html?id=seal), and the BioEdit Windows biological sequence editor (available from http://www.mbio.ncsu.edu/BioEdit/bioedit.html).

Cheers, Kurt Wollenberg, Ph.D. Phylogenetics and Sequence Analysis Consultant Biocomputing Research Consulting Section Bioinformatics and Scientific IT Program (BSIP) NIH/NIAID/OTIS Contractor, MSD Inc.

wollenbergk@niaid.nih.gov

## SexSpecific Markers Cottidae

Dear,

I would like to inform whether sex-specific markers are available for the bullhead (Cottus gobio), a small bottom-dwelling freshwater fish species (or other Cottidae)?

Kind regards, Guy

Dr. Guy Knaepkens University of Antwerp Department of Biology Campus Drie Eiken Universiteitsplein 1 2610 Wilrijk Belgium Tel.: 0032 3 820 22 86 Fax: 0032 3 820 22 71 E-mail: guy.knaepkens@ua.ac.be

Knaepkens Guy <Guy.Knaepkens@ua.ac.be>

#### Software Arlequin ver 3 1

Please note that a new version (3.1) of Arlequin is now available on

http://cmpg.unibe.ch/software/arlequin3 Compared to version 3.01, Arlequin 3.1 includes several cosmetic and speed improvements, as well as bug corrections and additional features:

Improvements — \* Locus-by-locus AMOVA can now be performed independently from conventional AMOVA. This can lead to faster computations for large sample sizes and large number of population samples. \* Faster routines to handle long DNA sequences or large number of microsatellites. \* Faster reading of input file. \* Faster computation of demographic parameters from mismatch distribution. Improved convergence of least-square fitting algorithm.

Additions: ——- \* Computations of population specific inbreeding coefficients and estimation of their significance level. \* Output of the number of alleles as well as observed and expected heterozygosity per locus for all populations. \* Computation of the Garza-Williamson statistic for MICROSAT data. \* New sections are provided at the end of the result file, in order to report summary statistics computed for each population: - Basic properties of the samples (size, no. of loci, etc...) - Heterozygosity per locus - Number of alleles + total no. of alleles over all pops - Allelic range + total allelic range over all pops (for microsatellite data) - Garza-Williamson index (for microsatellite data) - Number of segregating sites, + total over all pops - Molecular diversity indices (theta values) - Neutrality tests summary statistics and p-values - Demographic parameters estimated from the mismatch distribution and p-values. \* New shortcuts are provided in the left pane of the html result file for F-statistics bootstrap confidence intervals, population specific FIS, and summary of intra-population statistics.

 been di 2. File conversion towards the Phylip format could not be done. 3. It was impossible to change the default significance level of 0.05 for highlighting significant genetic distances in output file. 4. Missing data identifier other than "?" was not accepted. 5. If a a project file (or the path to it) contained the letters "arb", then it was erroneously considered as a Batch file. 6. Reported confidence interval around FST were badly reported by the bootstrap procedure in case of a single group and no Individual Level taken into account. 7. Estimation of haplotype frequencies from distance matrix was not performed when "Conventional FST" option was selected. 8. Locus-by-locus AMOVA reported incorrect results for Genotypic data when individuals had missing data for only one of their gene copy at a given locus. 9. Reported number of indels differed according to the weight given to indels in the Option panel. This bug did not affect AMOVA computations. 10. For sequence data, a mixture of N's and missing data led to problems in identifying distinct DNA sequences from distance matrix, leading to slightly incorrect FST computations. 11. Exact test of population differentiation could not be performed when gametic phase was unknown. Now, this option has been restored, like in ver. 2. 12. Arlequin hanged when a given population was entered several times in the definition of group for the computation of genetic structure. Now, the error is simply flagged but the program does not hang. 13. For frequency data, it was impossible to use a predefined distance matrix. 14. Beta approximation of the significance of Tajima's D gave wrong results. This approximation has been suppressed and now we only report the significance level obtained from coalescent 15. Bad computation of inbreeding coefficients under the locus-by-locus AMOVA approach for genotypic data when phenotype frequencies were larger than one. The bug caused an overestimation of the local (FIS) and total (FIT) inbreeding level. For samples where phenotype frequencies were all set to 1, the inbreeding coefficients were correctly estimated. 16. Expected heterozygosity reported under HWE exact test section was inaccurately computed. This inaccuracy however did not affect the results of the HWE exact test, which does not use information on observed and expected heterozygosity.

Laurent Excoffier Computational and Molecular Population Genetics (CMPG) Zoological Institute, University of Bern 6, Baltzerstrasse, CH-3012 Bern, Switzerland Tel: +41 31 631 30 31 Fax: +41 31 631 48 88 Email: laurent.excoffier@zoo.unibe.ch



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

## TeachingEvol ComputerPrograms

Dear Colleagues,

Would any of you know of computer programs that could be used for demonstrating experimental evolution to students, programs in which one can manipulate for example the strength of selection pressures, degree of genetic drift (effective population size; population structure, dispersal rates), mating system (not necessarily), and mutation rates ? Preferably a graphical program that would make it easy for students to use and give easily interpretable outputs (graphs of frequencies of various morphs as a function of time, population sizes etc.).

A search on the internet comes up either with references to specific models used by researchers in the context of their own work (testing specific hypotheses) or with programs such as the popular-level (but neat) program Darwin Pond (by J. Ventrella). Darwin Pond allows changing a lot of parameters linked to the fitness of creatures (mating preferences, swim rates and turning rates and hence dispersal capacities) and some of the environmental characteristics (food distributions), but does not allow setting directly the degree of genetic drift, strength of selection etc.

Thanks very much in advance for any information,

Best regards,

Else Fjerdingstaf

Dr. Else J. FJERDINGSTAD

Laboratoire d'Ecologie, CNRS UMR 7625 Université Pierre et Marie Curie 7 Quai St-Bernard, Bâtiment A, 7ème étage, case 237 F-75252 Paris Cedex 05 FRANCE

Email: Else.Fjerdingstad@snv.jussieu.fr Tél. +33 1 44 27 34 20, Fax. +33 1 44 27 35 16 Tél. +33 1 44 27 34 20, Fax. +33 1 44 27 35 16

## TeachingEvol ComputerPrograms answers

Dear Colleagues,

I received many very useful replies to my query for computer programs to demonstrate experimental evolution, and in general various evolutionary topics, for students. Thanks so very much to all those who kindly sent replies and information.

I list below an overview of the suggestions received and further below replies in full so that they may be of use for others.

Best regards,

Else Fjerdingstad

OVERVIEW:

- PopG by J. Felsenstein (earlier called Simul8) (ftp://evolution.gs.washington.edu/pub/popgen/popg.html) Free and downloadable. Allows manipulating fitness of different genotypes, population size, mutation rates for two different alleles, number of populations, migration rate between subpopulations, and then carry out simulations to give a graphic output on allele frequency changes and allele fixations.

- Populus by D. Alstad (http://www.cbs.umn.edu/software/populus.html/), free and downloadable, and allows illustrating a large number of different evolutionary topics (selection, genetic drift, co-evolution, heritability, genetic drift etc.)

- Ecobeaker (http://www.simbio.com/) a cellular automaton, not free.

- EvoBeaker (http://www.simbio.com/-EvoBeaker.html), Not free -one can download a free demo if teaching at colleges or in highschools. Has very detailed manuals.

- Darwinian snails, PopCycle and AlleleA1 by J. Herron (the first later included in modified version in EvoBeaker) Darwinian snails can de found (http://wps.prenhall.com/esm\_freeman\_evol\_3) at (http://wps.prenhall.com/esm\_freeman\_evol\_3 or ulty.washington.edu/~herronjc/SoftwareFolder/software.html) **PopCycle** athttp://wps.prenhall.com/-; esm\_freeman\_evol\_3/0,8018,849183-,00.html and AlleleA1  $\mathbf{at}$ http://wps.prenhall.com/esm\_freeman\_evol\_3/0,8018,849255- ,00.html PopCycle allows setting mutation rates, survival rates and migration rates for a test population. AlleleA1 is a single locus, two allele simulation illustrating how the balance among drift, selection, and mutation influence the rates of change and the maintenance of variation.

- XLGene, by C. M Austin & R. Carr. Ask for permission to use it (chris.austin@cdu.edu.au) & (rodney.carr@deakin.edu.au). The program is allows simulating genetic drift and tweaking various Hardy-Weinberg population parameters, while giving a graphical output showing frequency of alleles.

- WinPop 2.5 , P. Nuin, ( http://www.genedrift.org/winpop.php) - an upgraded version called — PopGene.S<sup>2</sup> will be released (contact P. Nuin : nuin@terra.com.br

- Evolve, distributed by BioQuest: (http://bioquest.org/BQLibrary/library/evolve.html ) , one must buy a site-licence or an individual license to access the programs.

- Evotutor ( http://www.evotutor.org/TutorA.html). Very graphical and treats a series of topics in different simulations (mutation, genetic drift, adaptation, gene flow, speciation, phylogenetics, sexual selection).

- Evolution tutorials from Ridley's Evolution textbook which has website resources - one of which are virtual experiments ( http://www.blackwellpublishing.com/ridley/experiments/) Also, the site below has a lot of lessons for various types of evolution related questions: ( http://www.indiana.edu/%7Eensiweb/home.html)

- Matlab functions to illustrate a series of evolutionary and population genetic topics (fitness surfaces, frequency dependent selection, stochastic fertility selection, fitness under epistasis, genetic drift and many more) by L. Revel, can be found at http://iguana.wustl.edu/ ~ liam/evol\_theory/matlab/ by following the link to the old page (more details on running these in the full reply from Revel listed below, towards the very end.

REPLIES IN FULL:

From: "Lauren Chan" <lmc36@cornell.edu> To: <Else.Fjerdingstad@snv.jussieu.fr> Sent: Friday, September 08, 2006 1:19 PM Subject: Re: Other: experimental evolution computer programs

Hi Else, The program AlleleA1 by Jon Herron might suit your needs.



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

microsat software distance answers

Thank you everyone for your answers and suggestions. Here are the replies I got.

Best;

Omur

\*\*\*\*\*

For topology reconstruction, Takezaki & Nei (1996) suggest that in both the Infinite Allele Model (IAM) and Stepwise Mutation Model (SMM), Cavalli-Sforza and Edwards (1967) chord distance and Nei et al. s (1983) genetic distance are preferably chosen, while for estimating branch lengths,  $(d\mu)^2$  may yield better results. I attached Takezaki & Nei's paper to this email for you.

With the fitch-margoliash algorithm, implemented in FITCH in PHYLIP, you can construct such a hybrid tree, using e.g. Nei's genetic distance for topology and delte mu 2 for branch lengths.

I used to calculate delta mu 2 values in MSA. Dieter.Anseeuw@kuleuven-kortrijk.be Unless your individuals are all of different species they don't have a "phylogenetic relationsip". Instead each locus has a different coalescent tree. By forcing them all to have the same tree you are distorting the relationships.

You should look into programs like Migrate or IM. If you're thinking in terms of phylogenies of individuals you should re-think the matter.

J.F. — Joe Felsenstein joe@gs.washington.edu Department of Genome Sciences and Department of Biology, University of Washington, Box 357730, Seattle, WA 98195-7730 USA

Depending on your sample size, you many be able to use more appropriate methods for determining the relationships between populations. Phylogenetic methods were developed for reciprocally monophyletic species and should really not be applied to populations that exchange genes. There are now some better methods to determine the relationships among populations. Two packages that I have found quite useful are Structure (http://pritch.bsd.uchicago.edu/ structure.html) and Population Graph (http://dyerlab.bio.vcu.edu/wiki/index.php/Software).

#### David B Lowry <dbl2@duke.edu>

delta mu square values can (as far as I know) only be calculated with RSTCALC. There are however other ways to conduct a phylogenetic analysis based on allele frequency data, e.g. Nei's genetic distance. I am attaching a protocol I wrote for doing so. It involves the following softwares "Convert", "Phylip" and "Treeview". All are available for free. \_\_\_\_\_ Dr. Susanne Hauswaldt Unit of Evolutionary Biology and Systematics Department of Biological Sciences University of Potsdam

here's a list of programs that compute genetic distances from microsatellite data as well as a distance tree. Some even boostrap across loci.

The best known program for microsatellite distances is MICROSAT: http://hpgl.stanford.edu/projects/microsat Microsatellite Analyzer or MSA (does all kinds of distances, among other things): http://i122server.vu-wien.ac.at/MSA/info.html/ MSA\_info.html#distance

Populations: http://bioinformatics.org/project/-?group\_id=84

POPTREE (just to make the NJ tree): http://www.bio.psu.edu/People/ Faculty/Nei/Lab/software.htm

SHAREDST (across individuals): http://www2.biology.ualberta.ca/jbrzusto/sharedst.php

GeneDist (across populations): http://www2.biology.ualberta.ca/ jbrzusto/GeneDist.php

Sergios-Orestis Kolokotronis Dept. of Ecology, Evolution, and Environmental Biology Columbia University sk2059@columbia.edu

Try the AFC plots in the GENETIX (Belkir et al.) software. The plots are not based on delta-mu ^2, they partition variance instead. Yet, each individual will be represented in a multi-vector space.

 $\operatorname{scott}$ 

\_\_\_\_\_

Scott M. Blankenship Ph. D. Biologist/Geneticist Washington Department Fish and Wildlife

blanksmb@dfw.wa.gov

\*\*\*\*\*\*

In the analysis of microsatellite loci, if the number of loci examined is small, Da or chord distance should work better than delta myu square to estimate the phylogenetic relationship of populations.

Previously, we have studied the probability of obtaining

a correct tree by using Da, chord distance, delta myu square, and some other distances for microsatellite loci and showed that Da and chord distance work better than delta myu square unless hundreds of loci are used (Takezaki and Nei 1996). This is because even though the value of delta myu square is expected to increase linearly with time under the stepwise mutation model that the microsatellite loci roughly follow, the sampling error of the delta myu square is used.

More explanations about genetic distance and phylogenetic tree are found in chapter 13 of the book of Nei and Kumar (2000). In this chapter,



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

#### r8s program problems

Dear colleagues,

I'm having problems with running the program r8s (by Mike Sanderson) and would like to know if anyone can help. I downloaded the program onto my PowerBook G4 OS 10.3.9 and tried to run by double-clicking the r8s binary executable. It seems to start alright, appearing a 'r8s>' on the terminal screen. However, when I try to execute any file it doesn't recognise it. It appears a message saying "this is not a NEXUS file". I've tried also to run the data files provided in the package, but the same message appears. Has any of you experienced a similar problem and how did you manage to solve it?

Thanks a lot.

Ramiro

Dr. Ramiro Morales-Hojas Evoluão Molecular IBMC Rua do Campo Alegre 823 Porto 4150-180 Portugal

e-mail: rmhojas@ibmc.up.pt

## **PostDocs**

BrownU SeqRecognitionSites
DalhousieU Endomsymbiosis67
GifsurYvette EvolBiolMemory68
Madrid PinePopGenet
MichiganStateU EcoEvoDevo69
NewZealand FreshwaterFish69
Orsay France Bioinformatics
PotsdamU AquaticEvol
TrentoItaly SystemsBiology
TrinityCollege HumanStatGenetics72
UBourgogne HostParasite72
UCaliforniaDavis ComparativeGenomics72
UCaliforniaDavis PopGenet
UCaliforniaIrvine GenetComplexTraits73
UCaliforniaLosAngeles EvolAvianDisease74

#### **BrownU SeqRecognitionSites**

The lab employs computational approaches to identify and understand the role of individual sequence elements in complex recognition events. In yeast, splice sites are defined by strong consensus sequences. Yet in vertebrate genes these signals appear much weaker even though the search space is much larger (bigger genomes, bigger pre-mRNAs, more introns). The information necessary for recognition appears to have migrated outside the sites and into the surrounding sequences. We have identified subtle enhancer and silencer sequences that appear to help explain this recognition event.

Main Goals: 1) identify functional variants using these models and inferences of selection. 2) test the enhancer activity of both version of the alleles in a high- throughput system 3) implement computational methods in multiple genomes to study the evolutionary history of these elements

An ideal candidate will come with quality molecular, evolutionary or computational biology experience. The types of assays used in this work may include: PCR, RNA and DNA extraction, In-vitro RNA synthesis, making constructs, hybridizations, electrophoresis (horizontal agarose, vertical native and SDS page), and maybe some Westerns. You don't need to be an expert in everything but you should have done most of these things at least a few times.

CaliforniaRiverside InterfaceEvolEcolProcesses	.74
Edinburgh ComplexEvolSystems	.75
Florida GenomicData	.76
Houston CiliateGenomeEvol	76
Houston EvolBioinformatics	77
Manchester ComplexTraitMaps	77
NAM Mexico EvolPlantReproduction	78
NC ChapelHill EvolBiol	78
NotreDame EvolGenomics	78
SouthernCalifornia PopGenet	79
StAndrews GenomicsOfSpeciation	79
TexasAustin AmphibianPhylogeny	.79
Vienna MathGenetics	80
aleMedicalSchool Infectious disease evol	.80

Sendanemailcoverlettertowilliam\_fairbrother@brown.edu<mailto:william\_fairbrother@brown.edu>.Even-tually you will be asked for other refs, and a CV.

- Will

Will Fairbrother, PhD Assistant Professor of Biology BioMed- Molecular, Cellular Biology Biochemistry Box G-E404 Brown University, Providence, RI 02912-G Telephone: (401)863-6215 Fax: (401)863-9653 http://web.mit.edu/wgf3/www Where is that Shuttlebus? http://brown.srtracker.com/-William\_Fairbrother@brown.edu

William\_Fairbrother@brown.edu

## **DalhousieU Endomsymbiosis**

POSTDOCTORAL RESEARCH POSI-TION?endosymbiosis and genome evolution in algae

Department of Biochemistry and Molecular Biology, Dalhousie University Halifax, Nova Scotia CANADA

We seek a highly skilled and self-motivated postdoctoral researcher to explore the impact of secondary endosymbiosis on eukaryotic genome evolution and cell biology. Specifically, the research will revolve around the analysis and interpretation of nuclear genome sequences from two unicellular algae (http://www.jgi.doe.gov/sequencing/why/CSP2007/guillardia.html). The Archibald Lab is part of a collegial and internationally recognized community of comparative genomics and molecular evolution researchers at Dalhousie University. The successful applicant will have the opportunity to work collaboratively with these researchers and with those at other institutions. Demonstrated skills in comparative genomics, genome evolution and phylogenetics are essential, as are strong written and oral communication abilities. Experience in molecular biology and cell culturing are welcome, as additional benchoriented projects synergistic with that described above are also possible.

The position is available immediately (start date negotiable) and will run for an initial 1-year period, with the possibility of extension to 2 or 3 years given satisfactory performance. All qualified and interested persons are encouraged to apply. Applicants should email (1) a brief cover letter outlining their qualifications and research interests, (2) a curriculum vitae and (3) contact information for three references to:

John Archibald jmarchib@dal.ca http://myweb.dal.ca/jmarchib/ Assistant Professor and Scholar, CIAR Program in Evolutionary Biology Department of Biochemistry and Molecular Biology Dalhousie University Sir Charles Tupper Medical Building 5850 College Street, Halifax, Nova Scotia B3H 1X5, CANADA

Phone: (902) 494-2536 Fax: (902) 494-1355

CLOSING DATE: November 1, 2006.

John Archibald <jmarchib@dal.ca>

#### GifsurYvette EvolBiolMemory

A 2 year postdoctoral position is available in the Lab Evolution Genome and Speciation (LEGS, CNRS) in Gif sur Yvette (France) to work on the evolutionary biology of memory.

In Drosophila 4 different memory phases have been described (short-term, middle-term, anesthesia-resistant and long-term). Using selection experiments, populations comparison and conditioning assays, we are addressing questions such as: what is the genetic diversity of the different memory phases? What are the fitness benefits and costs of the different memory phases? What is the effect of stress on the memory phases?

The successful candidate should be highly motivated

and will develop his/her own project. Candidates should have a PhD in evolutionary biology, animal behavior or Neuroscience. Some experience with Drosophila behavior, genetics or molecular methods would help but are not required. The application is open only to non-French citizens and is funded by the CNRS (the salary is around 2300 Euro/Month taxes included). No preexisting knowledge of French is required, although some knowledge makes living in the lab easier. Gif sur Yvette is located 40 min from Paris downtown.

send your CV and a letter describ-To apply, vour research interests and some ing ideas Frederic.mery@legs.cnrs-gif.fr for project  $\operatorname{to}$ а <mailto:Frederic.mery@legs.cnrs-gif.fr> .Arrange for one or two letters of recommendation to be sent to the same address. The review of applications will begin on November 01, 2006.

Frederic Mery Laboratoire Evolution, Genomes et Speciation CNRS - Bat 13 Avenue de la Terrasse F-91198 Gif sur Yvette Cedex France

E-mail: Frederic.Mery@legs.cnrs-gif.fr <mailto:Frederic.Mery@legs.cnrs-gif.fr> Phone (Office): (33) 1 69 82 37 34 Phone (Lab): (33) 1 69 82 38 63 Fax: (33) 1 69 82 37 36

Web: http://www.pge.cnrs-gif.fr/ -

Frederic Mery Laboratoire Evolution, Genomes et Speciation CNRS - Bat 13 Avenue de la Terrasse F-91198 Gif sur Yvette Cedex France

E-mail: Frederic.Mery@legs.cnrs-gif.fr Phone (Office): (33) 1 69 82 37 34 Phone (Lab): (33) 1 69 82 38 63 Fax: (33) 1 69 82 37 36

Web: http://www.pge.cnrs-gif.fr/ Frederic.Mery@legs.cnrs-gif.fr

## Madrid PinePopGenet

Dear all,

We are opening a Postdoctoral Researcher position at the National Institute of Agricultural Research at Madrid (www.inia.es), associated to the JERA 2 of the EU-funded Evoltree Network of Excellence (www.evoltree.org), to conduct research on nucleotide diversity, linkage disequilibrium and signatures of natural selection in drought-tolerance candidate genes in Mediterranean pines (see framework papers in Pot et

#### October 1, 2006 EvolDir

al. 2005 New Phytol; González-Martínez et al. 2006 Genetics; González-Martínez et al. 2006 New Phytol). Initially, the duration of the contract will be of 8 months (December 2006 - July 2007) but it will probably be extended, depending on the postdoc integration in our research group and his/her skills.

Lab experience in molecular techniques is required as well as proved expertise on DNA sequence processing and analyses. It is also requested of the candidate enough mobility to do short stages in different labs of Europe and USA.

Applicants must send a cv and a brief presentation letter to Santiago C. González-Martínez (santiago@inia.es) or Ricardo Alía (alia@inia.es). This call will be open till finding a suitable candidate.

Best wishes,

Santiago C. González-Martínez Ricardo Alía

Santiago C. González-Martínez 'Ramón y Cajal' Research Fellow Unit of Forest Genetics Department of Forest Systems and Resources Center of Forest Research (CIFOR-INIA) Carretera de La Coruña km 7.5 28040 Madrid (Spain) Ph +34 913471499 Fax +34 913572293 e-mail santiago@inia.es

santiago@inia.es

opmental genetics or insect physiology, with an strong interest in integrative biology and evolution. The individual must be energetic and career-motivated, who is able to work both independently and co-operatively with a team. A Ph.D. degree is required.

The position is available immediately, and applications will be considered until the position is filled. Salary is on the NIH/NRSA pay scale and is commensurate with experience. This position is limited to applicants who are currently studying or working in the US or are a permanent U.S. resident or U.S. citizen.

Please send vita, statement of research interests, and three reference contacts to Dr. Alexander Shingleton, shingle9@msu.edu

Alexander W. Shingleton Assistant Professor Ecology, Evolutionary Biology & Behavior Program Genetics Program

Department of Zoology Natural Sciences Building Michigan State University East Lansing, MI 48824

Tel: 517-353-2253 www.msu.edu/ ~ shingle9 shingle9@msu.edu shingle9@msu.edu

NewZealand FreshwaterFish

## MichiganStateU EcoEvoDevo

#### POSTDOCTORAL POSITION IN ECO-EVO-DEVO

What are the developmental mechanisms that control allometry? How do these mechanisms evolve? Recent progress in developmental biology has shed new light on the mechanisms that regulate body and organ size in animals. How these mechanisms are integrated to control the scaling relationship between body and organ size (allometry) is, however, unknown.

A Postdoctoral position is available to elucidate the physiological and genetic mechanisms that regulate allometry, as a prelude to understanding how allometries evolve. The project will concentrate on the role nutrition and the insulin-signaling pathway play in regulating the relationship between final organ size and body size in flies (Shingleton et al. (2005), PLOS Biology 3 (9); Shingleton (2005), Current Biology 15 (20), R825-R827). The research will involve molecular and physiological techniques. The ideal candidate is therefore one with a background in cell and molecular biology, devel-

#### POSTDOCTORAL RESEARCHER

COMMUNITY SCALE EFFECTS OF PARASITE-MEDIATED INTERACTIONS BETWEEN NATIVE AND INTRODUCED FRESHWATER FISH IN NEW ZEALAND

Landcare Research is a Crown Research Institute dedicated to high quality research relevant to conservation of the natural environment, and operating at nine locations throughout New Zealand.

We are seeking to fill a 3 year postdoctoral position to undertake research on the Royal Society of New Zealand Marsden funded project 'Is parasite spillback a cause of local extinction in native communities'. This project will address the fundamental question of whether the feedback of native parasites from introduced host species can cause the loss of native species, using native freshwater fish communities and introduced salmonids in New Zealand as a model system. The postdoctoral researcher will join a project team consisting of Dr Daniel M. Tompkins (Landcare Research), Professor Robert Poulin (Department of Zoology, University of Otago), Professor Colin Townsend (Department of Zoology, University of Otago), a PhD student, and technical support.

Research conducted by the postdoctoral worker will focus on parasite impact on native versus introduced species, the community structure implications of such impact, and expanding patterns observed to the global scale. A combination of techniques will be applied to address these issues, ranging from field surveys and microcosm trials, to literature reviews and mathematical modelling. The work will also involve a period of time in Argentina, studying a similar system.

The successful applicant will hold a PhD or equivalent degree by the commence date of the position, with specific research experience in fish parasitology. Experience in the husbandry of freshwater fish is also desirable. In addition, candidates with experience and/or interest in the application of mathematical models to complex systems will be viewed favourably.

The position is full-time, based at our Dunedin Office, and will commence Monday, 3rd April 2007.

Applications close on Friday, 24th November 2006.

For a Position Description and to apply for this role please go to the Landcare Research NZ Ltd website www.landcareresearch.co.nz/jobs Further information can be obtained from Dan Tompkins, Phone +64 3 4707210, or email tompkinsd@landcareresearch.co.nz

Landcare Research http://www.landcareresearch.co.nz TompkinsD@landcareresearch.co.nz

#### **Orsay France Bioinformatics**

#### BIOINFORMATICS - POSTDOCTORAL POSITION IN ORSAY (FRANCE)

A postdoctoral contract founded by the French "National Research Agency ANR" is available to develop a research project supervised by David Moreira, in the "Microbial diversity and evolution" team in the University of Paris-Sud at Orsay (http://www.ese.u-psud.fr/microbiologie/).

The project concerns a multi-gene study of eukaryotic evolution by the phylogenetic analysis of a number of conserved proteins involved in the construction of several cell complexes (centromeres, telomeres, etc.). The project will require the construction of a data base containing sequence, genomic, and phylogenetic information. The contract can be renewed up to three years and includes social and medical assistance. The salary will be of  $\sim 1800$  euros.

We are seeking motivate candidates with good experience in bioinformatics, especially in sequence data base construction and phylogenetic and genomic analysis. Knowledge of current programming languages will be necessary.

The position is available immediately. Interested candidates can send a CV and the names of scientists that we can ask for letters of support to:

David MOREIRA Unité d'Ecologie, Systématique et Evolution. UMR CNRS 8079. Université Paris-Sud. Bâtiment 360. 91405 Orsay CEDEX. FRANCE Tel: 33 1 69 15 76 08 Fax: 33 1 69 15 46 97 e-mail: david.moreira@ese.u-psud.fr http://www.ese.u-psud.fr/microbiologie/ David Moreira <david.moreira@ese.u-psud.fr>

#### PotsdamU AquaticEvol

Post-Doc and senior scientist positions in Theoretical Aquatic Ecology At Potsdam University (close to Berlin/Germany) two 2-year positions starting 01.12.2006 and 01.7.2008 are available for scientists with a strong background in theoretical aquatic ecology, modelling and/or (statistical) data analysis within the EU Marie Curie Transfer of Knowledge Project FEMMES (FEedback Mechanisms in Models for Ecological forecastS). It aims to develop innovative models that forecast how environmental change affects ecological systems at different hierarchical levels (e.g. populations and communities) which may be linked by feed back mechanisms. FEMMES will last for 4 years, comprises in total five positions and is hosted by the Dept. of Vegetation Science and Nature Conservation, and the Dept. Ecology and Ecosystem Modelling focussing on pelagic ecosystems. Details of the research to be conducted at Potsdam are open to discussion and should be linked to previous experiences and current research interests of the applicant and to ongoing research of the host (e.g. food web theory, metabolic theory of ecology, ecological stoichiometry, size spectra; for details see http://www.bio.unipotsdam.de/oeksys/index.htm). The analyses may be based on temporally and taxonomically highly resolved measurements of plankton biomass and production in Lake Constance (20 year time-series), and on longterm micro- and mesocosm experiments. The unusually comprehensive L. Constance data set already provided the basis for numerous (model) studies which resulted e.g. in seasonally resolved size spectra and quantitative food web models in units of carbon and nutrients (Gaedke et al. 2002) which may be further analvzed. Another focus of the host is on improving the capability of dynamic simulation models to account for the potential of individual populations to adapt to altered conditions, and for (species) shifts in community composition which change average community properties. Other topics are also welcomed as is teaching of post-graduate students. The salary will include a mobility allowance and depends on the scientific experience. Language requirements: English fluent in speaking and writing, knowledge of German is not essential but helpful. Applicants have to fulfil the following formal requirements of the EU (please refrain from an application if you don't fulfil them, for details see http://cordis.europa.eu/mariecurie-actions/tok/apply.htm) (1) Non-German Citizen of the EU or an associated country (e.g. Norway, Switzerland, Rumania, Turkey, etc) who has not stayed in Germany for > 1 year during the past 3 years, or Non-Germans (i.e. any nationality) who stayed in the EU or an associated country for at least 4 out of the past 5 years, but not > 1 year in Germany, or Germans who worked outside the EU or associated countries during at least 4 of the past 5 years. (2) at least Ph.D.. Applications will be considered from 01.09.2006 onwards until the positions are filled. Address for applications (with research proposal and publication list): by e-mail: Gaedke@uni-potsdam.de; or: Prof. Dr. Ursula Gaedke, Universität Potsdam, Maulbeerallee 2, D-14469 Potsdam, Germany. (The previous 3 fellows acquired funding to continue their stay in Potsdam.)

#### Ursula Gaedke

Ökologie & Ökosytemmodellierung Dept. Ecology & Ecosystem Modeling Universität Potsdam University of Potsdam Institut für Biochemie und Biologie Institute of Biochemistry and Biology

#### Maulbeerallee 2

D-14469 Potsdam, Germany

Tel. + 49 (0)331-977-1900/1902 Fax + 49 (0)331-977-1948 e-mail Gaedke@uni-potsdam.de

http://www.bio.uni-potsdam.de/oeksys/index.htm gaedke@uni-potsdam.de

#### 71

## TrentoItaly SystemsBiology

Open positions at postdoctoral, junior and senior scientist levels at the newly developing Centre for Computational and Sytems Biology in Trento, Italy.

Funded by the University of Trento, Microsoft Research, and the Italian Government, the Centre opened last spring. It is becoming home to a significant team of scientists seeking to advance important scientific challenges in biology through research at the interface of biology, computational biology, and computer science. Striving to be a leading institute for this type of research, the Centre offers state-of-the-art research infrastucture, excellent funding for attending conferences and workshops as well as support for organization of such events in-house.

The Centre is developing quickly to become a significant institute for vibrant scientific research in Computational Systems Biology in Europe. We are looking for enthusiastic and skilled scientists to join us at the postdoctoral, junior and senior scientist levels. The primary requirements are experience and interest in subjects at the interface of biology and computer science, as well as in systems biology. A brief summary of the Centre, example projects and open positions can be found on the Centre's web site: http://www.msrunitn.unitn.it/index.php

Informal inquiries related to projects on pathway biology (http:// www.msr-unitn.unitn.it/-Rpty\_Proj\_PBio.php) can be addressed to Orkun Soyer (orkun.soyer@msr-unitn.unitn.it). Formal applications and general inquiries should be made through the web site of the Centre.

#### Best Regards,

Orkun S. Soyer, PhD The Microsoft Research-University of Trento Centre for Computational and Systems Biology Piazza Manci 17 38050 Povo(TN), Italy Tel: +39 0461 882823 Fax: +39 0461 8828214 web: http://www.msr-unitn.unitn.it/-People\_view.php?view=47 http://www.tb.ethz.ch/people/soyero Orkun Soyer <orkun.soyer@msrunitn.unitn.it>

## **TrinityCollege HumanStatGenetics**

A new project, funded by Science Foundation Ireland Research Frontiers programme, requires a suitably qualified post-doctoral candidate. The focus of the project is the study of the spread of the Neolithic in Europe.

The project requires substantial study in the area of genetics, but will include archeology and perhas linguistics. As it is relatively unstructured with regard to the exact statistical methods required, the ideal candidate will have considerable experience of independent research. The ideal candidate would be well-versed in Bayesian methods and may have some background in the study of genetic data.

Further details are at http://www.tcd.ie/Statistics/-JHpersonal/Archeogenetics.htm The position is still open until 30 Sept 2006

John Haslett E-mail John.Haslett@tcd.ie Professor Phone +353 1 8961114 (direct) Department of Statistics +353 1 8961767 (sec) School of Computer Science Fax +353 1 6770711 and Statistics Room 146 Trinity College Dublin 2,Ireland

WWW: http://www.tcd.ie/Statistics/JHpersonal/research.htm John.Haslett@tcd.ie John.Haslett@tcd.ie

## UBourgogne HostParasite

POSTDOCTORAL POSITION - Local adaptation in a host-parasite interaction

CNRS and Université de Bourgogne, Dijon, FRANCE

A postdoctoral research assistant is required for a project entitled 'Local adaptation in the Plasmodiumhouse sparrow interaction'. The project aims to explore the role of MHC genes in the process of local adaptation in the interaction between the house sparrow and a plasmodium parasite. Experimental infections of house sparrows of known MHC genotype with sympatric and allopatric parasites should allow us to establish the link between MHC alleles and the dynamics of the infection and the virulence of the parasite. The candidate should have a good background in evolutionary biology and a good skill for laboratory work (MHC typing). The post is available for 1 year (24,000 euros with no taxes), starting January 1st 2007, and will be based in the Laboratory BioGéoSciences (CNRS, Université de Bourgogne, Dijon, FRANCE). The candidate should not be French.

Further information can be asked to: Gabriele Sorci (gabriele.sorci@u-bourgogne.fr) Stéphane Garnier (stephane.garnier@u-bourgogne.fr)

Letters of application, including a CV, the names and e-mail addresses of two academic referees, should be sent to: Gabriele Sorci (gabriele.sorci@u-bourgogne.fr) Closing date: 15 November 2006.

#### Stéphane Garnier

Equipe Ecologie Evolutive UMR CNRS 5561 Biogéosciences Université de Bourgogne 6 Bd Gabriel 21000 Dijon - France

 $\label{eq:stephane.garnier@u-bourgogne.fr} < mailto:stephane.garnier@u-bourgogne.fr> Tel: +33 (0) 3 80 39 90 58 Fax: +33 (0) 3 80 39 62 31$ 

## UCaliforniaDavis ComparativeGenomics

A postdoctoral position is available in the research group of Dr. Katherine Pollard at the UC Davis Genome Center. We recently developed a computational approach to detect rapidly evolving genomic regions and applied it to identify the elements of the human genome that have diverged most since our common ancestor with chimps. The successful candidate will take a lead role in extending these comparative genomic methods to study lineage-specific evolution in vertebrates, flies, and possibly other phylogenies.

The applicant must have a PhD in (bio)statistics, applied math, computer science, bioinformatics, molecular biology or a related field, with experience analyzing genomic data. Ability to program (e.g. in R/Splus, C, or Perl) is essential. Candidates interested in doing some experimental work are invited to apply - opportunities may be available in the labs of collaborators.

Please apply by email to postdoc@wald.ucdavis.edu and include: - CV (including record of peer-reviewed publication) - cover letter describing current research activity - names and email addresses of three references More info at http://docpollard.com and http://docpollard.com postdoc@wald.ucdavis.edu Simon Fraser University (mike\_hart@sfu.ca); or Rob Toonen, Hawaii Institute of Marine Biology, University of Hawaii, Manoa (toonen@hawaii.edu)

mike\_hart@sfu.ca mike\_hart@sfu.ca

## UCaliforniaDavis PopGenet

# POSTDOCTORAL POSITION IN COMPARATIVE POPULATION GENETICS

We are looking for a creative and independent researcher to join our collaborative study of gene flow, phylogeographic history, and reproductive evolution in asterinid sea stars. This position is funded by NSF for up to three years in the lab of Rick Grosberg at the University of California, Davis, but the successful applicant will work closely with collaborators elsewhere in the USA, Canada, Australia, and the UK.

Major responsibilities include data collection (mtDNA sequencing, microsatellite genotyping); coordination of tissue sample collection and distribution of samples among labs; archiving of vouchers, DNA, and data; analysis of sequence and genotype data; writing and presentations. Other responsibilities might include advising of student collaborators, laboratory hybridization and fertilization studies, field collection of sea stars in North America and Australia, and coordination of an annual meeting of collaborating labs.

Applicants should have a recent PhD in marine invertebrate zoology or population genetics or (preferably) both. Experience with fluorescent sequencing and genotyping methods (esp. ABI, Li-Cor) is required. Additional experience in quantitative analysis of population genetic data (e.g., Arlequin, IM, Migrate) and phylogenetic comparative analysis (e.g., Continuous, BayesMS) is highly desirable.

Starting salary is \$35,000 per year. Anticipated start date is 1 January 2007. Review of applications will begin 16 October 2006 and continue until the position is filled. Please apply electronically (via email): send curriculum vitae, a short description of research experience and interests, and names & email addresses of two referees to

Rick Grosberg, Section of Evolution & Ecology, UC Davis (rkgrosberg@ucdavis.edu)

For additional information, contact Rick Grosberg (above); Mike Hart, Department of Biological Sciences,

## UCaliforniaIrvine GenetComplexTraits

Postdoctoral Scholar in Evolutionary Quantitative Genetics

The Department of Ecology & Evolutionary Biology at UC Irvine is currently seeking one or more Postdoctoral Scholar(s) in the laboratory of Dr. Anthony Long:

We are seeking an individual(s) interested in uncovering the genetic architecture of complex traits. We have developed a novel approach for dissecting complex traits that incorporates beneficial features of both association and QTL mapping, while avoiding several of the disadvantages associated with each method. We have funding to use this novel approach to identify the nucleotides contributing to naturally occurring variation in bristle number in Drosophila (and perhaps extend the method to other characters of interest).

Applicants must have a PhD with training in population genetics, quantitative genetics, and/or statistical genetics. The project will involve handling large SNP genotyping datasets, as well as other bioinformatics skills. Working knowledge of basic molecular biological techniques is also required. Experience working with Drosophila desired although not necessary. Applicants must have excellent written and oral communication skills, and the ability to author manuscripts suitable for publication in top peer-reviewed journals.

The position has a flexible start-date and is available for an initial period of one year with the possibility for extension subject to satisfactory performance and continued funding. Salary will be commensurate with experience with generous benefits included.

Qualified applicants should submit a cover letter outlining research experience and interests, a curriculum vitae, and the names and contact information for three referees to the email or postal address below.

Dr. Anthony Long Department of Ecology and Evolutionary Biology 321 Steinhaus Hall University of California, Irvine Irvine, CA 92697-2525 tdlong@uci.edu Web page http://cstern.bio.uci.edu/ UC Irvine is located in coastal Southern California, between Los Angeles and San Diego. The Department of Ecology & Evolutionary Biology at UCI includes a faculty of >40 professors, and includes particularly strong groups in the areas of Evolutionary Genetics (http://evogen.bio.uci.edu/) and Global Change Ecology (http://globalchange.bio.uci.edu/).

The University of California, Irvine is an equal opportunity employer committed to excellence through diversity.

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Tony Long

Ecology and Evolutionary Biology Steinhaus Hall University of California at Irvine Irvine, CA 92697-2525

Tel: (949) 824-2562 (office) Tel: (949) 824-5994 (lab) Fax: (949) 824-2181

email: tdlong@uci.edu http://hjmuller.bio.uci.edu/-~labhome/ Tony Long <tdlong@uci.edu>

# UCaliforniaLosAngeles EvolAvianDisease

# POSTDOCTORAL POSITION - ECOLOGY AND EVOLUTION OF AVIAN DISEASE

A postdoctoral position is available in the Center for Tropical Research, Institute of the Environment and the Department of Ecology and Evolutionary Biology at UCLA. We are seeking a broadly trained evolutionary biologist with a strong background in the application of molecular genetic techniques to diseases of natural populations. The position is available for one year with the possibility of renewal for a second. The position is now open and applications will be accepted until the position is filled.

The successful candidate will work as part of an interdisciplinary team investigating the effects of deforestation on the prevalence of blood-borne pathogens in African rainforest birds. Using existing samples, as well as collecting new ones, and using PCR-based detection methods and molecular phylogenetics, the candidate will work collaboratively to investigate how long-term anthropogenic changes in habitats affect the prevalence of infectious diseases in natural populations. The three main objectives of the study are to: 1) determine how pathogen prevalence changes over time within differing rainforest habitats, 2) determine host, habitat and vector specificities of blood-borne pathogens to explore the degree of host-switching, and 3) determine, using remote sensing and bioclimatic data, the environmental variables that best correlate with pathogen prevalence and develop models that will aid in the prediction of how ecological change will affect disease prevalence and the likelihood of host switching.

The postdoctoral fellow will also have the opportunity to explore broader questions related to population diversification and microevolutionary processes. They will be encouraged to interact and collaborate with postdoctoral researchers and graduate students working on a broad range of ecological and evolutionary projects. Other Center for Tropical Research projects include: 1) investigations of the mechanisms of speciation and diversification of rainforest vertebrates, 2) approaches to identifying critical areas for conservation in the tropics, 3) population structure, connectivity and conservation of migrant birds, 4) studies of avian influenza, and 5) seed dispersal and forest regeneration. Interested candidates should e-mail a CV, a brief description of research interests, and names and contact information for three references to:

Tom Smith tbsmith@ucla.edu

Professor, Ecology and Evolutionary Biology Director, Center for Tropical Research Institute of the Environment University of California, Los Angeles La Kretz Hall, Suite 300 Box 951496 619 Charles E. Young Dr. East Los Angeles, CA 90095-1496 USA http://www.ioe.ucla.edu/ctr/index.htm (310) 206-4712 phone (310) 825-5446 fax

tbsmith@ucla.edu

# UCaliforniaRiverside InterfaceEvolEcolProcesses

Post Doctoral and Graduate Student Positions: We are seeking candidates for a 3-5 yr positions for a large interdisciplinary project which has been recommended for funding through the National Science Foundations (NSF) Frontiers in Biological Research (FIBR) Program: Linking genes to ecosystems: how do ecological and evolutionary processes interact in nature. The project summary and a list of the participating investigators appears at the end of this ad. This is a five year research program that will involve experiments done in natural streams on the island of Trinidad. The focal study will be on life history evolution in guppies, but the larger goal will be to characterize how guppy life history evolution interacts with the other components of the ecosystem and the co-evolution of interacting organisms. See the following project description for details. The positions that we wish to fill are from three laboratories, one devoted to evolutionary ecology and two to ecosystems ecology. Please note that applications should be sent to the individual laboratory.

Postdoctoral Position in Evolutionary Ecology, Department of Biology, University of California, Riverside, CA

The successful candidate will be based at the University of California. He/she will help organize and participate in the monitoring of introduced populations of guppies and the expansion of the introduced populations. Individually marked, genotyped fish will be introduced, then the growth of the populations will be followed by continuous mark-recapture and genotyping of recruits. These studies will be combined with laboratory assessments of life histories so that evolution can be followed through changes in the mean attributes of the population and the reproductive success of the population founders. These studies will be combined with ongoing stream ecosystem studies and parallel studies of the population biology of Rivulus hartii, a second fish species found in the same habitat. The successful candidate will also work with a data manager to help with the compilation and summary of incoming data from the different research teams. There will be an opportunity to pursue independent projects associated with the research program and to interact/collaborate with other investigators associated with the program.

The position offers full benefits and a starting salary of \$32,460/yr. The start date is 1 January 2007. Consideration of applications begins immediately and will continue until the position is filled. Please contact Dr. David Reznick at david.reznick@ucr.edu<mailto:cpringle@uga.edu> if you would like further information about this opportunity.

Please send a cover letter stating your research accomplishments and interests, a curriculum vitae, representative publications, and three letters of recommendation by mail or email to: David Reznick, Department of Biology, U. of California, Riverside, CA 92521 <david.reznick@ucr.edu>

Postdoctoral Position in Stream Ecology/Stable Isotope/ Stoichiometry

Institute of Ecology, University of Georgia, Athens, GA

The successful applicant will be based at the University of Georgias Institute of Ecology and will be part of an interdisciplinary research team composed of scientists from the University of Georgia, University of California, Riverside, Cornell University, University of Nebraska, and several other universities. Field research will be conducted in tropical streams of Trinidad and laboratory work at the University of Georgias Institute of Ecology. The successful applicant will be involved in characterization of tropical stream food webs which includes natural abundance stable isotope studies, stoichiometry, and experimental 15N addition. He/she will co-coordinate (with another postdoc) studies of ecosystem variables in study streams and participate in manipulative experiments that involve a larger team. He/she will be involved in small-scale and whole-stream manipulative experiments. He/she will have considerable intellectual freedom to develop independent research projects that compliment, but are distinct from goals of the main project.

The position offers full benefits and a starting salary of \$40,000/yr. The start date is 1 January 2007 (or earlier). Consideration of applications begins immediately and will continue until the position is filled. Please contact Dr. Catherine Pringle at cpringle@uga.edu if you would like further information about this opportunity.

Please send a cover letter stating your research accomplishments and interests, a curriculum vitae, representative publications, and three letters of recommendation by mail or email to: Catherine Pringle, Institute of Ecology, University of Georgia, Athens, GA (cpringle@uga.edu)

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### UEdinburgh ComplexEvolSystems

Research Position in complex evolutionary systems

Biomathematics & Statistics Scotland (BioSS) and The Institute of Evolutionary Biology (IEB), University of Edinburgh seek to recruit a highly motivated mathematician, physicist, theoretical population geneticist or quantitative scientist wishing to develop a research career in the mathematical study of complex biological systems, evolution and population genetics. The precise direction of the research will depend upon the successful candidate's experience and interests. Potential topics include resource dynamics and spatial effects in ecological communities, population genetics in clustered populations and across range boundaries, and the coupling of ecological and evolutionary dynamics. The post (available for up to 2 1/2 years) will be based in Edinburgh and contribute to the NANIA project www.ph.ac.uk/nania/ funded under EPSRC's Novel Computation Initiative. The post-holder will work jointly with Professor Nick Barton (n.barton@ed.ac.uk IEB: http://bartongroup.icapb.ed.ac.uk/) and Glenn Marion (glenn@bioss.ac.uk BioSS: www.bioss.ac.uk), and have the opportunity to interact with other members of the NANIA consortium in Edinburgh and beyond.

Candidates should have a strong quantitative background (PhD or MSc with at least three years relevant postgraduate experience), excellent communication skills, the ability to work independently, and enthusiasm for enhancing scientific understanding through the development of mathematical models. Experience of developing, simulating, and analysing stochastic models would be a considerable advantage. Preference will be given to making a higher graded appointment to an individual with a promising publication record and experience of productive collaborations with applied scientists.

The starting salary will be in the range  $\pounds 23,000 - \pounds 26,000$ , plus contributory public sector pension (Pay award pending).

Closing Date - 13th October 2006 Applications are invited for this post by CV and covering letter, to include: \_ education and employment history; \_ full publication list; \_ names and addresses of three referees; \_ a short description of why you consider yourself suitable for this post. Please send applications to: The Administrative Officer Biomathematics & Statistics Scotland The King's Buildings Edinburgh EH9 3JZ UK. Tel: +44 (0) 131 650 4900 Fax: +44 (0) 131 650 4901 email: Betty Heyburn at E.Heyburn@bioss.ac.uk

Potential applicants should contact Dr. Glenn Marion (glenn@bioss.ac.uk, Tel: +44 (0) 131 650 4898), or Professor Nick Barton (n.barton@ed.ac.uk) in confidence to discuss the post.

n.barton@ed.ac.uk n.barton@ed.ac.uk

#### UFlorida GenomicData

Post-Doctoral Researcher in Analysis of Genomic Data

There is an opening for a postdoctoral research associate with Dr. Lauren McIntyre at the University of Florida Department of Molecular Genetics and Microbiology. The position will be affiliated with the UF Genetics Institute. Dr. McIntyre's research is in the area of statistical genetics and gneetical genomics. The successful applicant will be working on quantitative genomics of sex dimorphism in Drosophila. This project is in collaboration with Dr. Marta Wayne in the department of Zoology. The majority of the post-doc will be spent on analysis and writing, but there will be opportunities for molecular work validating genomic data. Skills expected include: knowledge and interest in genetics, particularly evolutionary genetics, as well as substantial quantitative skill. Candidates with PhD's in either Genetics or Statistics will be considered for this position. Previous work with Drosophila a benefit but not necessary. The work will be highly interdisciplinary. The most important qualities are analytic thinking and problem solving, highly developed writing skills, and a genuine interest in working as part of a team. The initial term of the position is one year, with renewal for up to three years, pending satisfactory performance.

Contact: Lauren McIntyre mcintyre@ufl.edu http://www.mgm.ufl.edu/faculty/lmcintyre.htm 352:273-8024

mcintyre@mgm.ufl.edu mcintyre@mgm.ufl.edu

### UHouston CiliateGenomeEvol

#### POSTDOC IN GENOME AND MOLECULAR EVO-LUTION

A postdoc position is available in Becky Zufall's lab (http:// bchs.uh.edu/~rzufall/) at the University of Houston to study the evolution of genome processing in ciliates.

The goal of the funded research is to understand the diversification of genome architecture and its implications for patterns of molecular evolution by examining diverse ciliates with extensively fragmented genomes. Specific research projects are flexible and the candidate is encouraged to develop additional lines of inquiry complementary to ongoing research in the lab.

Candidates with a background in evolution and molecular genetics, and an interest in protists, are encouraged to apply. The start date is negotiable, but the position is available immediately, for an initial period of one year.

To apply, send an email containing a letter of interest, a C.V., and two references to rzufall@uh.edu.

Rebecca Zufall Dept of Biology and Biochemistry 353 Science and Research 2 University of Houston Houston, TX 77204 713-743-8172 (office) 713-743-8136 (lab) rzufall@uh.edu

http://bchs.uh.edu/~rzufall/ rzufall@uh.edu rzufall@uh.edu

# **UHouston EvolBioinformatics**

Postdoctoral Fellowship in Evolutionary Bioinformatics

An NSF-funded postdoctoral position is available in Dan Graur?s lab at the University of Houston.

Applicants should have a broad appreciation of molecular evolutionary theory and bioinformatics and an aptitude for modeling and molecular data analysis. The specific research subject is flexible and negotiable. The overall goal of the funded project is to study multiplesequence alignment and its effects on subsequent evolutionary reconstructions. Independent research in any other branch of theoretical molecular evolution and bioinformatics is encouraged as well.

Qualifications: a PhD in Biology or a related field, some experience in computer programming, familiarity with biological databases, bioinformatic packages, and statistical tools.

To apply: send, via email, a CV, a statement of research interests, some reprints or preprints, and the names and contact information for two references. Applications and inquiries should be addressed to Dan Graur at dgraur@uh.edu.

Dan Graur, Ph.D. John and Rebecca Moores Professor

Department of Biology & Biochemistry University of Houston Houston, TX 77204-5001 E-mail: dgraur@uh.edu Voice (office): 713-743-7236 Homepage: http://nsm.uh.edu/~dgraur/ Dan Graur <dgraur@uh.edu>

#### POSTDOCTORAL POSITION AVAILABLE IN GE-NETIC MAPPING OF DEVELOPMENTAL TRAITS IN RECOMBINANT INBRED LINES OF ARA-BIDOPSIS THALIANA

A 30 month postdoctoral position is available at the University of Manchester (United Kingdom), to work on QTL mapping using a large panel of recombinant inbred lines derived from a heterogeneous stock of Arabidopsis thaliana. This is a new and unique genetic resource that will be used to dissect the genetics of complex traits in this plant. Its analysis requires the use of statistical techniques originally developed for mouse QTL analysis (for more details see http://gscan.well.ox.ac.uk/), and the postholder will be responsible for converting such methods to this project.

The project is a collaboration between Dr. Paula Kover (Manchester), Prof. Richard Mott and Dr William Valdar (Oxford). While the position is based in Manchester, the postdoc will spend part of his/her tenure in the Welcome Trust Centre for Human Genetics in Oxford.

Candidates should have a PhD in QTL mapping, statistical genetics or statistics. Good computational skills are essential. A background in quantitative genetics applications would be an advantage, but exceptional candidates wishing to move into the genetics field are also welcome to apply. Salary will be in the range £26,000 depending on experience.

Applicants should send a copy of current CV, a letter indicating your reasons for applying, a brief statement of research interests, and the name and contact information of three referees to kover@manchester.ac.uk. Review of applications will begin on Sept. 30th, and will continue until a suitable candidate has been found. While start date is somewhat flexible, it should be no later than Jan 31st 2007.

For more information, please contact kover@manchester.ac.uk, or rmott@well.ox.ac.uk

Dr. Paula X. Kover University of Manchester Faculty of Life Sciences Michael Smith Building - room C.1261 tel.:(0)161- 275 1550

"Paula X. Kover" <kover@manchester.ac.uk>

UNAM Mexico EvolPlantReproduction

UManchester ComplexTraitMaps

POSTDOCTORAL POSITION, DEPARTMENT OF EVOLUTIONARY BIOLOGY, INSTITUTE FOR ECOLOGY, UNAM MEXICO Seeking Postdoctoral Research Associate for projects related to reproductive biology of plants and the evolution of sexual polymorphisms. Qualified individual should have Ph.D. in life sciences and familiarity with basic methods of theoretical modeling, programing, and plant reproduction evolution. The position is open for a year term extendable to a second period. Please send a cover letter, resume or curriculum vitae, names of three references, and a summary of research interests to: Dr. César A. Domínguez, Instituto de Ecología, UNAM; A.P. 70-275, México D.F.; C.P. 04510 E- mail: tejada@servidor.unam.mx

Juan Fornoni <jfornoni@miranda.ecologia.unam.mx>

## UNC ChapelHill EvolBiol

The Carolina Postdoctoral Program for Faculty Diversity The University of North Carolina at Chapel Hill

As part of a continuing commitment to advance scholars from underrepresented groups in higher education, The University of North Carolina at Chapel Hill Carolina Postdoctoral Program for Faculty Diversity is pleased to announce the availability of postdoctoral research appointments for a period of two years. The purpose of the Program is to develop scholars from underrepresented groups for possible tenure track appointments at the University of North Carolina and other research universities. Postdoctoral scholars will participate essentially full-time in research and may teach only one course per year. Applications for study in any discipline represented at the University are welcome. The Department of Biology at the University of North Carolina at Chapel Hill strongly encourages candidates interested in evolutionary biology to apply. Potential faculty sponsors for interested candidates can be identified at http://www.bio.unc.edu/graduate/EEOB/ evolution.html

The stipend will be \$35,625 per calendar year. Health benefits are available. Some funds are available for research expenses, including travel. Minority students who will have completed their doctoral degree no later than July 1, 2007, and no earlier than July 1, 2003 are eligible to apply. Preference will be given to U.S. citizens and permanent residents. This program is funded by the State of North Carolina and places emphasis on underrepresented minorities. A complete application will include curriculum vitae, sample publications and/or dissertation chapters, three letters of recommendation, an application, a statement of research plans and a separate statement of why you should be selected for the program. Applications can be found at http://research.unc.edu/red/postdoc.html .If recommendation letters accompany application materials they should be in a sealed envelope.

All materials should be sent to the Carolina Postdoctoral Program for Faculty Diversity, Office of the Vice Chancellor for Research and Economic Development, CB# 4000, 312 South Building, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27599-4000, and must be postmarked by Thursday, January 4, 2007. Incomplete or late applications will not be accepted.

\*\*\*\*\* Dr. Maria Servedio Department of Biology University of North Carolina CB# 3280, Coker Hall Chapel Hill, NC 27599 Phone: 919-843-2692 Fax: 919-962-1625 e-mail: servedio@email.unc.edu http://www.bio.unc.edu/faculty/servedio/Lab/-

index.htm servedio@EMAIL.UNC.EDU servedio@EMAIL.UNC.EDU

### **UNotreDame EvolGenomics**

# POSTDOCTORAL RESEARCH IN GENETIC ASPECTS OF GLOBAL CHANGE

Department of Biological Sciences, University of Notre Dame

We seek an evolutionary biologist to participate in applied genetic research. This individual will be a founding member of our new Center for Environmental Genomics and will collaborate with Drs. Hellmann, Lodge, and Feder on projects involving the impacts of global change. One project examines changes in interspecific hybridization among butterflies under climate change using microsatellites and experimental crosses (Hellmann). A second project will develop genetic tools to screen for aquatic, microscopic invasive species (Lodge and Feder). A dedicated technician will support the postdoc. This is a one-year position with a possible extension of six months; opportunities for grant writing to extend the position are available as is longer-term collaboration. Applicants should send a description of their research, a CV, and the names of three references to: Jessica Hellmann, Department of Biological Sciences, 107 Galvin Life Science Center,

University of Notre Dame, Notre Dame, IN 46556 (hellmann.3@nd.edu). The University of Notre Dame is an Equal Opportunity/Affirmative Action Employer.

Jessica J. Hellmann Dept. of Biol. Sci. University of Notre Dame Notre Dame, IN 46556 574.631.7521 (ph) 574.631.7413 (fax)

Jessica Hellmann <hellmann.3@nd.edu>

#### **USouthernCalifornia** PopGenet

# STATISTICAL AND POPULATION GENETICS POSTDOC AT USC

A postdoctoral position is available to work with genomic polymorphism data in Arabidopsis thaliana. The project focuses on genome-wide association mapping using a large SNP data set (over 1,000 inbred lines genotyped at 250,000 SNP loci), but there is also room for various forms of evolutionary analysis. The project is directed by Magnus Nordborg (Molecular & Computational Biology) and Paul Marjoram (Preventive Medicine, Keck School of Medicine), and the position would enjoy close contacts with other quantitative groups in both departments, as well as with prominent collaborators in several countries.

Applicants for the position must have backgrounds in statistical, quantitative, or population genetics. Experience with genetic mapping is a definite advantage. Informal inquiries can be address to either Magnus (magnus@usc.edu) or Paul (pmarjora@usc.edu); applications (a CV and two letters of recommendation) should be sent to Magnus.

Magnus Nordborg, Associate Professor Molecular & Computational Biology University of Southern California 1050 Childs Way Los Angeles, CA 90089-2910

http://walnut.usc.edu/ ~ magnus iChat A/V: nord-borg@mac.com

+1.213.821-5349 (office) +1.213.821-2858 (lab)

magnus@usc.edu magnus@usc.edu

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UStAndrews GenomicsOfSpeciation
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Research Fellowship: Genomic Analysis of Adaptive Divergence and Hybrid Speciation in Senecio School of Biology University of St Andrews

I have a 3 year Postdoc Research Fellowship available in my lab to work on the the genomics of hybrid speciation. Applicants should have a PhD and ideally be experienced in using molecular markers for genomic map construction, QTL analysis, and identifying genomic locations bearing the signature of selection. Good skills in molecular biology and a background in evolutionary biology are desirable.

Application forms and further particulars are available from Human Resources, University of St Andrews, College Gate, North Street, St Andrews, Fife KY16 9AJ, UK (tel: +44 (0)1334 462571, by fax +44 (0)1334 462570 or by email Jobline@standrews.ac.uk. The advertisement and further particulars can be viewed at http://www.st-andrews.ac.uk/hr/recruitment/vacancies. Job reference: CD035/06; Closing date: 20 October 2006.

I shall be happy to respond to informal enquiries and to send a detailed project description to potential applicants

Professor Richard Abbott Mitchell Building, School of Biology University of St Andrews St Andrews, Fife KY16 9TH Scotland, UK Tel. +44 (0)1334 463350 Fax. +44 (0)1334 463366 Email. rja@st-and.ac.uk Website: http://biology.st-and.ac.uk/staff/abbott.html rja@standrews.ac.uk rja@st-andrews.ac.uk

## UTexasAustin AmphibianPhylogeny

Postdoctoral Position in Amphibian Phylogeny at UT Austin

A postdoctoral position in the AmphibiaTree project will be available 1 January 2007 at the University of Texas at Austin in the labs of David Cannatella and David Hillis. This position is funded for up to two years (starting salary approximately \$35,000, plus benefits).

The goal of the AmphibiaTree project is to produce an integrated, multidimensional phylogeny of all species of amphibians, using data from mitochondrial and nuclear sequences, phenotypic characters, and fossils. The first major effort of AmphibiaTree has been funded by the National Science Foundation as part of the Assembling the Tree of Life program.

The primary responsibility of the postdoc will be to generate and analyze a dataset of nuclear gene sequences for a targeted sample of amphibians. Experience in molecular lab techniques for phylogenetics is necessary, as some familiarity with the amphibian diversity is desirable. Additionally, the most attractive candidates will be those who display enthusiasm, motivation and creativity.

Additionally, the postdoctoral researcher will interact with the labs of David Wake and Marvalee Wake (University of California, Berkeley), Linda Trueb and Rafe Brown (University of Kansas) and James Hanken (Harvard University) on related aspects of the project.

Review of applications will begin 1 October 2006 and continue until a suitable candidate is found. Applicants should send a curriculum vitae, a brief letter describing their prior research experience and current interests and goals, and names only of two referees (letters may be requested later) to David Cannatella at the address below. Application by email is encouraged.

For more information, contact

David Cannatella Integrative Biology 1 University Station C0930 The University of Texas Austin, TX 78712 512-232-4862 catfish@mail.utexas.edu

catfish@mail.utexas.edu

### **UVienna MathGenetics**

Postdoctoral Researcher in Mathematical Genetics

Applications from highly qualified candidates are invited for a research position at the PostDoc level at the University of Vienna. Initially, a one-year contract is offered with possible extension to a second year. The successful candidate participate in the interdisciplinary research project /Mathematics and Evolution: Mathematical and Statistical Analysis of Ecological and Genetic Diversity/, aiming at a close interaction between mathematics, statistics, and evolutionary genetics and ecology. (PIs: Reinhard Bürger, Ulf Dieckmann, Andreas Futschik, Christian Schlötterer.) The prime topic of research will be the mathematical and numerical analysis of population-genetic models of frequency-dependent selection as arising from migration in geographically structured populations. The position will be associated with the Department of Mathematics.

Qualifications: a PhD in (applied) mathematics, theoretical biology, computer science, or some related field. The optimal candidate has a strong background in mathematics (preferably difference or differential equations), populations genetics, and computer programming.

The contract can start as early as November 1. The net salary (after taxes and social and health insurance) follows the University scheme and is about 24.000 Euros per year. Applicants should email a statement of research interests (including the starting date), a CV, a list of publications, and one or more letters of reference to Reinhard.Buerger@univie.ac.at

Reinhard Bürger Department of Mathematics University of Vienna Nordbergstrasse 15 1090 Vienna, Austria

Phone: +43 1 4277 506 31 FAX: +43 1 4277 9506 Email: Reinhard.Buerger@univie.ac.at Homepage: http://homepage.univie.ac.at/Reinhard.Buerger reinhard.buerger@univie.ac.at

# YaleMedicalSchool Infectious disease evol

Post-doctoral positions are available at Yale Medical School in the Department of Epidemiology and Public Health to develop and analyze socioeconomic models of infectious disease epidemiology.

This position will require an independent and motivated individual who has published in epidemiology, population biology and/or economics. Mathematical and/or computational modeling skills are essential.

The salary will be at least according to NIH pay scale, commensurate with experience and expertise. Funding is available for three years.

Closing date: Open until filled.

To apply please send CV, brief statement of research interests and contact information for two academic references to alison.galvani@yale.edu

Donna M. Berube Sr. Administrative Assistant Yale University School of Medicine Epidemiology of Microbial Diseases voice 203-785-2734 fax 203-785-3260

"Life is a precious gift. Don't waste it being unhappy, dissatisfied, or anything less than you can be."

Donna Berube <donna.berube@yale.edu>

# **WorkshopsCourses**

 Kyoto DrosophilaSpecies Nov3-5
 81

 Montpellier ESF ExperimentalPops Dec7-9
 81

 Tutzing Germany MolEvolStat Nov27-Dec1
 82

#### Kyoto DrosophilaSpecies Nov3-5

Dear non-melanogaster Drosophilists,

JAPANESE DROSOPHILA SPECIES WORKSHOP VI Sponsored by the National Bioresource Project (Japan)

WHERE: Drosophila Genetic Resource Center Kyoto Institute of Technology, Kyoto, Japan WHEN: November 3 - 5, 2006

HOW TO APPLY: Please send your e-mail to Dr. M. Watada (watada@mserv.sci.ehime-u.ac.jp) for application no later than October 16, with information of your name, affiliation, e-mail address and species or species group you are interested in. A few foreign participants will be acceptable. Participants are responsible for their own transportation to Kyoto. We can reserve a block of rooms (3,000Yen/day) for participants near the campus of Kyoto Institute of Technology.

The Sixth Japanese Drosophila Species Identification Workshop will focus on 1. How to identify the family of Drosophilidae. 2. How to identify the genus of Japanese Drosophila 3. How to identify the species and the species group of the subgenus Sophophora, 4. How to identify the species of the subgenus Drosophila. 5. How to identify the species closely related in the virilis section. 6. How to use Drosophila database search system (BioCIS) developed by M. J. Toda.

The approximate schedule will include the following: 1. Participants arrive in Kyoto at noon of Friday (Nov. 3, 2006; Japan Standard Time). 2. Friday workshop will introduce the Drosophila morphology and the use of keys to identify species, and the use of BioCIS system. 3. During the next two days, the following materials will be used for identification: species of the genus Scaptodrosophila, Cymomyza, and the subgenus Sophophora (especially in the melanogaster species group), and Drosophila (especially in the virilis section). 4. Instructors: Drs. Masanori J. Toda, Masahito T. Kimura, Hideaki Watabe, Hisaki Takamori, and Katsura Beppu. Drs. Muneo Matsuda, Masatoshi Yamanoto, Masatashi Tomaru and Masayoshi Watada will also attend the workshop as members of National Bioresource Project. 5. Participants depart Sunday afternoon (Nov. 5, 2006).

Masatoshi TOMARU, PhD Drosophila Genetic Resource Center Kyoto Institute of Technology Saga-Ippongi-cho, Ukyo-ku, Kyoto 616-8354, JAPAN Email: tomaru@kit.jp Phone: +81-75-873-2655 Fax: +81-75-861-0881 http://www.kit.ac.jp/~tomaru/pukiwiki/Top\_English.html tomaru@kit.jp tomaru@kit.jp

# Montpellier ESF ExperimentalPops Dec7-9

Dear all,

An ESF ConGen workshop on "Experimental metapopulations" will take place on December 7-9 2006, Montpellier France (arrival on December 6th, departure on December 10th). A list of the invited speakers is given below. There is room for a dozen of contributed talks and 10-20 posters. Anyone interested in participating (with or without giving a talk) should apply to the organizing commitee.

Most species live in fragmented habitats, and many are threatened by fragmentation. The ecological and evolutionary consequences of fragmentation have motivated the flourishing of metapopulation theoretical studies, with little empirical testing, partly because of the difficulty of manipulating metapopulations in nature. Artificial or semi-natural metapopulations may help overcome some of these difficulties and may provide powerful tools to evaluate our understanding of evolutionary and ecological processes in spatially structured systems. The main rationale for this workshop is our belief that experimental simple systems will help to overcome many difficulties encountered in empirical studies of metapopulations, will increase our understanding of metapopulation biology and help testing the theory. We wish to encourage the development of manipulative empirical studies in the field of metapopulation biology. One of the prime aim of this workshop would be to foster the development of new projects in this area.

ESF funds in part travel and accomodation for speakers. Priority will be given to researchers working in one of the participating countries of ConGen (see http://www.usc.es/congresos/esf05/index.html) and to young researchers. We wish to keep the workshop relatively small, with a maximum of 50 participants.

People interested should contact us with information regarding 1) whether they want to give a talk, or a poster, 2) the title and summary for their talk if applicable, 3) a short CV, 4) their estimated travel cost. We wish that participants stay for the whole duration of the workshop (from 9 am on the 7th to 6 pm on the 9th of December). Send all information before September 22 2006 to both adresses below:

Isabelle.Olivieri@univ-montp2.fr Ophelie.Ronce@univ-montp2.fr

Invited speakers: Jane Molofsky : Population Dynamics in Experimental Plant Metapopulations Nikolas Friedenberg. Experimental evolution of life-histories in Nematodes Jean Clobert : Two-patches model system: kin competition, density and information. Claire Lavigne : Evolution of neutral and selected genetic diversity in metapopulations : Arabidopsis thaliana as an experimental model Isabelle Goldringer : Experimental metapopulation of wheat : a way to manage genetic diversity Henrique Teotonio : C. elegans as a model system for experimental evolution of life-histories and mating system Markus Fischer : Fitness consequences of experimental gene flow between plants of populations of different sizes and degrees of isolation Kuke Bijlsma : Dynamics and significance of genetic variation in experimental Drosophila metapopulations Arjan de Visser : Role of spatial structure in adaptive evolution of experimental populations of E. coli Santiago F. Elena : RNA virus replicate in an always fluctuating world: organ-specific adaptation, gene flow and metapopulation structure. Dieter Ebert : Experimental evolution in a Daphnia - parasite metapopulation Wolfgang Weisser : Host-parasitoid metapopulation dynamics in a field experiment Angus Buckling : Experimental coevolution in spatially structured environments Mike Brockhurst : Hot-spots and cold-spots in bacteria-phage metapopulations

Isabelle Olivieri Université Montpellier 2, cc 065 Institut des Sciences de l'Evolution Place Eugène Bataillon 34095 Montpellier cedex 05 France Fax : 33 (0) 4 67 14 36 22 Tel : 33 (0) 4 67 14 37 50 (/ 36 31) LAB http://www.isem.univ-montp2.fr/-GE/Metapopulations/MetaAccueil.php Master BGAE, spécialité EBE, parcours RPI : http://mon.univmontp2.fr/MBGAEEBERPI/ Ecole Doctorale : http:/-/www.univ-montp2.fr/ ~ edbi/ Isabelle Olivieri <olivieri@isem.univ-montp2.fr>

# Tutzing Germany MolEvolStat Nov27-Dec1

Workshop Announcement

âAdvances in molecular evolutionary ecology: statistical tools to unravel evolutionary processes in natural populationsâ

Funded by the Volkswagen Foundation

Dates: 27 November â 1 December 2006 Venue: Evangelische Akademie Tutzing, near Munich, Germany

The rapid addition of modern molecular techniques to the evolutionary ecologistâs toolbox has been paralleled by the extensive development of sophisticated stastistical methods with which to decipher evolutionary processes in natural populations. This workshop aims to introduce empirical evolutionary ecologists at the preand post-doctoral level to these modern inference techniques. The workshop is organised around several research themes, each of which will be presented by an expert in the field. Emphasis will be placed on concepts, interconnections and applications rather than mathematical finesse. This guided tour should enable the participants to identify the best approaches for their own budding or ongoing projects and aid the design of future research. Ideally the participants will be encouraged to further their own understanding of these methods and/or to recruit a theoretician to their project. The workshop language will be English.

Each day of the workshop consists of lectures, discussion groups and hands-on exercises and will be devoted to one of the following research themes:

Estimates of historic and contemporary dispersal rates Raphael Leblois, Museum National d'Histoire Naturelle, Paris

Phylogeographic inference Stuart Baird, Centre de Biologie et de Gestion des Populations, Montferrier-sur-Lez

Reconstructing sibships and pedigrees, and inferring mating patterns Kevin Dawson, Rothamsted Research, Harpenden

QTL mapping in the field Jon Slate, University of Sheffield

Estimates of genetic parameters and natural selection using the animal model Katharina Foerster, University of Edinburgh

Workshop Organisation: Beate Nurnberger, University of Munich

Funding of the course covers accommodation and meals as well as travel expenses (up to 150 Euros) for the participants. Applications in English should consist of a curriculum vitae, a publication list, a description of the planned or ongoing research project and a statement of how the applicant expects to benefit from the workshop. Requests for further information and applications shall be sent by e-mail only to Beate Nurnberger (nurnbb@zi.biologie.uni-muenchen.de) no later than September 30.

 PD Dr. Beate Nurnberger Dept Biologie der LMU Munchen Grosshaderner Str. 2 82152 Planegg-Martinsried Germany Phone: +49 (0)89 2180 74205
 Fax: +49 (0)89 2180 74204

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

#### UHelsinki ConsGenetics Jan16-29

ESF Workshop: Adaptive vs neutral genetic variability in conservation genetics

TvÅrminne Zoological Station, University of Helsinki,

Finland Friday 26th - Monday 29th January 2007.

#### <http://www.helsinki.fi/biosci/egru/congen.html>

We would like to invite you to an European Science Foundation (ESF) and NordForsk funded workshop on adaptive and neutral genetic variability in conservation genetics, in January 2007. The meeting will be held at TvÅrminne Zoological Station of Helsinki University, just over 100km from Helsinki.

The workshop will bring together theoreticians and empiricists to review and discuss problems and prospects in comparative studies of neutral marker genes and quantitative traits (e.g. through comparing Fst and Qst). A chief objective is to identify future lines of research needed to improve the accuracy and usefulness of these studies in general, and in the conservation context in particular. The meeting will include talks, posters and group discussions.

The following speakers have already confirmed their attendence: David Balding (UK), Armando Caballero (Spain), Jérome Goudet (Switzerland), Juha Merilà (Finland), Bob O'Hara (Helsinki), Patrik Waldmann (Sweden).

The Dates: Friday 26th - Monday 29th January 2007 The Place: TvÃrminne Zoological Station, Hanko, Finland (http://luoto.tvarminne.helsinki.fi/english/index.htm)

If you are interested in attending, please email Bob O'Hara (bob.ohara@helsinki.fi) before the deadline (Monday 30th October 2006), and if you wish to present a talk or poster, give a provisional title (we will let you change it later, for now we just want to have an idea about your subject). Priority will be given to applicants who come from countries that financially support the ConGen programme (Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Hungary, Netherlands, Norway, Spain, Sweden and Turkey).

More information about ESF Conservation Genetics programme can be found from <www.esf.org/esf\_article.php?language=0&articleD3&domain=3&activity=1>, and more information about NordForsk can be found from <www.nordforsk.org> We are looking forward to lively discussions and brain-storming in TvÃrminne! Bob

– Bob O'Hara

Dept. of Mathematics and Statistics P.O. Box 68 (Gustaf HÃllstrÃkatu 2b) FIN-00014 University of Helsinki Finland

ative Results - EEB: http://www.jnr-eeb.org

bob.ohara@helsinki.fi bob.ohara@helsinki.fi

# Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LATEX files, Excel files, etc. ...plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

# 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 IATEX do not try to embed IATEX or TEX in your message (or other formats) since my program will strip these from the message.