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# E v o l D i r

November 1, 2006

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

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## 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](mailto:Golding@McMaster.CA).

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

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



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### Ascona Switzerland PlantInvasives Feb25-Mar2

#### INTERNATIONAL WORKSHOP

Colonization versus invasion: do the same traits matter? Towards a joint perspective in research on range expansion of native and biological invasion of non-indigenous plants

February 25 to March 2, 2007, Monte Verita, Ascona, Switzerland. (Monday morning to Thursday evening; arrival on Sunday, departure on Friday)

**FOCUS** The aim of this conference is to work at the interface of native-species range expansion and non-indigenous species invasion. We would like to bring together scientists from these different, but closely linked ecological fields to kick-off an intensified research effort on possible climate warming effects on ecosystems and on mechanisms leading to biological invasion of non-indigenous species. Until now, research groups working on biological invasion, on the impact of biodiversity on invasion resistance and on range-shifts of native

species due to climate-mediated habitat change have not worked closely together even though the three areas of research are closely linked. Collaboration in these research areas could result in a deeper understanding of traits that enable both, native and invasive species to expand their ranges under novel environmental conditions.

The scientific program will consist of keynote lectures by 12 invited speakers, contributed oral and poster presentations and discussion groups. Those contributing talks or posters are encouraged to present results or ideas from on-going research. Participants are expected to attend the entire workshop and their number is limited to 73.

**INVITED SPEAKERS** D. Blumenthal, USDA-ARS, Fort Collins, Colorado (USA) M.A. Davis, Macalester College, St. Paul (USA) P. Edwards, Institute of Integrative Biology, ETH Zurich (CH) P.M. Kotanen, Dept. of Botany, University of Toronto (CDN) H. Mueller-Schaerer, Dept. of Biology, University of Fribourg (CH) R. Petit, UMR Biodiversity Genes & Ecosystems, INRA, Cestas (F) P. Pysek, Institute of Botany, Pruhonice (CZ) B. Schmid, Institute of Environmental Sciences, University of Zurich (CH) W. Thuiller, Laboratoire d'Ecologie Alpine, Grenoble (F) W. van der

Putten, NIOO-KNAW, Centre for Terrestrial Ecology, Heteren (NL) M. Vila, Estación Biológica de Doñana (EBD-CSIC), Sevilla (E) G.-R. Walther, Institute for Geobotany, University of Hannover (D)

Detailed information and registration: <http://www.unizh.ch/uwinst/Ascona> Registration deadline: November 6, 2006.

Organisers: Bernhard Schmid, Jasmin Joshi (University of Zurich, Switzerland), Regula Billeter and Peter Edwards (ETH Zurich) and Dana Blumenthal (USDA-ARS Rangeland Resources Research Unit, Fort Collins, USA)

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Dr. Jasmin Joshi Institute of Environmental Sciences University of Zurich Winterthurerstrasse 190 CH-8057 Zuerich Switzerland Tel. ++41 (0)1 635 6128 Fax ++41 (0)1 635 5711 e-mail [joshi@uwinst.unizh.ch](mailto:joshi@uwinst.unizh.ch) <http://www.unizh.ch/uwinst/> Please note the forthcoming international workshop on:

“Colonization versus invasion: do the same traits matter?” <http://www.unizh.ch/uwinst/Ascona/> Monte Verità, Ascona, Switzerland February 25 to March 2, 2007

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## Bangkok MEEGID Nov30-Dec3 CallForProposals

MEEGID VIII Bangkok, Thailand. 30th November-2nd December 2006

Call for conferences/symposia proposals and papers. Still open to proposals!

The 8th International Meeting “Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases” (MEEGID VIII) will be held in Bangkok, Thailand, 30th November morning-2nd December evening 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.mahidol.ac.th/>) will be an official 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 Evolu-*

*tion* (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 12 plenary lectures, 12 specialized symposia, 9 “express-debates” (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. Plenary 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, since some slots are still available.

Scientific committee of MEEGID VIII :

Prof. Amaret Bhumiratana, Dean of Faculty of Science Mahidol University; Dr. Sansanee Chaiyaroj, Deputy Dean for Research, Faculty of Sciences, Mahidol University; Dr. Pattamaporn Kittayapong, CVVD and Dept. of Biology, Faculty of Sciences, Mahidol University; Dr Philippe Barbazan, RD/ Mahidol University Collaborative programme on emerging diseases Dr Jean-Paul Gonzalez, IRD/ Mahidol University Collaborative programme on emerging diseases; Dr Jean-Pierre Hugot, National History Museum, Paris, France Dr Janet McNichols, Thailand MOPH -US CDC Collaboration Dr Leonard Peruski, Thailand MOPH -US CDC Collaboration Dr Stuart Blacksell, Wellcome Trust-Mahidol University-Oxford Tropical Medicine Research Unit Dr. Robert Gibbons, Armed Forces Research Institute of Medical Science (AFRIMS)

Dr Marc Lallemand, PHPT, IRD HIV programme in Chiang Mai  
 Dr Brett Crawley, Biomerieux Company Thailand  
 Dr Jean-Pierre Dujardin, IRD/ Mahidol University/Genetics and Evolution of Infectious Diseases  
 Dr Michel Tibayrenc, IRD representative in Thailand, editor-in-chief Infection, Genetics and Evolution

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

Aedes aegypti: genomics, population biology, epidemiological role  
 Avian flu Anthroozoonoses Contribution of private industry to infectious disease control  
 Cytokine genetics 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 antigenically-diverse pathogens.  
 Malaria Modern approaches to medical entomology : morphometry and population genetics  
 Mycobacterium tuberculosis epidemiology, molecular typing and evolution  
 Pharmacogenomics Phylogeography Population genetics of pathogens  
 Trypanosomatidae evolution and pathogenic role in humans and animals  
 Vectors: Population structure and Genetic structure

Keynote speakers include :

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 To read the entire message look it up at <http://life.biology-mcmaster.ca/~brian/evoldir.html>

## Bangkok MEEGID Nov30-Dec3 Debates

The MEEGID VIII congress in Bangkok and Infection, Genetics and Evolution (<http://www.elsevier.com/locate/meegid>) will be the privileged tribune for debates of high topicality:

Human evolution: has it been shaped chiefly by transmissible diseases?

Molecular typing of pathogens: what is it good for?

Does Intelligent Design challenge neodarwinism? Is it challenged by transmissible diseases?

Is a unified species concept for pathogens possible?

Is an integrated approach host/pathogen/vector feasible?

Large-scale copy number variation: a major actor in genetic susceptibility to infectious diseases?

The Asean CDC: a first step toward the World CDC belt?

More information at <http://www.th.ird.fr/events/-2006/meegid.htm> (constantly updated).

Michel Tibayrenc, MD, PhD Editor -in-chief Infection, Genetics and Evolution (Elsevier) <http://www.elsevier.com/locate/meegid> Impact factor evaluated by Elsevier: 3.195  
 IRD representative in Thailand  
 IRD Representative Office French Embassy 29, Thanon Sathorn Tai, Bangkok 10120, Thailand  
 Tel : + (66 2) 627 2190 Fax : + (66 2) 627 2194 Cel: + (66 1) 82 64 056  
 E-mail : (direct): Michel.Tibayrenc@ird.fr (secretary) ird\_th@ksc.th.com Website : <http://www.th.ird.fr> tibayren <Michel.Tibayrenc@ird.fr>

## Bayreuth Germany PhDEvolBiol

Invitation to the

Graduate Meeting of the Evolutionary Biologists of the German Zoological Society

February 2007 in Bayreuth, Germany

The 12th meeting of the study group Evolutionary Biology will take place on February, 23-25, 2007 at Bayreuth University, Germany. We expect about 80 scientists covering all fields of evolutionary biology. The main topic of the meeting will be life-history evolution, though contributions from all other fields of evolutionary biology are welcome. Confirmed keynote speakers include Prof. Sauer (Bonn), Prof. Blanckenhorn (Zürich) and Dr. Sommer (Berlin).

For more information visit [http://www.uni-bayreuth.de/departments/toek1/dzgtagung/-index\\_e.htm](http://www.uni-bayreuth.de/departments/toek1/dzgtagung/-index_e.htm). Deadline for registration is December, 15th, 2006.

PD Dr. Klaus Fischer Department of Animal Ecology I University of Bayreuth D-95440 Bayreuth, Germany  
 Phone: + 49-921-552649 Fax: + 49-921-552784 E-mail: Klaus.Fischer@uni-bayreuth.de

PhD meeting EvoBio in Bayreuth! <http://www.uni-bayreuth.de/departments/toek1/dzgtagung/>  
 Klaus.Fischer@uni-bayreuth.de

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**Davos Switzerland Biodiversity  
Nov23-24**

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

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**Hamamatsu Japan MathBiol  
Mar14-17 CallforPapers**

dear evoldir members,

i would like to announce the following call for papers for biomath conference:

The 2nd International Symposium “Dynamical Systems Theory and Its Applications to Biology and Environmental Sciences” Hamamatsu Japan, March 14th-17th, 2007. <http://moon.sys.eng.shizuoka.ac.jp/~dst-sympo2nd/> Deadline for call for papers is 16 October, 2006 (one week).

The symposium broadly focusses on any dynamical aspect of math biology. Many presentations are reviewed as a special issue/articles of several scientific journals, as before. We would appreciate it if you consider to present a paper/poster at the conference.

Symposium objectives and other information is in the postscript.

best regards, jin

Jin Yoshimura Department of Systems Engineering, Shizuoka University 3-5-1 Johoku, Hamamatsu, Shizuoka, 432-8561, JAPAN. tel: +81-53-478-1215 email:jin@sys.eng.shizuoka.ac.jp

P.S. Symposium Objectives

Dynamical system theory in mathematical biology and environmental science has been attracted much attention from many scientific fields as well as mathematics. Mathematicians should establish a mathematical basis on the various problems appeared in dynamical systems of biology and feed back their work to biology and environmental sciences. Biologists and environmental scientists should clarify/build the model systems that are important in the global biological and environmental problems of their own. The purpose of “The International Symposium on Dynamical Systems Theory and Its Applications to Biology and Environmental Sciences” is to discuss many interests on the rich properties of dynamical systems appeared in biology and environmental sciences. The symposium constitutes of the lectures by about 20 eminent mathematical biologists and contributed oral or poster sessions. Asian contributors are especially welcome to the symposium. <http://moon.sys.eng.shizuoka.ac.jp/~dst-sympo2nd/> Collections of papers based on the presentations may appear as special issues of international journals. We already have agreements with Journal of Biological Dynamics.

Correspondence takeuchi@sys.eng.shizuoka.ac.jp Yasuhiro Takeuchi, Faculty of Engineering, Shizuoka University 3-5-1 Johoku, Hamamatsu, Shizuoka, 432-8561, JAPAN. tel: +81-53-478-1200 <http://moon.sys.eng.shizuoka.ac.jp/~dst-sympo2nd/> —

— Jin Yoshimura jin@sys.eng.shizuoka.ac.jp

jin@sys.eng.shizuoka.ac.jp

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**Honolulu IEEE  
EvolutionarySystems Apr1-5**

Dear Colleagues,

The IEEE Artificial Life Symposium will include studies of evolutionary systems and aspects of evolution in the setting of “life-as-it-could-be” in natural and artificial systems (on earth and elsewhere), not only life-as-we-know-it (on planet earth).

We’d also like to announce that there will be an Award for Best Student Paper. Please forward the announcement below to interested colleagues and students.

Best Regards,

Chrystopher Nehaniv

IEEE Symposium Series on Computational Intelligence 2007 <http://www.ieee-ssci.org/> IEEE-ALife'07

The First IEEE Symposium on Artificial Life <http://www.itee.adfa.edu.au/~alar/ieeecalife07/> April 1-5, 2007

Honolulu, Hawaii, USA

Best Student Paper

This symposium will be offering a best student paper award. To qualify, the paper must be submitted under the student category.

Call for Papers

The IEEE-Alife'07 brings together researchers working on the emerging areas of Artificial Life and Complex Adaptive Systems. In particular, the conference focuses on Artificial life in silico including artificial chemistry, multi-agent systems, and robotics; ant colony systems; biological and evolutionary systems; evolutionary art, immune systems; neuro- biology and neuro-computing; network theory; swarm intelligence; and other topics.

PAPER SUBMISSION

Authors are invited to submit previously unpublished work to IEEE-ALife'07. All papers will be subject to a peer review process. Accepted papers will be published in the conference proceedings and the attendance of at least one author of an accepted paper at the conference is a condition for publications. The maximum number of pages is 8. Only PDF files are acceptable.

We invite high quality technical papers on substantial, original, and unpublished research on all aspects of Artificial Life and Complex Adaptive Systems. Submission and formatting information are at <http://www.itee.adfa.edu.au/~alar/ieeecalife07/ps.htm> IMPORTANT DATES Submission of papers : 31 October 2006 Decisions sent to authors: 30 November 2006 Camera ready format : 15 January 2007 Conference date : 1-5 April 2007

ORGANIZATION Conference Co-Chairs Hussein Abbass (UNSW, Australia, [abbass@itee.adfa.edu.au](mailto:abbass@itee.adfa.edu.au)) Mark Bedau (Reed, USA, [mab@reed.edu](mailto:mab@reed.edu)) Stefano Nolfi (CNR, Italy, [stefano.nolfi@istc.cnr.it](mailto:stefano.nolfi@istc.cnr.it)) Janet Wiles (UQ, Australia, [j.wiles@itee.uq.edu.au](mailto:j.wiles@itee.uq.edu.au)) Publicity chair Chrystopher Nehaniv (U Herts, UK, [C.L.Nehaniv@herts.ac.uk](mailto:C.L.Nehaniv@herts.ac.uk)) Web Masters Lam Thu Bui (UNSW@ADFA, [l.bui@student.adfa.edu.au](mailto:l.bui@student.adfa.edu.au)) Kamran Shafi (UNSW@ADFA, [k.shafi@student.adfa.edu.au](mailto:k.shafi@student.adfa.edu.au))

TOPICS OF INTEREST (non-exhaustive list): Adaptive robotics Artificial Chemistry Artificial societies and markets Ant colony optimization Applications of ALife technologies Bioinformatics Biological agents

Cellular automata Coevolution of morphology and mind Collaborative behaviour Complex systems Complexity Coordination Embodied cognition Emergence Ethics of artificial life Evolutionary and adaptive dynamics Evolutionary computation Fitness landscapes Games Hierarchical dynamics Marriage in Honey-Bees optimization Modularity Multi-agent systems Network theory Neural networks and connectionism Neurobiology Origin of life Philosophy of artificial life Percolation Robotics Self-organization Self-replication Simulation and synthesis tools and methodologies Social networks Swarm Intelligence Visualization Wet Alife

IEEE ALIFE 2007 Webpages: <http://www.itee.adfa.edu.au/~alar/ieeecalife07> Prof. Dr. Chrystopher L. Nehaniv Research Professor of Mathematical & Evolutionary Computer Sciences Adaptive Systems, Algorithms, & BioComputation Research Groups School of Computer Science University of Hertfordshire College Lane Hatfield, Hertfordshire AL10 9AB United Kingdom e-mail: [C.L.Nehaniv@herts.ac.uk](mailto:C.L.Nehaniv@herts.ac.uk) phone: +44-1707-284-470 fax: +44-1707-284-303

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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>

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## Honolulu IEEE Evolutionary Systems Apr1-5 2

Dear Colleagues,

Based on numerous requests, papers submitted to IEEE Artificial Life after the deadline may still be considered for review on a time-available basis.

Note however that in no event will late papers submitted after \*\*\* November 10th \*\*\* be considered.

Looking forward to your submissions!

Kind Regards,

Chrystopher L. Nehaniv

IEEE Symposium Series on Computational Intelligence 2007 <http://www.ieee-ssci.org/> IEEE-ALife'07

The First IEEE Symposium on Artificial Life <http://www.itee.adfa.edu.au/~alar/ieeecalife07/> April 1-5,



2007

Honolulu, Hawaii, USA

Best Student Paper

This symposium will be offering a best student paper award. To qualify, the paper must be submitted under the student category.

Call for Papers

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ORGANIZATION Conference Co-Chairs Hussein Abbass (UNSW, Australia, [abbass@itee.adfa.edu.au](mailto:abbass@itee.adfa.edu.au)) Mark Bedau (Reed, USA, [mab@reed.edu](mailto:mab@reed.edu)) Stefano Nolfi (CNR, Italy, [stefano.nolfi@istc.cnr.it](mailto:stefano.nolfi@istc.cnr.it)) Janet Wiles (UQ, Australia, [j.wiles@itee.uq.edu.au](mailto:j.wiles@itee.uq.edu.au)) Publicity chair Chrystopher Nehaniv (U Herts, UK, [C.L.Nehaniv@herts.ac.uk](mailto:C.L.Nehaniv@herts.ac.uk)) Web Masters Lam Thu Bui (UNSW@ADFA, [l.bui@student.adfa.edu.au](mailto:l.bui@student.adfa.edu.au)) Kamran Shafi (UNSW@ADFA, [k.shafi@student.adfa.edu.au](mailto:k.shafi@student.adfa.edu.au))

TOPICS OF INTEREST (non-exhaustive list): Adaptive robotics Artificial Chemistry Artificial societies and markets Ant colony optimization Applications of ALife technologies Bioinformatics Biological agents Cellular automata Coevolution of morphology and mind Collaborative behaviour Complex systems Complexity Coordination Embodied cognition Emergence Ethics of artificial life Evolutionary and adaptive dynamics Evolutionary computation Fitness landscapes

Games Hierarchical dynamics Marriage in Honey-Bees optimization Modularity Multi-agent systems Network theory Neural networks and connectionism Neurobiology Origin of life Philosophy of artificial life Percolation Robotics Self-organization Self-replication Simulation and synthesis tools and methodologies Social networks Swarm Intelligence Visualization Wet Alife

IEEE ALIFE 2007 Webpages: <http://www.itee.adfa.edu.au/~alar/ieealife07>  
c.l.nehaniv@herts.ac.uk

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## Innsbruck EvoImmunity Apr22-27

ESF-FWF Conference in Partnership with LFUI: Environmental and Evolutionary Immunology

Evolutionary ecology of immunity is a rapidly expanding field of research that brings together evolutionary biologists, ecologists and immunologists. The conference will offer a chance to discuss the most recent developments in this field, with a special focus on the evolution and ecology of an important defence function of organisms against disease: the innate immune system. Even invertebrates possess this evolutionary ancient part of immunity. The conference will have a broad-based interest - from the molecular and cellular through to the ecological level, incorporating evolutionary thinking at all of these levels. More specifically, we will cover topics such as how immune specificity is enabled in invertebrates; the impact of stress and fear; a theoretical angle on innate immunity and the interplay between innate immunity, sex and evolution.

Scientific programme and application form are accessible on-line through <http://www.esf.org/conferences/07223> (closing date for application: 20 November 2006).

Some grants available for young researchers to cover the conference fee and possibly part of the travel costs.

Many thanks for passing on the conference details to your colleagues who may be interested in this event.

Kind regards, Corinne Wininger - Le Moal Publicity Officer - ESF Research Conferences European Science Foundation - Research Conferences Unit 1 quai Lezay-Marnésia, BP 90015 67080 Strasbourg Cedex, France Phone: +33 (0)388 76 71 35 Fax: +33 (0)388 36 69 87 [clemoal@esf.org](mailto:clemoal@esf.org) [www.esf.org/conferences](http://www.esf.org/conferences) Corinne Wininger - Le Moal <[clemoal@esf.org](mailto:clemoal@esf.org)>

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## IrvineCA EvolAdaptation Dec1-2 EarlyRegistrationDeadline

December 1-2, 2006 In the Light of Evolution: Adaptation and Complex Design Organizers: John C. Avise and Francisco J. Ayala Beckman Center of the National Academies, Irvine, CA A century-and-a-half after Darwin, the challenge of understanding nature's complex design remains in many regards in its infancy. For example, only recently has it become possible to conduct whole-genome analyses in ways that may permit the discovery of heretofore unspecified structural and regulatory genes contributing to the molecular assembly of complex organismal phenotypes. New discoveries in paleontology and developmental biology have significantly improved our understanding of the intermediate stages of seemingly complex evolutionary transitions. Recent developments in evolutionary genetic theory, such as formal network analysis, have opened exciting new avenues for exploring the genes and maintenance of biological complexity at the levels of genetic and metabolic pathways. <[http://www.nasonline.org/-Sackler\\_evolution](http://www.nasonline.org/-Sackler_evolution)>[www.nasonline.org/-Sackler\\_evolution](http://www.nasonline.org/-Sackler_evolution) \$250 EARLY REGISTRATION UNTIL OCT 15

\$150 STUDENT / POST DOC REGISTRATION - TRAVEL/HOTEL AWARDS STILL AVAILABLE

Register at <[http://www.nasonline.org/-Sackler\\_evolution](http://www.nasonline.org/-Sackler_evolution)>[www.nasonline.org/Sackler\\_evolution](http://www.nasonline.org/-Sackler_evolution)

"Francisco J. Ayala" <[fjayala@uci.edu](mailto:fjayala@uci.edu)>

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## IrvineCA InTheLightOfEvol Dec1-2 EarlyRegistrationDeadline

December 1-2, 2006

In the Light of Evolution: Adaptation and Complex Design

Organizers: John C. Avise and Francisco J. Ayala

Beckman Center of the National Academies, Irvine, CA

A century-and-a-half after Darwin, the challenge of understanding nature's complex design remains in many regards in its infancy. For example, only recently has it become possible to conduct whole-genome analyses in ways that may permit the discovery of heretofore unspecified structural and regulatory genes contributing to the molecular assembly of complex organismal phenotypes. New discoveries in paleontology and developmental biology have significantly improved our understanding of the intermediate stages of seemingly complex evolutionary transitions. Recent developments in evolutionary genetic theory, such as formal network analysis, have opened exciting new avenues for exploring the genes and maintenance of biological complexity at the levels of genetic and metabolic pathways. [www.nasonline.org/Sackler\\_evolution](http://www.nasonline.org/Sackler_evolution) \$250 EARLY REGISTRATION UNTIL OCT 15

\$150 STUDENT / POST DOC REGISTRATION - TRAVEL/HOTEL AWARDS STILL AVAILABLE

Register at [www.nasonline.org/Sackler\\_evolution](http://www.nasonline.org/Sackler_evolution) SMBE <[info@smbe.org](mailto:info@smbe.org)>

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## KansasCity EcoGenomics Nov3-5 2

GENES IN ECOLOGY, ECOLOGY IN GENES Ecological Genomics Symposium November 3 to 5, 2006, in Kansas City

PLEASE NOTE: THE DEADLINE TO MAKE HOTEL RESERVATIONS AT THE GROUP RATE IS FRIDAY, OCTOBER 13, AT 5:00 P.M.

We are continuing to accept Registrations for you to attend. . . . WHAT? Ecological Genomics Symposium WHEN? November 3, 4, and 5, 2006 (Friday evening, Saturday, & Sunday morning) WHERE? Sheraton Hotel, Overland Park, KS (Kansas City metro area) HOW DO I REGISTER? Click on the following links: ONLINE Registration for the conference <[https://www.dce.ksu.edu/cgi-bin/conf/ecological\\_genomics.cgi](https://www.dce.ksu.edu/cgi-bin/conf/ecological_genomics.cgi)> ONLINE Reservations for the Sheraton Hotel <<http://www.starwoodmeeting.com/-StarGroupsWeb/booking/reservation?id05175165&key479>> (Deadline for a guaranteed room rate of \$89 is Friday, 10/13/06.) WHO IS SPEAKING? Visit this website for a complete schedule <<http://www.k-state.edu/ecogen/Schedule-2006.pdf>> . QUESTIONS? Contact [ECOGEN@ksu.edu](mailto:ECOGEN@ksu.edu) or (785) 532-3482. POSTER ABSTRACTS? We are continuing to accept abstracts for poster presentations. Participants are



invited to share their own research at poster sessions on Friday night and Saturday. Please follow the online abstract submission guidelines <<http://www.ksu.edu/ecogen/PosterAbstractGuidelines2006.htm>> .

A complete brochure and Symposium schedule can be downloaded by clicking on the Symposium Information website <<http://www.ksu.edu/ecogen/symp2006.html>> . Links for online Conference Registration and Hotel Reservations are also posted on the website.

Please share this announcement with colleagues and students who are interested in learning more about the emerging field of Ecological Genomics.

“Ecology in Genes, Genes in Ecology” **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 nimety?” 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, “The geographic scale of adaptation in annual 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”

Funding for this symposium is provided by Kansas State University.

Ecological Genomics Institute Kansas State University, Division of Biology 116 Ackert Hall, Manhattan, KS 66506-4901 (785) 532-3482, [www.ksu.edu/ecogen](http://www.ksu.edu/ecogen) dmerrill@ksu.edu

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## Manchester EvolBiol Mar29-30

—————MASAMB 2007: Call for Submissions—————  
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The annual Mathematical and Statistical Aspects of Molecular Biology (MASAMB) meeting will take place in Manchester on March 29-30, 2007.

See <http://www.cs.manchester.ac.uk/ai/masamb07/> for details.

With participants from mathematics, statistics, computer science, bioinformatics, biology and related fields, the MASAMB meetings provide an intimate setting for exchange of ideas in methodological and applied research. Research students and scientists newly entering the field of genomic research are particularly welcome.

Likely topics for sessions this year are phylogenetics and comparative genomics, microarrays and functional genomics, biological networks and systems biology. We also welcome contributions from any other areas where mathematical and statistical techniques are being applied to important problems in molecular and cell biology.

To be considered for a talk or poster authors should submit a one page abstract describing their research. This abstract will be used to select presentations and should provide an overview of the research objectives, methods and results.

Important dates are:

Abstract Submission: January 19 Author Notification: February 2 Registration ends: March 1 Conference: March 29-30

Further details, along with instructions for abstract submission and registration, are provided on the above conference website.

MASAMB Programme Committee

Magnus Rattray, University of Manchester, UK Simon Whelan, University of Manchester, UK Frank Bruggeman, University of Manchester, UK Nick Goldman, European Bioinformatics Institute, UK Des Higgins, University College Dublin, Ireland

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## Manchester PopGenet Jan9-12 Registration

Registration is now open for the Population Genetics Group meeting to be held in Manchester from 9th to 12th January 2007. The website is: <http://www/bioinf.man.ac.uk/PopGroup2006/> The plenary speakers for this year’s meeting are Mohamed Noor (speciation), Ken Wolfe (genome evolution) and Michael Bruford (conservation genetics).

The deadline for registration is 26th November 2006. A

late booking fee (£20) will be incurred after that date. For those of you wanting the budget option i.e. sharing a room, please book early to avoid disappointment.

In case anyone should be unaware of the delights of Manchester (pubs, bars, nightlife, music, shopping, restaurants, historical buildings, lively atmosphere, theatre, opera, football, etc, etc, in addition to hosting a conference on population genetics), then check out these websites:

<http://www.visitmanchester.com/> <http://www.visitenglandsnorthwest.com/-displaypage.asp?page=27>

Please direct any questions to [cathy.walton@manchester.ac.uk](mailto:cathy.walton@manchester.ac.uk)

Cathy Walton

[Catherine.Walton@manchester.ac.uk](mailto:Catherine.Walton@manchester.ac.uk) Catherine.Walton@manchester.ac.uk

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## RoyalSocietyLondon ComparativeGenomics Nov10 2

The Genetics Society Autumn Meeting Comparative Genomics and Diversity Friday 10th November, 2006, The Royal Society, London

Scientific Programme 09.30 Registration and Coffee

10.00 Welcome & Introduction to Symposium. Ewan Birney (European Bioinformatics Institute, UK)

Session 1. Chair: Julian Parkhill (The Sanger Institute, UK)

10.10 Comparative genomics of the alpha-Proteobacteria Siv Andersson, (University of Uppsala, Sweden)

10.50 Comparative genomics of protozoa and insights into pathogenesis. Matt Berriman, (Sanger Institute, UK)

11.30 Tea/Coffee

Session 2. Chair: Julian Parkhill (The Sanger Institute, UK)

11.50 Neglected animal genomes Mark Blaxter, (University of Edinburgh, UK)

12.30 Interpreting the function of evolutionarily constrained sequences Elliott Margulies, (National Human Genome Research Institute, USA)

13.10 LUNCH

Session 3. Chair: Jane Rogers (The Sanger Institute, UK)

14.20 Primate comparative genomics Svante Paabo, (Max Planck Institute for Evolutionary Anthropology, Germany)

15.00 GENETICS SOCIETY MEDAL LECTURE

Comparative genomics of *Drosophila* Michael Ashburner, (University of Cambridge, UK)

16.00 Tea and Coffee

Session 4. Chair: Ewan Birney (European Bioinformatics Institute, UK)

16.20 Comparative genes and hyper-unstable genomes in flowering plants Jeff Bennetzen, (University of Georgia, USA)

17.00 A genetic analysis of mouse Chr 11: essential genes, functions and linkage conservation Monica Justice, (Baylor College of Medicine, USA)

17.40 Evidence for positive selection in non-coding sequence Chris P Ponting, (University of Oxford, UK)

18.20 WINE RECEPTION

Registration is available at [www.genetics.org.uk](http://www.genetics.org.uk) Brian Charlesworth <[brian.charlesworth@ed.ac.uk](mailto:brian.charlesworth@ed.ac.uk)>

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## SanteFe EncouragingEvolBiol Oct3

Please join us in Santa Fe at the ASLO Water Rocks! Meeting for a special session. We are interested in bringing a diverse group of scientist together. Please read the description below and contact any one of the session chairs with questions. There are opportunities for oral as well as poster presentations. We strongly encourage evolutionary biologists to submit an abstract.

NOTE: ABSTRACT SUBMISSION DUE OCT. 3, 2006. To submit please visit: <https://www.sgmeet.com/aslo/santafe2007/startprocess.htm>

Title: SS27 Trace Metals, Microbial Processes, and Biogeochemical Cycles through Space and Time

Organizers - Kathy Barbeau, Scripps Institution of Oceanography, UC San Diego, [kbarbeau@ucsd.edu](mailto:kbarbeau@ucsd.edu) Alison Butler, Dept. of Chemistry and Biochemistry, UC Santa Barbara, [butler@chem.ucsb.edu](mailto:butler@chem.ucsb.edu) Felisa Wolfe-Simon, Arizona State University, [fwolfe@asu.edu](mailto:fwolfe@asu.edu)

Invited Speakers: Francois M. M. Morel, Dept. of Geosciences, Princeton University Ariel Anbar, School of Space and Earth Exploration and Dept. of Chemistry and Biochemistry, Arizona State University

Trace metals play an important role in structuring aquatic microbial communities by virtue of their function as essential micronutrients and toxins. Modern environments show marked spatial variability in trace metal bioavailability, and over geologic time scales changes in Earth's redox state have dramatically affected trace metal geochemistry. Both of these gradients are hypothesized to constrain the selection of elements for biological usage in microbial communities; however, the interaction between bioinorganic and environmental chemistry is only beginning to be understood, and due to the complex set of feedback cycles involved a multidisciplinary approach is warranted. Evidence from the rock record examined synergistically with physiological and genomic data on extant organisms will be required to fully appreciate and understand the evolution of bioinorganic chemistry, including the modern employment of novel metalloenzymes (e.g. utilizing metals such as Ni, W, Cd, V). Current studies of trace elements and their biogeochemical cycles are taking advantage of molecular-level knowledge of trace element speciation, new stable isotope analytical techniques, and increasingly sophisticated field incubation methods. At the same time, the availability of partial and complete genomic information for model organisms and microbial assemblages is enabling researchers to elucidate the function of trace elements at the organism and ecosystem level. We invite a wide range of papers, with an aim to engage researchers from diverse fields interested in synthesis of the information in this emerging field, which embraces biochemistry, paleoceanography, molecular genomics, inorganic chemistry, microbiology, and geochemistry. Topics will include metal speciation and bioavailability, biogenic metal chelating agents, metalloenzymes, metals as limiting micronutrients or toxins, the role of microbes in trace element transformations, and genomic studies of metal function, acquisition or cellular homeostasis.

Thanks and I look forward to your submissions, Felisa Wolfe-Simon

Felisa Wolfe-Simon, PhD NSF Postdoctoral Research Fellow Metallomics Laboratory Department of Chemistry and Biochemistry Arizona State University P.O. Box 871604 Tempe, AZ 85287-1604 lab: 480-965-7570 fax: 480-965-2747 [www.ironlisa.com](http://www.ironlisa.com) [fwolfe@asu.edu](mailto:fwolfe@asu.edu)

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## Seattle EvolSalmon Dec7

Evolutionary Changes and Salmon: Consequences of anthropogenic changes for the long-term viability of Pacific salmon and steelhead

A Symposium

7 December 2006 Seattle, WA

A great deal of effort (and money) has been expended in evaluating the anthropogenic factors that have contributed to the widespread declines of anadromous Pacific salmonids. With few exceptions, however, these efforts have focused on ecological/demographic effects, and relatively little attention has been paid to the evolutionary response of salmon to anthropogenic change. This is unfortunate, because any changes to the ecosystems that salmon inhabit will alter the selective regimes they experience and can be expected to elicit an evolutionary response. What is not clear is the nature and magnitude of these evolutionary changes and the consequences they have for long-term viability of natural populations of these species, which play such an important role in marine and terrestrial ecosystems as well as in human societies. The Symposium will bring together top salmon biologists and top evolutionary biologists to explore this challenging topic. The meeting is sponsored by the NOAA Fisheries Northwest Fisheries Science Center and will end with a hosted reception and poster session. Contributed posters are solicited on three general themes: 1) The nature and extent of anthropogenic changes that affect salmon and their ecosystems; 2) Data for salmon that provide insights into their potential for evolutionary change; 3) Case studies from other organisms that demonstrate an evolutionary response to anthropogenic change. Posters on other related topics also will be considered. If you are interested in presenting a poster at the Symposium, submit an abstract (<200 words) by November 10 to Robin Waples ([robin.waples@noaa.gov](mailto:robin.waples@noaa.gov) <<mailto:robin.waples@noaa.gov>>). You will be notified soon afterwards whether the poster is accepted. Please contact Robin if you have any questions. More information about the meeting and how to register can be found at the following website: <http://www.regonline.com/108983>. For questions about registration or logistics, contact Tara Torres ([tara@ucar.edu](mailto:tara@ucar.edu) <<mailto:tara@ucar.edu>>; 303-497-8694).

[paul.moran@noaa.gov](mailto:paul.moran@noaa.gov) [paul.moran@noaa.gov](mailto:paul.moran@noaa.gov)

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## Switzerland FungalSymbiontEvol Apr29-May4

Dear Colleagues, 12 October 2006

We have organized a meeting on the Population and Evolutionary Biology of Fungal Symbionts that will occur in spring next year in Switzerland. The meeting will be limited to 100 participants and approximately 50 places remain open. More information is presented on the email attachment and on our web site, [http://www.path.ethz.ch/news/conferences/2006\\_ascona/](http://www.path.ethz.ch/news/conferences/2006_ascona/). Registration is now open and the remaining places will be filled on a first-come, first-served basis. Please register on the web site as soon as possible if you want to attend. Please feel free to pass along this information to colleagues who may be interested in this topic.

Best wishes,

Bruce

Many fungi are symbionts that form mutualistic associations with plants and animals. Plant examples include lichens, mycorrhizae, and leaf and stem endophytes. More than 80% of all plants are mycorrhizal, with the fungal partner obtaining carbon from the plant and contributing to the plant phosphate and other nutrients needed for growth. Leaf and stem endophytes protect the plants they inhabit from herbivory through production of alkaloid secondary metabolites and also can affect flowering and other aspects of plant reproduction. Mutualistic animal associations include the attine ants that farm fungi as their primary source of nutrition. Fungal associations can also be antagonistic, including many important plant pathogens, such as rusts, smuts, and the forest pathogens that cause Dutch elm disease and chestnut blight. The amphibian chytrid *Batrachochytrium dendrobatidis* is thought to be responsible for the recent alarming decline in frog populations worldwide, while insect-infecting fungi such as *Beauveria bassiana* are already used as biocontrol agents to manage insect populations and have recently been proposed to control the spread of malaria-transmitting mosquitos. Other fungi such as *Pneumocystis*, *Coccidioides*, and *Cryptococcus* parasitize humans and have increased in importance due to the increase in patients with suppressed immune systems. Commensal fungi include species such as *Candida albicans* that commonly inhabit the gastrointestinal tract of humans, but occa-

sionally become pathogens. Similarly, most plant roots are colonized by commensal strains of *Fusarium oxysporum*, but occasionally some of these strains evolve to become pathogenic. PCR-amplification of environmental samples using fungus-specific primers has shown that many more species of fungi live in intimate associations with plants, but we don't know what their function is, or whether they are mutualists, commensals, or antagonists in their hosts. It is clear that many fungi form symbioses with other eukaryotes and that many of these symbioses are important in the framework of ecology, agriculture, and medicine.

Bruce McDonald Plant Pathology Institute of Integrative Biology, Zurich (IBZ) ETH Zurich, LFW B16 8092 Zurich Switzerland

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<http://www.path.ethz.ch> Population Genetics of  
 Plant Pathogens: <http://www.apsnet.org/education/AdvancedPlantPath/Topics/PopGenetics/top.htm>  
 Bruce McDonald <[bruce.mcdonald@agrl.ethz.ch](mailto:bruce.mcdonald@agrl.ethz.ch)>

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## Toronto CSEE SCEE May17-20

### FIRST ANNOUNCEMENT

Canadian Society of Ecology and Evolution (CSEE) Annual Meeting, Toronto, May 17-20, 2007

We are pleased to announce that the second CSEE annual meeting will be held over three and a half days from May 17-20, 2007 at Victoria College in the University of Toronto. There will be 3 plenary talks, 3 symposia, 132 contributed talks, 2 poster sessions, and rooms for evening workshops. We expect about 500 delegates. More information can be found at: <http://www.eeb.utoronto.ca/csee/index.html> In addition, CSEE is launching a contest to find a logo representing the Society (see <http://www.ecoevo.ca/en/findlogo.htm>). The contest is open to graduate students and post-doctoral fellows who are members of the Canadian Society for Ecology and Evolution. The First Prize is an award of \$500 in support of research or travel expenses for attending the CSEE meeting.

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### PREMIÈRE COMMUNICATION

Réunion annuelle de la Société Canadienne d'Écologie

et d'Évolution (SCEE), Toronto, 17-20 mai 2007.

La SCEE a le plaisir d'annoncer qu'elle tiendra sa deuxième réunion annuelle au Victoria College de l'Université de Toronto du 17 au 20 mai 2007. Cette réunion inclura 3 présentations plénières, 3 symposiums, 132 présentations libres, 2 sessions de présentations par affiches et des locaux pour la tenue d'ateliers en soirée. Nous prévoyons accueillir environ 500 délégués. Vous trouverez plus d'information sur <http://www.eeb.utoronto.ca/csee/fr/index.htm> En plus, la SCEE annonce la tenue d'un concours afin de trouver un logo représentant la Société (<http://www.ecoevo.ca/fr/trouvezlogo.htm>). Ce concours est ouvert aux étudiants gradués et aux stagiaires post-doctoraux qui sont membres de la Société Canadienne d'Écologie et d'Évolution. Le premier prix est d'une valeur de 500\$, pour supporter des travaux de recherche ou dépenses de voyage afin d'assister à la conférence de la SCEE.

"Sarah P. Otto" <[otto@zoology.ubc.ca](mailto:otto@zoology.ubc.ca)>

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### UCLosAngeles IntlSummitEvolChange Feb8-10 3

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, registration and to submit an abstract for a poster go to:

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

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

Louis Bernatchez

Titulaire de la Chaire de recherche du Canada en Génomique et Conservation des Ressources Aquatiques

Département de biologie Pavillon Charles-Eugène Marchand Université Laval, Quebec QC G1K 7P4 Canada

Tél: 418 656-3402 Fax: 418 656-2043 Courriel: [Louis.Bernatchez@bio.ulaval.ca](mailto:Louis.Bernatchez@bio.ulaval.ca) Web: <http://www.bio.ulaval.ca/louisbernatchez/>

[Louis.Bernatchez@bio.ulaval.ca](mailto:Louis.Bernatchez@bio.ulaval.ca)

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### UMassAmherst NEMEB2006 Nov4 Deadline

REMINDER: The registration deadline for NEMEB XVII (New England Molecular Evolutionary Biologists meeting 2006) is midnight WEDNESDAY Oct 18. All contributed talk and poster titles must be submitted before the deadline to be included in the conference. No abstract is required.

Registration is online at the following site: <http://brcr.bio.umass.edu/nemeb2006/node/3> All others who plan to attend should also register by the deadline. There is no registration fee.

NEMEB XVII will be held at the University of Massachusetts in Amherst on Saturday, November 4, 2006.

Invited talks:

Daniel Weinreich, Brown University, Finding Darwin in the details: simple questions in molecular evolution.

Antónia Monteiro, Yale University, Evolution of a complex trait: lepidopteran eyespots – homology vs. co-option.

Peg Riley, University of Massachusetts Amherst, Applying ecological and evolutionary theory to meet the challenge of antibiotic resistance.

Matthew Meselson, Harvard University, Why does sexual reproduction exist?

For more information, please see the website:

<http://brcr.bio.umass.edu/nemeb2006/>

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

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## UMichigan YoungSci Mar10

Speaker Nominations Sought Young Scientists Symposium 2007, University of Michigan

The Department of Ecology and Evolutionary Biology at the University of Michigan seeks nominations for its third annual Young Scientists Symposium to be held on March 10, 2007. The annual symposium, supported by Dr. Nancy Walls and the College of Literature, Science and the Arts, brings together outstanding young scientists from throughout the United States to focus on a particular theme. The theme for the 2007 symposium is Evolutionary Ecology.

One major goal of the symposium is to highlight the work of young scientists who are poised to make significant contributions to the development of their fields. Speakers must be early in their scientific careers, generally finishing graduate students or post-doctoral scholars. We expect to invite about eight speakers to the 2007 symposium, for whom we will cover the expenses of travel, food, and accommodation. As well as giving research talks at the symposium, invited speakers will be asked to judge a graduate student poster competition.

Speakers will be selected based on nominations from members of the scientific community. There are two parts to the nomination process. First, a nominator must send a one-page letter to the committee, describing the contributions that the nominee is making to research in Evolutionary Ecology. The nomination letter should also address the ability of the nominee to present a lively and engaging seminar. Second, the nominee should send curriculum vitae and a seminar abstract to the committee. All materials should be sent by email to YSS07@umich.edu by October 31, 2006. The Department of Ecology and Evolutionary Biology at the University of Michigan strongly encourages nominations of women and minorities. Questions about the symposium or the nomination process should be sent to the email address above.

<http://www.lsa.umich.edu/eeb/> cwdick@umich.edu

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## UPorto Portugal EvolBiol Dec21

Following the success, last year in Lisbon, of the 1st National Meeting of Evolutionary Biology, bringing together Portuguese evolutionary biologists, working in Portugal and abroad,

the 2nd National Meeting of Evolutionary Biology will be held on the 21st of December 2006, in the Campus Agrário de Vairão, Centro de Investigação e Biodiversidade e Recursos Genéticos (CIBIO; <http://cibio.up.pt/>) da Universidade do Porto.

The organization of this year's event is in the hands of Nuno Ferrand (CIBIO), with collaboration from Jorge Rocha (Instituto de Patologia e Imunologia Molecular - IPATIMUP; <http://www.ipatimup.pt/>) and Jorge Vieira (Instituto de Biologia Molecular e Celular - IBMC; <http://www.ibmc.up.pt/>).

The organizers are open to suggestions regarding the program and welcome volunteers willing to help organize the event. Suggestions and questions may be posted on the electronic group [http://groups.google.com/group/biologia\\_evolutiva](http://groups.google.com/group/biologia_evolutiva) or sent to [biologia.evolutiva@gmail.com](mailto:biologia.evolutiva@gmail.com).

For registration, send your name, institution, and study area to [biologia.evolutiva@gmail.com](mailto:biologia.evolutiva@gmail.com)

Lastly, please forward this message to all potentially interested participants (there is also a meeting poster, in Portuguese, at <http://andrelevy.net/enbe2.cartaz.pdf>)

Thank you – [http://groups.google.com/group/biologia\\_evolutiva/](http://groups.google.com/group/biologia_evolutiva/) [http://andrelevy.net/biologia\\_evolutiva.htm](http://andrelevy.net/biologia_evolutiva.htm) – André Levy Paz, Peace, Pax, Salaam, Shalom, He Ping, Shanti, Mir

<http://andrelevy.net> <http://andrelevy.net> [andrelevy@gmail.com](mailto:andrelevy@gmail.com)

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## VenturaBeachCA QuantGenetGenomics Feb18-23

The semi-annual Gordon Conference on Quantitative Genetics and Genomics will take place February 18-

23, 2007 at the Ventura Beach Marriott, Ventura, California. Conference participants consistently rank this as the best meeting that they attend. We emphasize cross-disciplinary communication, cutting edge work, and a lot of fun (including the traditional wine-country tour). The 2005 meeting sold out, so count on registering early.

<http://www.grc.org/programs/2007/quantgen.htm>

Quantitative genetics aims to link phenotypic variation to its underlying genetic basis in order to better understand and predict genetic composition and long term change within natural, agricultural, and human populations. Traditionally built upon statistical abstractions of genetic effects, the field is now rapidly advancing by making use of recent developments in genetic technology to reveal explicit links between genes and complex phenotypes, and therefore serves as a focal point bringing together many emerging areas of genetics, genomics, statistics, and biotechnology. This synthesis is already having a large impact on the areas of evolutionary biology, plant and animal breeding, and the analysis of human disease. The strength of the Gordon Conference on Quantitative Genetics and Genomics has historically been the bringing together of leaders in each of these fields to explore areas of shared interest and cutting edge developments with the potential to affect all researchers within the broad field of quantitative genetics.

Building upon the tremendous success of our conferences in recent years, we will again focus on cutting edge developments in the field, especially highlighting whole genomic approaches to marker analysis, association mapping, transcriptional profiling, and statistical analysis. As the field turns its attention from loosely mapped chromosomal regions to specific genetic elements, elucidation of gene function in a quantitative genetic context becomes central, and these approaches will also be highlighted here. Finally, comprehensive solutions to understanding genetic basis of complex variation require large-scale collaborations among researchers, and several exemplars of these efforts will be presented.

We look forward to meeting you in Ventura, CA in February of 2007! Your continued participation and support of this conference is greatly appreciated. As you will see from the schedule, afternoons are free for adventure and discussion, while poster sessions will be held in the evening.

Lastly, expenses for these meetings are rapidly climbing. If you or your institution/company are interested in making a financial contribution to the chair's fund (to support registration, travel, and social activities),

please contact Patrick Phillips ([pphil@uoregon.edu](mailto:pphil@uoregon.edu)).

See you in Ventura! Patrick Patrick and Daniel Pomp

Program: \* Two Decades of Quantitative Genetics and Genomics (Patrick Phillips / Eugene Eisen) \* Keynote: Genetic regulation of development (Elliot Meyerowitz) \* Genome-wide Association Mapping (Richard Mott / Magnus Nordberg) \* Gene Expression and Mapping (Leonid Krugliak / Eric Schadt) \* Statistical Genomics (Rebecca Doerge / David Allison / Manolis Dermitzakis) \* Collaborative Crosses (Ed Buckler / Elisa Chesler) \* Selection and Mapping in Animal Models (Daniel Pomp / Jerry Taylor / Archie Clutter) \* Selection and Mapping in Natural Populations (Hopi Hoekstra / Andy Clark) \* Quantitative Genomics of Behavior (Trudy Mackay / Charles Whitfield) \* Quantitative Genetics and Species Differences (John Willis / David Houle) \* Variation in Developmental Systems (Fred Nijhout / William Cresko)

A full program should be available in a few weeks.

Patrick C. Phillips, Professor of Biology Center for Ecology and Evolutionary Biology  
Email: [pphil@uoregon.edu](mailto:pphil@uoregon.edu) Phone: (541) 346-0916 | FAX (541) 346-2364 Address: 5289 University of Oregon Eugene, OR 97403-5289 USA Web: Lab <http://www.uoregon.edu/~pphil> EvoNet <http://www.EvoNet.org> CEEB <http://evolution.uoregon.edu> IGERT <http://evodevo.uoregon.edu> [pphil@uoregon.edu](mailto:pphil@uoregon.edu)

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## Wageningen Adaptive Behaviour Nov3

International Symposium on Ecological Implications of Adaptive Behavior, November 3, 2006, Wageningen, The Netherlands

How does adaptive behavior affects the structure and evolution of ecological communities? Behavioral flexibility in organisms has a major impact on both their ability to persist in an environment and their evolutionary development in that environment. Behaviors that affect species interactions are particularly important for predicting the abundance of species within biological communities. Understanding these behaviors can be essential in applied ecology, conservation biology and fisheries management. Other behaviors that act within a species, such as mate choice, can be important in processes such as speciation and density de-

pendent population regulation.

The symposium will address the ways in which behavioral components of interactions can be measured and modeled. It will explore the predictions of models that incorporate adaptive behavior, using problems ranging from the change in ecosystem functioning with global warming to the optimal harvesting of biological resources. It will also highlight the variety of unexplored problems associated with the interactions among behavioral, ecological, and evolutionary processes.

Organizer Dr. Wolf Mooij (Netherlands Institute of Ecology, w.mooij@nioo.knaw.nl)

Speakers Peter Abrams (University of Toronto) Matthijs Vos (Netherlands Institute of Ecology) Don DeAngelis (University of Miami) Hanna Kokko (University of Helsinki) Franjo Weissing (University of Groningen) Jaap van der Meer (Netherlands Institute of Sea Research) John Fryxell (University of Guelph)

Location WICC, Wageningen, The Netherlands

Date November 3, 2006

Information and registration <http://www.currentthemesinecology.nl> Ph.D. course on Consumer-Resource Interactions The symposium will be followed by an international Ph.D. course on Consumer-Resource Interactions. The course will take place in Zeist, The Netherlands, during November 5-9. For more info on the course go to <http://www.rug.nl/biologie/onderzoek/onderzoekScholen/functionalEcology/phdCourses/consumerResourceInteractions> (or search Consumer-Resource Interactions with Google)

W.Mooij@nioo.knaw.nl W.Mooij@nioo.knaw.nl

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## YaleU BayesianInvasion Oct28

Announcing a Special Symposium!

We would like to invite all interested parties to attend the forthcoming "Bayesian Invasion" symposium. The event features presentations by leading experts in Bayesian phylogenetic research that describe exciting new developments in Bayesian phylogeny estimation and phylogeny-based inference methods.

The symposium will be held on the Yale campus between 10AM-6:00PM on Saturday October 28, 2006, in the main auditorium of Linsly- Chittenden Hall (room 102), located at 63 High Street in New Haven.

All are welcome and registration is free. Because space is limited, early registration is strongly encouraged. For more information and online registration, please visit the symposium web site: <http://www.phylodiversity.net/bmoore/-symposium/symposium.html>. Brian R. Moore Department of Ecology and Evolutionary Biology Yale University 165 Prospect Street New Haven CT 06520 Phone: 203-432-7168 Fax: 203-432-2374 Web: <http://www.phylodiversity.net/bmoore/> brian.moore@yale.edu

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## ZhejiangU China QuantGenetics Aug18-24

The Second Announcement:

The 3rd International Conference of Quantitative Genetics Zhejiang University, Hangzhou, China August 18-24, 2007 (<http://ibi.zju.edu.cn/icqg>)

The 3rd International Conference on Quantitative Genetics (ICQG3) will be held during August 18-24, 2007 hosted by Zhejiang University in Hangzhou, China. As with the 1st ICQG in Ames, Iowa in 1976 and the 2nd ICQG in Raleigh, North Carolina in 1987, the 3rd Conference will be a comprehensive survey of the current status of quantitative genetics. New technologies in areas ranging from genomics and molecular genetics to statistics are providing both opportunities and challenges for our understanding of the genetic basis of quantitative traits in natural populations, the evolution of characters, and use for plant and animal breeding.

The outline program and list of speakers is appended. The Conference will be held in an international hotel, the Dragon Hotel, in the downtown of Hangzhou.

Zhejiang University is one of the few top-rank research institutions in China. It is a comprehensive institute with a full range of disciplines. With a faculty capable of top-level and large-scale research and a high proportion of graduate students, the university has been undertaking projects, both basic and applied, to address pressing issues and challenges of today and of the future. The City of Hangzhou is one of the seven ancient capital cities of China. It has a population of 3.72 million and has a recorded history spanning 2100years. Marco Polo described Hangzhou as the "Most beautiful, magnificent, and heavenly city in the world." Located in China's most developed southeast coastal area,

Hangzhou is renowned for its thriving economy, colorful culture and beautiful landscape, especially its famed West Lake and Tea House.

The Conference welcomes participants to submit contributed papers. Only an abstract is needed and is to be submitted at registration for the conference. A limited number of contributed papers will be selected for oral presentation in an appropriate session of the conference. Accompanying persons are also welcomed, and a special program for them will be arranged.

Organizers Academic Chairs : Bruce Weir, University of Washington, Seattle, USA (bsweir@u.washington.edu) William Hill, University of Edinburgh, Edinburgh, UK (w.g.hill@ed.ac.uk) Junyi Gai, Nanjing Agriculture University, Nanjing, China (sri@njau.edu.cn) Changqin Wu, China Agriculture University, Beijing, China (chxwu@public.bta.net.cn) Organizing Chairs: Jun Zhu, Zhejiang University, Hangzhou, China (jzhu@zju.edu.cn) Zhao-Bang Zeng, North Carolina State University, Raleigh, USA (zeng@stat.ncsu.edu) Local Organizer: Zhejiang University

Invited speakers Laura Almasy (San Antonio, TX, USA) Linkage analysis for quantitative traits using whole genome data Leif Andersson (Uppsala, Sweden) Genes for quantitative traits in domestic animals Ed Buckler (Ithaca, NY, USA) Dissection of complex traits in maize Lon Cardon (Oxford, UK) Association mapping of quantitative traits Andy Clark (USA) Evolutionary quantitative genetics of gene regulatory networks Mike Goddard (Melbourne, Australia) Genomic selection Fred Hospital (Gif-sur-Yvette, France) Challenges for effective marker assisted selection in plants Jean-Luc Jannink (Ames, IA, USA) Design and analysis for QTL detection in plant populations Pe-

ter Keightley (Edinburgh, UK) Analysis and implications of mutational variation Mark Kirkpatrick (Austin, TX, USA) Evolutionary quantitative genetics Ning Li (Beijing, China) Genomics in quantitative genetic analysis Trudy Mackay (Raleigh, NC, USA) The genetic architecture of complex behaviours: Lessons from *Drosophila* Eric Schadt (Seattle, WA, USA) Reconstructing genetic networks to identify subtypes of disease and key regulators of disease and their associated network components Pak Sham (Hong Kong) Application of genome-wide SNP data for uncovering pairwise relationships and quantitative trait loci Daniel Sorensen (Foulum, Denmark) Developments in statistical analysis in quantitative genetics Hamish Spencer (Otago, New Zealand) Effects of genomic imprinting on quantitative traits Peter Visscher (Brisbane, Australia) Utilisation of whole genome mapping to partition genetic variation Bruce Walsh (Tucson, AZ, USA) Quantitative Genetics, version 3.0: Where have we gone since 1987 (last congress) and where are we headed? Zhao-Bang Zeng (Raleigh, NC, USA) Statistical issues of gene expression QTL analysis Qifa Zhang (Wuhan, China) Genetic basis of heterosis in crop plants Qin Zhang (Beijing, China) QTL mapping in animals Jun Zhu (Hangzhou, China) Mixed model methods for analyzing complex traits

Programs 08/19 Registration and Reception Academic program The Conference will run as single sessions. Each session is composed of 90 minutes presentation from invited and contributed speakers. 08/20 Conference session (morning and afternoon).

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## BinghamtonU Evol

Graduate Student Positions in Ecology, Evolution and Behavior at Binghamton University

The Department of Biological Sciences at Binghamton University is recruiting qualified applicants for the M. S. and Ph. D. programs in Ecology, Evolution and Behavior (EEB). Areas of research emphasis could include ANIMAL BEHAVIOR (including the evolution of parental care, helping behaviors and mating systems), POPULATION AND ECOSYSTEM ECOLOGY (including invasive species, predator-prey interactions, and biogeochemistry), SYSTEMATICS (including paleobotany, phylogenetic reconstruction and evolutionary development), and EVOLUTIONARY GENETICS (including host-symbiont coevolution, human population genetics and quantitative genetics).

Several faculty are actively recruiting graduate students:

Anthony Fiumera (<http://bingweb.binghamton.edu/~afiumera/home.html>) Andrew Merriwether (<http://anthro.binghamton.edu/Faculty/Merriwether.html>)

along with many others. Visit the departmental website at (<http://biology.binghamton.edu/>) for more information about faculty research interests and please contact the faculty member you are interested in working with before beginning the application process.

Students will have access to the Nature Preserve (<http://naturepreserve.binghamton.edu/>) the E.W. Heier Teaching & Research Greenhouse (<http://biogreenhouse.binghamton.edu/>) and a Molecular Biology Core Facility. EEB students will also have the opportunity to participate in the EvoS program (<http://bingweb.binghamton.edu/~evos/>), a campus-wide Evolutionary Biology initiative designed to promote interactions among members from a variety of university departments. Financial aid may be available for highly

qualified applicants through either Graduate Teaching or Research Assistantships.

Binghamton University is a doctoral granting in the SUNY system and is consistently ranked as one of the top 50 public universities in the nation by U.S. News & World Reports. Located in the Southern Tier of upstate New York, Binghamton University offers quick access to a variety of outdoor activities yet is only a few hours away from both New York City and Philadelphia.

Visit the Graduate School website for information about the application process. (<http://gradschool.binghamton.edu/ps/gradapplication.asp>).

If you have any questions, please contact Dr. Sandra Micheal (Graduate Committee Chairperson) ([smichael@binghamton.edu](mailto:smichael@binghamton.edu)).

[afumera@binghamton.edu](mailto:afumera@binghamton.edu) [afumera@binghamton.edu](mailto:afumera@binghamton.edu)

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## ClemsonU Evol

GRADUATE OPPORTUNITIES IN ECOLOGY AND EVOLUTIONARY BIOLOGY

The Department of Biological Sciences at Clemson University is recruiting doctoral students for its emphasis area in ecology and evolutionary biology. Annual stipends of \$17,000 are guaranteed for 5 years (TAs in academic semesters, RAs in summer). Individual faculty may augment these stipends from grant support. In addition, applicants are eligible to compete for first-year fellowships from the graduate school of \$10,000 or \$15,000 in addition to the annual stipend. The ecology and evolutionary biology area includes six new faculty (M. Childress, S. DeWalt, B. Hersh, P. Marko, A. Moran, and K. Paul), all seeking new PhD students, and several established faculty (R. Blob, M. Ptacek, C. Rice) who are currently recruiting new students for their labs. For more information regarding the ecology and evolutionary biology emphasis area in the Bi-



ological Sciences graduate program at Clemson, please visit our web site: (<http://www.clemson.edu/biosci/graduate/>). Deadline for application of prospective students to be considered for graduate school fellowship competition is December 15th, 2006.

For more information about graduate faculty in ecology and evolution at Clemson, please visit: <http://www.clemson.edu/biosci/graduate/interests.htm> For Rick Blob: <http://people.clemson.edu/~rblob/>; rblob@clemson.edu; Biomechanics and the evolution of animal function; animal locomotion; comparative vertebrate anatomy, physiology, and functional morphology; herpetology; vertebrate paleontology.

For Michael Childress: <http://people.clemson.edu/~mchildr/>; mchildr@clemson.edu; Behavioral ecology, marine ecology, comparative sociobiology, invertebrate zoology, animal behavior, communication, evolutionary biology.

For Saara DeWalt: <http://people.clemson.edu/~saarad/>; saarad@clemson.edu; Population ecology and genetics of invasive plants; community ecology of woody plants with emphasis on lianas (woody vines); tropical ecology.

For Brad Hersh: <http://people.clemson.edu/~bhersh/>; bhersh@clemson.edu; Development and evolution of animal shapes, especially insect wings; molecular mechanisms of gene regulation during Drosophila development; regulation of target genes by Hox proteins.

For Peter Marko: <http://people.clemson.edu/~pmarko/>; pmarko@clemson.edu; Molecular population biology, biogeography, and conservation genetics.

For Amy Moran: <http://people.clemson.edu/~moran/>; moran@clemson.edu; Ecology and evolution of marine organisms; physiological and morphological adaptations of early life history stages to varying environments.

For Kim Paul: <http://www.clemson.edu/biosci/faculty/paul/>; kpaul@clemson.edu Parasite-host adaptation in African Trypanosomes; biochemistry of fatty acid metabolism; environmental sensing and regulation of lipid uptake and metabolism.

For Margaret Ptacek: <http://people.clemson.edu/~mptacek/>; mptacek@clemson.edu; Speciation; animal behavior and mating systems; population divergence in fishes; conservation genetics.

For Charlie Rice: <http://people.clemson.edu/~cdrice/>; cdrice@clemson.edu; Comparative marine immunobiology, with a special interest in the immunobiology of fishes; molecular and cellular aspects of neuroendocrine-immune interactions.

“Margaret B. Ptacek” <mptacek@CLEMSON.EDU>

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## ClemsonU phylogeography

### GRADUATE STUDENT POSITION IN PHYLOGEOGRAPHY AND COMMUNITY GENETICS

Dr. Peter Marko is seeking highly motivated graduate students to participate in a comparative phylogeography project focused on the marine flora and fauna of the north Pacific. Applicants should have strong interests in both community ecology and molecular approaches to biogeography; students will be involved in field collections, molecular genetic analyses, and potentially field experiments. Annual PhD stipends of \$17,000 are guaranteed for 5 years, and can be augmented by grant funds when appropriate. In addition, applicants are eligible to compete for fellowships from the graduate school of \$10,000 or \$15,000. For more information regarding the ecology and evolutionary biology emphasis area in the Biological Sciences graduate program at Clemson, please visit our department web site (<http://www.clemson.edu/biosci/graduate/>) and my lab web page (<http://www.clemson.edu/biosci/graduate/www.clemson.edu/biosci/faculty/marko/lab/>). Inquiries should be sent to pmarko@clemson.edu and include a CV, a statement of research interests, and contact information for three references. Screening of applicants will begin December 1, 2006.

pmarko@CLEMSON.EDU pmarko@CLEMSON.EDU

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## European Bioinformatics Inst

There is still just about time to apply for PhD studentships to work at the European Bioinformatics Institute or other EMBL sites.

The closing date is 1 November 2006, for studentships commencing in October 2007.

At the EBI, list readers might be interested to know of opportunities that exist in the research of Nick Goldman and Ewan Birney at EBI.

If you are a lecturer, please draw this to the attention of your talented undergraduate or Masters students.

EMBL PhD studentships are open to any nationals of EMBL nations. Under certain circumstances, we are also able to consider non-EMBL-nationals' applications.

Full details on the PhD programme and applications are available at this site: <http://www.embl.org/training/phdprogramme/index.html> Further details on the EBI's opportunities for PhD students are available at this site: <http://www.ebi.ac.uk/training/Studentships/> Nick Goldman

Nick Goldman tel: +44-(0)1223-492530 EMBL - European Bioinformatics Institute fax: +44-(0)1223-494468 Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SD, UK

goldman@ebi.ac.uk

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## Gatersleben Germany Apomictic Transcriptome

PhD position - Transcriptome analysis of apomictic *Hypericum perforatum*

Position begins 1st January, 2007

Location: Apomixis research group, Dept. of Cytogenetics and Genome Analysis, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), D-06466 Gatersleben, Germany

<http://www.ipk-gatersleben.de/en/02/04/01/05/>  
Contact: Dr. Tim Sharbel [sharbel@ipk-gatersleben.de](mailto:sharbel@ipk-gatersleben.de)

Project: I would like to announce a 3 year PhD position based in my research group, but funded through the IMPRS (see link below). We are studying reproduction in *St. John's wort* (*H. perforatum*), a species which can reproduce either through sex or apomixis (asexual reproduction through seed). One of the major goals of my group is to decipher the underlying changes in gene regulation which cause the switch from sexual to apomictic seed production. The project will thus involve a number of major steps, including (1) the identification of highly-expressive accessions using flow cytometric analyses of seeds; (2) the isolation of single egg cells or ovules from both sexual and apomictic accessions; and (3) a comparative transcriptome analysis of both reproductive forms using SAGE (serial analysis of gene expression) technology.

The position is funded through the International Max Planck Research Schools (<http://www.mpg.de/>-

[english/institutesProjectsFacilities/schoolChoice/ecologicalInteractions/index.html](http://english/institutesProjectsFacilities/schoolChoice/ecologicalInteractions/index.html)).

My research group is part of the Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), a very high-tech institute located near the Harz Mountains, about 2 hours south west of Berlin. Please don't hesitate to contact me if you require any further information.

Best wishes, Tim

Dr. Tim Sharbel Apomixis Research Group Dept. of Cytogenetics and Genome Analysis Leibniz Institute of Plant Genetics and Crop Plant Research (IPK) Corrensstraße 3, D-06466 Gatersleben Germany

Apomixis Group Webpage <http://www.ipk-gatersleben.de/en/02/04/01/05/> IPK Webpage [www.ipk-gatersleben.de](http://www.ipk-gatersleben.de) tel: +049 (0)39482 5608 fax: +049 (0)39482 5137

[sharbel@ipk-gatersleben.de](mailto:sharbel@ipk-gatersleben.de) [sharbel@ipk-gatersleben.de](mailto:sharbel@ipk-gatersleben.de)

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## JamesCookU Biodiversity

A number of funded PhD scholarships are available for commencement early in 2007 at James Cook University, Australia. JCU has an international reputation for many areas of research, particularly in disciplines related to the tropics. Each PhD Scholarship will provide a stipend allowance for three years: outstanding applicants may be eligible for full tuition-fee waivers. These scholarships are available to both international and domestic (Australian) students.

Project descriptions and supervisors are listed below. Applicants are encouraged to contact the listed supervisors for further details.

Applications must be submitted by October 31, 2006.

Further information on these and other scholarships can be accessed via <http://www.jcu.edu.au/office/grs/scholarships/index.html>.

1). Biodiversity and climate change: ant distribution, abundance and ecophysiology

\*Supervisors\*: Steve Williams  
([steve.williams@jcu.edu.au](mailto:steve.williams@jcu.edu.au))  
<<mailto:steve.williams@jcu.edu.au%29m>>  
Simon Robson ([simon.robson@jcu.edu.au](mailto:simon.robson@jcu.edu.au))  
<<mailto:simon.robson@jcu.edu.au>>) and Andrew

Krockenburger (andrew.krockenburger@jcu.edu.au)

2. Biodiversity and climate change: interactions between climate change, Net primary productivity and bird abundance and altitudinal distributions

\*Supervisors\*: Steve Williams (steve.williams@jcu.edu.au), Richard Pearson (richard.pearson@jcu.edu.au), Peter Franks

3). The impact of multiple stressors on benthic microalgae on the GBR coral reefs

\*Supervisors\*: \*Kirsten Heimann, JCU (Kirsten.Heimann@jcu.edu.au); Sven Uthicke, AIMS (s.uthicke@aims.gov.au <mailto:uthicke@aims.gov.au>)

4) Benthic diatoms as indicators for water quality

\*Supervisors\*: \*Kirsten Heimann, JCU (Kirsten.Heimann@jcu.edu.au); Sven Uthicke, AIMS (s.uthicke@aims.gov.au <mailto:uthicke@aims.gov.au>)

5) Climate change and the demography of reef fish assemblages

\*Supervisors\*: Mark McCormick, JCU (mark.mccormick@jcu.edu.au); Mark Meekan, AIMS (m.meekan@aims.gov.au <mailto:m.meekan@aims.gov.au>)

6. Understanding and enhancing social resilience: implications of climate change

\*Supervisors\*: Terry Hughes (JCU/ARC CoE) (terry.hughes@jcu.edu.au), Larry Fiddick (JCU) (larry.fiddick@jcu.edu.au <mailto:larry.fiddick@jcu.edu.au>), Gail Kelly (CSIRO) (gail.kelly@csiro.au), Tim Lynam (CSIRO) (tim.lynam@csiro.au)

simon.robson@jcu.edu.au

mented with molecular analyzes of gene flow, in particular directional gene flow, between populations. We are looking for a highly motivated, independent and well-qualified candidate who will work in an already established research group (see for additional information about current research).

The candidate should ideally have some past independent research experience in evolutionary ecology/biology, population genetics, conservation biology, molecular ecology or related fields in ecology/evolution. A strong interest in evolutionary biology in general, and speciation ecology in particular, is requested, and the candidate should be able to work both independently as well as in a group. Applicants should be prepared to work both in the field and in the laboratory. Experience and interest in statistics and/or mathematical modelling will be considered as extra advantages.

Information and application forms (in Swedish) can be found at:

Info: <http://www.science.lu.se/o.o.i.s/3168> Application form: [http://www.science.lu.se/upload/LUPDF/-natvet/Dokument/Ans\\_DoktAnst.pdf](http://www.science.lu.se/upload/LUPDF/-natvet/Dokument/Ans_DoktAnst.pdf) Additional information can be obtained from Erik Svensson (erik.svensson@zoekol.lu.se)

Send application form, documents regarding courses and research experience, letters of recommendation (optional) and all other documents to Kansli N, Lunds universitet, Box 118,221 00 LUND, no later than Monday 6 November 2006. Copies of all documents should be authenticated.

Best wishes/Erik Svensson

Erik Svensson <erik.svensson@zoekol.lu.se>

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## MonashU Butterflies

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## LundU EvolEcol

Dear All,

A PhD-student position in evolutionary ecology is available for application at the Section for Animal Ecology (Lund University, SWEDEN). The tentative title/topic is "Experimental studies on sexual isolation in natural populations", and model organisms will be reptiles or insects, or a combination of the two. Experimental studies on natural field populations will be comple-

We have recently been awarded funding to investigate species responses to climate change using the widely-distributed Common brown butterfly (*Heteronympha merope*) as a model. We are applying an exciting, novel combination of functional and neutral marker genetics, experimental physiology and biophysical modelling, and will compare data collected 30 years ago with contemporary data. We are seeking three strong PhD applicants to apply for PhD scholarships to work on this project at Monash University, The University of Melbourne and La Trobe University. The students will be exposed to a range of genetic, physiological and mod-

elling techniques and will all have the opportunity for extensive fieldwork.

Background and PhD project descriptions:

Climate change and habitat fragmentation are together a major threat to the continued survival of a vast number of species. Correlative bioclimatic models are often used for predicting future suitable habitats, but currently do not take into account whether species are able to colonise new regions, nor the mechanisms by which they interact with and adapt to their climatic environment. We aim to bridge the gap between genotype, phenotype and geographic distribution to improve dramatically our ability to predict the effect climate change will have on the range of a species.

Three projects are outlined below, each investigating a different aspect of the study. However, the results from each of these will be complementary in developing predictive modelling tools to apply more broadly than just our model organism. The students will therefore be encouraged to interact with the larger research group as well as to develop their own ideas about research direction and experimental design. All students will participate in extensive fieldwork along the eastern coast of Australia to collect butterfly specimens for the project.

Project 1: How have ecologically significant enzymes and wing characters responded to climate change in the Common brown butterfly?

Contacts:

1. Dr Neil Murray

School of Molecular Sciences, La Trobe University, Australia

Phone: +61 3 9479 2270 / email: n.murray@latrobe.edu.au

2. Dr Paul Sunnucks

School of Biological Sciences, Monash University, Australia

Phone: +61-3-9905-9593 / email: paul.sunnucks@sci.monash.edu.au

This project will make a comparison between classic and current data for enzymes and morphological characters likely to play important roles in climate change ecology. One major advantage of using the Common brown as a model organism is that it was extensively sampled 30 years ago by Neil Murray and Kay Pearse. Many of the sampling locations were in the vicinity of weather stations, allowing accurate correlation between changes in the distribution of these important traits and climate conditions since the last study. This project

will analyse the allele frequency distribution for ecologically significant enzymes and wing morphology characters. The data collected will be compared that from the previous study, which identified variation in these characters across the butterfly's range, correlating with temperature and rainfall variation. This comparison will be extremely powerful for two reasons: 1) we will be able to associate the changes we see over 30 years with changes in climate change during this time; and 2) we will have the potential to apply the predictive modelling tools we develop on past data to test their forecasting accuracy.

Project 2: What evolutionary processes are behind the climate change response?

Contacts:

1. Dr Paul Sunnucks

School of Biological Sciences, Monash University, Australia

Phone: +61-3-9905-9593 / email: paul.sunnucks@sci.monash.edu.au

2. Dr Melanie Norgate

School of Biological Sciences, Monash University, Australia

Phone: +61-3-9905-5680 / email: melanie.norgate@sci.monash.edu.au

Constraints on flight ability in butterflies are extremely well-studied and, importantly, a number of enzymes have been identified that are directly linked to flight ability in butterflies and other insects, including a wealth of classic work on glucose phosphate isomerase (GPI or PGI). This project investigates the functional genomics of flight ability and climate change response by examining these enzymes at the genetic level. The specific mutations responsible for different forms of the enzymes will be identified and their effect on the butterflies will be examined in two ways. The rate and extent of the enzymatic reaction catalysed by purified protein will be measured in vitro, allowing us to make a direct connection between the mutations and protein activity. In addition, the effect of the mutations will be examined in vivo by investigating ecologically relevant traits (e.g. flight ability and reproductive output) using cages and flight aviaries. The geographical distribution of the different enzyme alleles will be identified as part of Project 1 (above). These data will be assessed against neutral

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mcmaster.ca/~brian/evodir.html

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## Munich Adaptation

\* PhD and Postdoc Positions in Evolutionary Biology in Munich\*

The University of Munich, Munich Technical University and the University of Applied Sciences Weihenstephan are pleased to announce the establishment of a Collaborative Research Center under the theme Adaptation: Selection Pressures, Phenotypic Responses, Genetic Mechanisms and Resulting Differentiation. Pending final funding approval by the German Research Foundation, multiple PhD and postdoc positions (including one slot for a computer programmer) will be available. The Research Center will include 14 individual projects employing both experimental and theoretical approaches to the study of adaptation. Areas of research include population genetics, evolutionary functional genomics, QTL analysis and phenotypic evolution.

Participating faculty include:

Wolfgang Stephan, Research Center Coordinator (University of Munich) John Baines (University of Munich) Susanne Foitzik (University of Munich) Wilfried Gabriel (University of Munich) Bernhard Haubold (University of Applied Sciences Weihenstephan) Joachim Hermisson (University of Munich) Wolfgang Ludwig (Munich Technical University) Beate Nuernberger (University of Munich) Joerg Overmann (University of Munich) Martin Parniske (University of Munich) John Parsch (University of Munich) Peter Pfaffelhuber (University of Munich) Susanne Renner (University of Munich) Laura Rose (University of Munich)

PhD students will also have the opportunity to participate in a newly established Graduate Program in Evolution, Ecology and Systematics (EES) at the University of Munich. This program is supported by the Volkswagen Foundation and includes team-taught courses for entering PhD students, a student-organized external-speaker seminar series and yearly workshops and excursions.

For more information about the Collaborative Research Center, EES Program and details of the individual projects and positions available, please visit the following website:

[http://www.biologie.uni-muenchen.de/ou/-sfb\\_adaptation/index.htm](http://www.biologie.uni-muenchen.de/ou/-sfb_adaptation/index.htm)

Applications are now being accepted. Pending final approval, positions will be available starting January 1, 2007, but will remain open until filled. Applicants should specify which project(s) and position(s) (Phd or postdoc) they wish to be considered for and provide (preferably as PDF files) a CV, statement of research interests/experience and the name and contact information of 2 references. Applicants for PhD positions should also provide a transcript of their academic record. Informal inquiries and formal applications should be sent to Pleuni Pennings (pennings@lmu.de).

The University of Munich is an Equal Opportunity/Affirmative Action Employer and has an affirmative action policy for the disabled.

– Pleuni S. Pennings

\* Program Coordinator of the Munich Graduate School for Evolution, Ecology, and Systematics

\* Postdoc in theoretical evolutionary biology

Evolutionary Biology, Department Biologie II University of Munich (LMU) GroÁhaderner Str. 2 D-82152 Planegg-Martinsried

Tel: 0049 89 2180 74 234 <http://www.biologie.uni-muenchen.de/ou/theopopgen/index.htm>

pennings@zi.biologie.uni-muenchen.de skype: pleunipennings

pennings@zi.biologie.uni-muenchen.de

pennings@zi.biologie.uni-muenchen.de

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## Oulu Finland 7 PopGenet

The Finnish Graduate School in Population Genetics announces seven new positions for PhD students. The graduate school trains students in the broad area of population genetics and the students are expected complete a doctoral thesis in about four years. The students entering the school should join a research project led by one of the supervisors that are members of the school. The research teams involved, their contact addresses, and the instructions concerning the application are found at the web site <http://cc.oulu.fi/~biolwww/-PopGenSchool/>. The applications are due to October 27, 2006.

Pekka Pamilo Head of the Graduate School  
pekka.pamilo (at) oulu.fi



pekka.pamilo@oulu.fi

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## Singapore ComputationalBiosci

Nanyang Technological University (College of Engineering), Singapore

PhD in Computational Bioscience

Multiple agent models of sexual selection

Description:

We take an in-depth study of how life self-organizes and adapts to environmental changes in evolutionary biology. In particular, the project will consider how mating strategies adapt and stabilize as an evolutionary multi-player game. The objective is twofold: 1) to understand and explain why males in many higher-organisms are endowed with exaggerated courtship signals (e.g. brightly coloured feathers) which reduce their survival but are still preferred by females and 2) to use artificial life models to study how strategies evolve through the collective and coevolutionary dynamics of multiple agents acting autonomously to maximize genetic fitness. This research will be done in collaboration with the Centre for Mathematics and Physics in Life Sciences and Experimental Biology (CoMPLEX) at University College London as well as the Department of Biology at the National University of Singapore.

If you are interested please apply online at <http://www.ntu.edu.sg/-GradStudies/research+programmes/default.htm>

for a graduate programme by research (leading to a PhD), and email Dr. Tay Joc Cing at [asjctay@ntu.edu.sg](mailto:asjctay@ntu.edu.sg).

The next intake will be in January 2007.

Min Requirements: 2nd Upper Hons and above in Computer Science/ Engineering, Physics or Mathematics.

Salary: S\$1400 - 1500/mth, On-campus accomodation provided.

Type: Full time graduate student, 4 year programme.

[ucbhpom@ucl.ac.uk](mailto:ucbhpom@ucl.ac.uk) [ucbhpom@ucl.ac.uk](mailto:ucbhpom@ucl.ac.uk)

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## UBasel SexualSelection

Division of Evolutionary Biology at the Zoological Institute of the University of Basel, Switzerland

PhD position in Sperm competition, cryptic female choice and sex allocation in hermaphrodites

The earliest starting date is December 2006.

A Phd position is available in the group of Dr. Lukas Schärer. The research of our group focuses on reproductive biology in simultaneous hermaphrodites, using the free-living marine flatworm *Macrostomum lignano* as a model.

The specific aims are to better understand the mechanisms of sperm competition and cryptic female choice in hermaphrodites. Current evolutionary theory predicts that such mechanisms of post-copulatory sexual selection can have a profound influence on the evolution of sex allocation (i.e. how much a hermaphrodite invests in male and female reproduction), but only limited empirical data is currently available to test this theory. To produce such data the successful candidate will carry out laboratory experiments, molecular paternity analyses, and field work in the Mediterranean Sea.

Our group has recently moved to the Division of Evolutionary Biology at the Zoological Institute of the University of Basel, Switzerland, a very stimulating and highly international research environment with English as the predominant language. There are groups working on host-parasite interactions, evolution of the immune system, behavioural ecology of vertebrates, and parent-offspring conflict. Given the strong backgrounds in experimental design, statistics, population genetics, and quantitative genetics, it is an ideal place to study for a PhD in evolutionary biology.

The successful candidate should be dedicated, inquisitive, creative, and collaborative. Moreover, he/she should have a keen interest to learn about experimental design and proper statistical analysis. Previous experience in molecular biology is an advantage, but not a prerequisite. A MSc or equivalent education level is required for this position and the salary is in accordance to the standards of the Swiss National Science Foundation.

Basel is the third largest city of Switzerland and attractively situated at the foot of the Jura mountain range. It has the beautiful river Rhine, directly borders both

Germany and France, and thus offers rich culinary, cultural, and outdoor possibilities.

To apply please send a CV, a copy of your MSc-thesis (if available), and contact details of 1-2 referees to [lukas.scharer@unibas.ch](mailto:lukas.scharer@unibas.ch) (electronic applications are preferred). The reviewing of your applications will start on October 30, but candidates will be considered until the position is filled.

For more details about our research please visit our Homepage.

Lukas Scharer

Evolutionary Biology Zoological Institute University of Basel Vesalgasse 1 4051 Basel Switzerland

Tel: ++41 61 267 03 66 Fax: ++41 61 267 03 62 Email: [lukas.scharer@unibas.ch](mailto:lukas.scharer@unibas.ch) Homepage: <http://evolution.unibas.ch/schaerer/index.htm>  
[lukas.scharer@unibas.ch](mailto:lukas.scharer@unibas.ch) [lukas.scharer@unibas.ch](mailto:lukas.scharer@unibas.ch)

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## ULouisianaMonroe PhenotypicPlasticity

TEACHING/RESEARCH ASSISTANTSHIP (MS) AVAILABLE.

The Department of Biology at the University of Louisiana at Monroe is looking to recruit a student interested in studying phenotypic plasticity in various accessions of *Arabidopsis* using a combination of qualitative and quantitative methods. Applicants should have an interest in botany and morphometrics, and have good math and computer skills. Starting date for the position is on or around January 15, 2007. The position includes a full tuition waiver and stipend (\$8,000 per year) and requires the student to teach undergraduate lab courses. Additional stipend funds may be available from grants currently in review.

Monroe is a city of 56,000 people on the banks of the Ouachita River in north-central Louisiana, and serves as the educational, commercial, and economic hub of the Delta parishes. ULM enrolls over 8,500 students, and houses Herbarium NLU, one of the largest herbaria in the south with over 450,000 specimens. The cost of living is very reasonable, and the area tends to avoid hurricanes.

We are looking for applicants with a minimum 3.0 undergraduate GPA and minimum 1000 GRE (v+q); please note that these are above the minimum entrance

requirements for ULM (see below). Applicants lacking graduate degrees in other biological areas will be given preference. Interested students should contact either Dr. Russ Minton ([minton@ulm.edu](mailto:minton@ulm.edu)) or Dr. Tom Sasek ([sasek@ulm.edu](mailto:sasek@ulm.edu)) for additional information and specifics on applying. General information on the department, faculty, facilities, and course offerings can be found at <http://www.ulm.edu/biology>. Students seeking admission to the Biology Graduate Program must first be admitted to the ULM Graduate School. Application forms may be obtained online from the Office of Graduate Studies and Research. In addition to a minimum undergraduate GPA of 2.5, the Biology Graduate Program requires either a score of 900 or higher on the GRE General Test (combined verbal and quantitative scores), or a total of 2400 points when the GPA is multiplied by the combined verbal and quantitative GRE General Test scores. Students must also have taken courses in introductory zoology, introductory botany, introductory microbiology, ecology, genetics, and an upper level physiology class (animal, plant, human, or cell). A limited number of course deficiencies can be taken after admission.

Russ Minton, Ph.D. Assistant Professor, Department of Biology University of Louisiana at Monroe Monroe, LA 71209-0520 ph: 318-342-1795 fax: 318-342-3312 <http://www.ulm.edu/~minton> [minton@ulm.edu](mailto:minton@ulm.edu)

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## UMaryland EvoSystematics

\*University\*\* of Maryland\*\* BEES Graduate Program\*

The interdisciplinary graduate program in Behavior, Ecology, Evolution and Systematics (BEES) at University of Maryland is looking for exceptional Ph. D. candidates for the academic year 2007-2008. The BEES program consists of over 50 faculty members. At University of Maryland the participating departments include: Animal and Avian Sciences, Anthropology, Biology, Biological Resources Engineering, Cell Biology and Molecular Genetics, Computer Sciences, Entomology, Geology, Natural Resource Sciences, Philosophy, and Psychology. We also have adjunct faculty from a number of affiliated institutions from the surrounding DC metropolitan area including the Smithsonian Institute, National Cancer Institute, UM Center for Advanced Research in Biotechnology (UMBI), and USDA.

We offer Darwin Fellowships to outstanding Ph. D.

candidates and have just instituted a new graduate fellowship program to fund Ph. D. students planning on being co-advised by a member of the Smithsonian adjunct faculty along with a BEES UM faculty member. As a long-term member of the Organization for Tropical Studies (OTS), we encourage and fund participation by our BEES graduate students in field courses offered by OTS.

Please see our BEES program web site for more information: <http://bees.umd.edu> <<http://bees.umd.edu>> Faculty accepting graduate students for the 2007-2008 academic year are listed here: <http://www.chemlife.umd.edu/grad/bees/fac.accepting.html> Please feel free to contact us if you have any questions at: [beesoffice@umd.edu](mailto:beesoffice@umd.edu) <<mailto:beesoffice@umd.edu>>

<http://www.life.umd.edu/biology/dudashlab/-dudashlabpage.html> Michele R. Dudash Associate Professor of Biology and Director of the Graduate Program in Behavior, Ecology, Evolution and Systematics

Department of Biology, Room 3202 Biology Psychology Building University of Maryland College Park, MD 20742

Office: 301-405-1642 Fax: 301-314-9358 Email: [mdudash@umd.edu](mailto:mdudash@umd.edu)

Summer Research Address:

Mountain Lake Biological Station 240 Salt Pond Road Pembroke, VA 24136

Lab phone at MLBS is 540-626-5257 Fax at MLBS is 540-626-5229

“Peace and joy of having known them, with the sorrow of the loss less debilitating”

Michele Dudash <[mdudash@umd.edu](mailto:mdudash@umd.edu)>

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## UPadova EvolBiol

The Doctoral School in Biosciences (course in Evolutionary Biology) of the University of Padova (Italy) announces a new position for a PhD student.

Topical focus Growth control and regulation during the post-embryonic development of *Lithobius forficatus* (Chilopoda).

Background By investigating the generative mecha-

nisms of organic forms, evolutionary developmental biology (evo-devo) specifically addresses a quite neglected topic of the theory of evolution, that is, the origin of variation, the raw material for natural selection. In the evo-devo perspective, evolution is the change of developmental processes through time. Thus, the study of the mechanisms of evolution and evolutionary history goes through the analysis of organismal developmental systems, in their relationship with the genetic developmental network and the physiological processes that control them. In arthropods, during post-embryonic development, body size increase occurs mainly in a stepwise manner, as the ontogeny is punctuated by the moulting cycle. Moreover, postembryonic development of many arthropods is characterized, at least for a few early instars, by a progressive increase in the number of body segments, moult after moult (anamorphic development). The relationship between growth, segmentation and moulting cycle, characterizes arthropod ontogeny and it is at the basis of the evolution of arthropod body plan.

Research project Through a breeding of *Lithobius forficatus* (Chilopoda) under environmental controlled condition and the analysis of developmental trajectories referred to individual specimens (longitudinal analysis), the project aims to investigate the evolvability of the developmental system of regulation and control of growth during the anamorphic phase of post-embryonic development (the phase during which there is an increase in the number of body segments). Biometrical analyses involve in vivo measures of exoskeleton size and body weight, as well as measures of endocrinological parameters (temporal variation in the title of growth and moulting hormones) and measures of cell proliferation and cell death.

The course will last 3 years (start 2nd January 2007). Deadline for applications is October 25th 2006. For foreign students, the position will be covered by a scholarship fully funded by the Fondazione Cassa di Risparmio di Padova e Rovigo. The successful candidate will be offered full board and lodging. The connected charges will be covered by the University of Padova through the Fondazione Cassa di Risparmio di Padova e Rovigo. Salary is about 830 Euros per month.

Information and instructions concerning the application are found at the web site - <[http://www.unipd.it/en/students/res\\_doctorates.htm](http://www.unipd.it/en/students/res_doctorates.htm)> [http://www.unipd.it/en/students/res\\_doctorates.htm](http://www.unipd.it/en/students/res_doctorates.htm) For further information contact

Giuseppe Fusco, PhD Department of Biology University of Padova Via U. Bassi 58/B I-35131 Padova Italy tel. +39.049.827.6238 fax +39.049.827.6230

e-mail [giuseppe.fusco@unipd.it](mailto:giuseppe.fusco@unipd.it) webpage <http://dept.bio.unipd.it/fusco>

Giuseppe Fusco <[giuseppe.fusco@unipd.it](mailto:giuseppe.fusco@unipd.it)>

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## USouthFlorida Speciation

Ph.D. position available to study speciation

I have funding available for a graduate student beginning Fall, 2007 to study various aspects of the process of speciation and its relationship to patterns of biodiversity. The student would join my laboratory in the Department of Zoology at the University of Florida. The overarching goal of this collaborative research project is to link micro- and macroevolution using an exciting new approach based on individual energetics. The research will employ a combination of approaches, including laboratory experimentation, field studies, and modeling. I am especially interested in finding students that are inquisitive, creative, and collaborative to join our exciting research program. The student will have the opportunity to take part in all aspects of this research, as well as collaborate with other students and faculty from the department. Individuals from groups underrepresented in science are especially encouraged to apply.

For more information, please contact me via e-mail ([gillooly@zoo.ufl.edu](mailto:gillooly@zoo.ufl.edu)), and take a look at my website. I would be glad to chat with you. Also, feel free to check out our departmental webpage for information on graduate admissions (<http://www.zoo.ufl.edu/-GRADUATE/appinfo.html>).

James F. Gillooly Assistant Professor Department of Zoology University of Florida Gainesville, FL, USA 32611-8525 Phone: 352-392-2743, fax: 352-392-3704 web site: <http://www.zoo.ufl.edu/gillooly> Jamie Gillooly <[gillooly@zoo.ufl.edu](mailto:gillooly@zoo.ufl.edu)>

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## UTurku PredatorPreyEvol

A Ph.D. STUDENT POSITION: to study predator-prey interactions in a Finnish forest bird community. University of Turku, Finland

Currently our research group is studying intra-guild predation and competition between Tengmalm's and Pygmy owls in intensively managed forest landscape; furthermore, we investigate passerine habitat selection and reproductive investment decisions, and the consequences (behavioural and evolutionary) of these decisions relative to breeding owls and other avian predators. We are looking for a (non-Finnish) PhD student with an MSc degree (or equivalent) to join our group in these studies early in 2007. The candidate will be able to continue within the already established studies. However, there is also scope for developing new questions relating to the system, something we would encourage. This is therefore an ideal opportunity for a motivated PhD student eager to be involved in all stages of developing a research project.

In general, you should have an interest in behavioural/evolutionary ecology and have some experience in conducting fieldwork, preferably bird related. You will work closely in the field and office with a post-doc, and other PhD and MSc level students. Fieldwork (in the Kauhava/Lapua area, 350km north of Turku, Finland) will typically last 3 months/year, with the remainder of the time being spent at the Section of Ecology, Dept. of Biology, Univ. of Turku, Finland.

Section homepage: <http://www.sci.utu.fi/biologia/en/ecology.html> Research group homepage: <http://users.utu.fi/ekorpi/index.htm> Some relevant information can be found at <http://users.utu.fi/robtho/> Initially this position has funding for 1 year (~1100/month). Several possibilities exist for applying for additional funding once the candidate is in Finland. Please note that non-Finns that have been living in Finland for longer than 1 year are not eligible for this position.

For more information or to apply, please send a short cover letter with motivation for this project, CV and two references by email to: Erkki Korpi (ekorpi@utu.fi) and Robert L. Thomson (robtho@utu.fi) not later than 30.11.2006.

[robtho@utu.fi](mailto:robtho@utu.fi) [robtho@utu.fi](mailto:robtho@utu.fi)

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## UVienna BotanicalSystematics

Ph.D position in the department of Systematics and Evolutionary Botany, Univ. of Vienna Austria. Its a collaborative project between Austria and Royal Botanical Gardens, Kew, UK. The title of the project is

“Molecular Phylogeny and chromosomal evolution in *Polystachya* (Orchidaceae), its a three grant from Austrian Science Foundation (FWF). Requirement will be knowledge in plant taxonomy, some experience in DNA sequencing and basic on cytology. To register as a Ph.D student in University of Vienna one should have a recognised M.Sc. degree.

Thank you.

sincerely

Ao. Univ. Prof. Dr. Rosabelle Samuel Department of Systematic and Evolutionary Botany Faculty of Life Sciences University of Vienna Rennweg 14 A-1030, Vienna, Austria Phone: 00431-4277-54162 or 54129 Fax : 00431-4277-9541 email: mary.rosabella.samuel@univie.ac.at

Rose Samuel <mary.rosabella.samuel@univie.ac.at>

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## UZurich PlantMolSyst

### Ph.D. ASSISTANTSHIP IN PLANT MOLECULAR SYSTEMATICS/ EVOLUTIONARY ECOLOGY

POSITION DESCRIPTION: ONE 50%, 3-year Ph.D. Assistantship is available in the area of Plant Molecular Systematics/Evolutionary Ecology at the Institute of Systematic Botany of the University of Zurich, under the supervision of Prof. Elena Conti. The Ph.D. project will focus on hybridization and/or the evolution of breeding systems in the genus *Primula* by using a combination of macro-evolutionary (phylogenetics) and micro-evolutionary (population genetics; field experiments; pollination biology) approaches, in relation to the specific interests and strengths of the selected applicant. For further information, see: <http://www.systbot.unizh.ch/institut/personen/-person.php?l=d&id=24> DEADLINE FOR APPLICATION: November 15, 2006. If needed, the position will remain open until a suitable candidate is found. STARTING DATE: Between Jan. 1 and February 1, 2007. A starting date of March 1 could be considered under special circumstances. REQUIREMENTS: Perspective students are expected to have received their Master's degree or equivalent by the start of the Ph.D. program. Good knowledge of English and German highly desirable. The ideal candidate will have documented experience/knowledge in one or more of the following areas: molecular biology, phylogeny reconstruction, population genetics, evolutionary ecology, plant

breeding systems, pollination biology. The selected candidate will be expected to help in teaching (3 to 5 hours weekly average, for 4-5 months per year) and in writing proposals to help fund his/her research. HOW TO APPLY: Send the following by regular mail to Prof. Elena Conti, Institute for Systematic Botany, Zollikonerstrasse 107, 8008, Zurich, Switzerland: I) a one- to two-page application letter addressing, but not limited to the following questions: a) Why are you interested in a Ph.D. in this research area? b) What are your career goals? II) Your detailed curriculum vitae, including a detailed list of field collecting, molecular, analytical, and linguistic skills, presentations at scientific meetings, and publications (if applicable); III) a copy of your undergraduate and graduate academic records, with grades and explanation of the grading system; IV) two or three letters from your academic advisors addressing: a) your intellectual and academic skills; b) your dedication to science; c) your ability to work cooperatively in a team. Please, follow the directions for application carefully. Incomplete applications will not be further considered. FACILITIES: The Institute for Plant Systematics of the University of Zurich offers excellent research facilities in an international and stimulating academic environment. Located in the heart of Europe, Zurich offers all the cultural opportunities of a major European city in close proximity to the Alps.

Prof. Elena Conti, Ph.D. University of Zuerich, Institute for Systematic Botany Zollikerstrasse 107, 8008 Zuerich, SWITZERLAND Ph: 0041 1 634 8424 Fax: 0041 1 634 84 03 email: [ContiElena@access.unizh.ch](mailto:ContiElena@access.unizh.ch) <http://www.systbot.unizh.ch/institut/personen/-person.php?l=d&id=24>

[ContiElena@access.unizh.ch](mailto:ContiElena@access.unizh.ch)

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## UZurich SystBotany

### Ph.D. ASSISTANTSHIP IN PLANT MOLECULAR SYSTEMATICS/ EVOLUTIONARY ECOLOGY

POSITION DESCRIPTION: ONE 50%, 3-year Ph.D. Assistantship is available in the area of Plant Molecular Systematics/Evolutionary Ecology at the Institute of Systematic Botany of the University of Zurich, under the supervision of Prof. Elena Conti. The Ph.D. project will focus on hybridization and/or the evolution of breeding systems in the genus *Primula* by using a combination of macro-evolutionary (phy-



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Prof. Elena Conti, Ph.D. University of Zuerich, Institute for Systematic Botany Zollikerstrasse 107, 8008 Zuerich, SWITZERLAND Ph: 0041 1 634 8424 Fax: 0041 1 634 84 03 email: [ContiElena@access.unizh.ch](mailto:ContiElena@access.unizh.ch) <http://www.systbot.unizh.ch/institut/personen/-person.php?l=d&id=24>

[ContiElena@access.unizh.ch](mailto:ContiElena@access.unizh.ch)

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## UppsalaU EvolEcol

PhD position in Evolutionary Ecology Evolutionary consequences of environmental change

A 4-year PhD position is available in the department of Ecology and Evolution / Limnology at Uppsala University. The student can choose between two projects, depending on interests and skills: 1. Evolutionary responses to changed selection on the threespined stickleback in the Baltic Sea. 2. The evolutionary consequences of the invasion of round gobies (*Neogobius melanostomus*) into the Baltic Sea.

In the first project, the student would work in close collaboration with two other PhD students investigating the effects of eutrophication on Baltic Sea sticklebacks. Present results show that changed environmental conditions affect the density and reproductive output of reproducing individuals and the selection on individual traits. However, whether an evolutionary response will occur depends on the heritability of the traits and on gene flow. Sexual selection is assumed to facilitate adaptation to new conditions, but harsh conditions may reduce heritability and sexual selection can impose a fitness cost on the population. The work would include both behavioural and genetic work, carried out in the lab and in the field. Fish populations from different parts of the Baltic Sea, suffering to different degrees from eutrophication, will be considered.

In the second project, the student would start a new project together with the supervisor, and work in collaboration with other groups investigating the round goby both in the Baltic Sea and in the Great Lakes in North America. The project would focus either on the effects on native species or on phenotypic and evolutionary changes in the invader as it colonizes new areas.

The salary will follow the scheme of Uppsala University (rising from approx 15 000 to 22 000 SEK/month in 4 years). A MSc or equivalent education level is required. The student will be based in Uppsala with part of the field work carried out at Tvärminne Zoological Station in Finland (University of Helsinki). The position will start at the earliest possible date.

Interested candidates should send an application letter, a CV, a brief summary of research experience and interests, and the contact details of at least two referees by November 27th 2006 to [ulrika.candolin@ebc.uu.se](mailto:ulrika.candolin@ebc.uu.se).

Ulrika Candolin Dept of Ecology and Evolution/Limnology, Uppsala University Box 573, SE-752 37 Uppsala, Sweden Phone: +46-18-471 2701, E-mail: [ulrika.candolin@ebc.uu.se](mailto:ulrika.candolin@ebc.uu.se), <http://www.ebc.uu.se/limno/> <http://www.helsinki.fi/-bioscience/hsg/index.htm> [ucandoli@mappi.helsinki.fi](mailto:ucandoli@mappi.helsinki.fi)

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## Wageningen Celegans

Graduate position:

PhD position DPW 06-33 Gene-environment interactions in *Caenorhabditis elegans*.

Wageningen University and Research Centre, The Netherlands.

Job description — Environmental variation is an important driver of evolution. Gene-environment interactions are at the heart of this selection process affecting traits in numerous organisms. Goal of the project is to identify gene-environment interactions underlying complex traits in the soil nematode *Caenorhabditis elegans*. The characterization of genes will be performed in natural as well as laboratory populations using quantitative genetic and genomics approaches. The PhD candidate will investigate the genetic variation of gene expression (genetical genomics) in laboratory strains of *C. elegans* exposed to different environmental conditions. Natural field populations of *C. elegans* will be assessed for comparative gene expression in response to selected soil parameters. Traits to be studied can be body size, feeding behaviour and mobility in response to anoxia, temperature, pH and toxic stressors.

Requirements — MSc degree in Biology, genetical and/or evolutionary sciences or comparable education experience in genetic mapping and knowledge of bioinformatics is preferred good writing (English) and communication skills accurate, systematic worker

Organization — Wageningen University and Researchcentre, Laboratory of Nematology

Conditions of employment — Estimated maximum salary per month: eur 2000 - 2500 Employment basis: Temporary for specified period Duration of the contract: 1-4 years Maximum hours per week: 38

Additional conditions of employment: Temporary contract for 1 year. After a positive evaluation of this first year an extension of 3 years will be given. Salary from

1933, in the first year to 2472, in the fourth year, per month, based on full time employment.

Additional Information — Additional information about the vacancy can be obtained from:

Dr. Jan E. Kammenga, Laboratory of Nematology, Wageningen University, Binnenhaven 5, 6709 PD, Wageningen, The Netherlands, Tel: +31 317 482998/482197, Fax: +31 317 484254, email: [Jan.Kammenga@wur.nl](mailto:Jan.Kammenga@wur.nl), website: <http://www.nem.wur.nl/UK/Staff/Kammenga/> No rights can be obtained from this notification.

Dr. Jan. E. Kammenga Laboratory of Nematology Wageningen University Binnenhaven 5 6709 PD, Wageningen The Netherlands Tel: +31 317 482998/482197 ax: +31 317 484254

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## Wageningen Celegans GeneExpr

PhD position DPW 06-40 Plasticity of global gene expression in *Caenorhabditis elegans*.

Wageningen University and Research Centre, The Netherlands.

Job description — Recent studies have shown that mRNA levels for many genes are heritable and that master regulators affect the expression levels of hundreds of genes. Whether environment-induced response of gene expression also shows heritable variation is unknown. To answer this question we look for a PhD student who unravels gene expression plasticity to various environmental variables in the nematode *C. elegans*. Central in these studies will be the identification of regulatory genes of expression plasticity.

Requirements — MSc degree in Biology, genetical and/or evolutionary sciences or comparable education experience in genetic mapping and knowledge of bioinformatics is preferred good writing (English) and communication skills accurate, systematic worker

Organization — Wageningen University and Researchcentre, Laboratory of Nematology

Conditions of employment — Estimated maximum salary per month: eur 2000 - 2500 Employment basis: Temporary for specified period Duration of the contract: 1-4 years Maximum hours per week: 38

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## Zurich Plant Evolutionary Genetics

ETH Zurich: PhD position: “molecular basis of plant-pollinator interactions”

A PhD position funded by the Swiss Federal Institute of Technology (ETH) Zürich is available at the plant ecological genetics group to study the molecular basis and evolutionary ecology of plant-pollinator interactions in *Ophrys*. The project will focus on the identification and evolutionary patterns of genes encoding key odor compounds for pollinator-mediated reproductive isolation. I am looking for a candidate with a background in molecular biology (ecology) or biochemistry, or ecology/evolution with good knowledge of molecular techniques. Experience in growing orchids is an advantage.

The project is embedded in a larger framework of evolutionary studies in *Ophrys* and *Silene* performed in our group ([www.peg.ethz.ch](http://www.peg.ethz.ch)). We are currently a group of 3 academic staff, two PostDoc, and 7 PhD students that investigate topics such as pollinator mediated selection, reproductive isolation, hybridisation, and habitat adaptation. Our institute houses modern molecular and chemical ecology labs, including a wind tunnel for behavioural experiments with pollinators. Greenhouses and growth chambers for plant cultivation are also available.

Zürich has a large and very active research community at the ETH ([www.ethz.ch](http://www.ethz.ch) <<http://www.ethz.ch/>> ) and the University of Zürich ([www.unizh.ch](http://www.unizh.ch) <<http://www.unizh.ch/>> ) dealing with various aspects of organismal and molecular biology ([www.lifescience-zurich.ch](http://www.lifescience-zurich.ch) <<http://www.lifescience-zurich.ch/>> ). The city also offers excellent quality of life through active cultural programs and infrastructure, as well as an attractive surrounding including the alps in proximity.

If you are interested, please send a letter describing your motivation for the application, C.V., copy of degrees, publications (manuscripts) if any, and e-mail addresses of two academic referees (applications by e-mail preferred) by 30. November 2006. If you have further questions, don't hesitate to contact me.

PD Dr. Florian Schiestl Plant Ecological Genetics / Institute of Integrative Biology ETH Universitätsstrasse 16 CH-8092 Zürich [florian.schiestl@env.ethz.ch](mailto:florian.schiestl@env.ethz.ch)

[florian.schiestl@env.ethz.ch](mailto:florian.schiestl@env.ethz.ch)

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### AmerMuseumNatHist Programmer

The American Museum of Natural History ([www.amnh.org](http://www.amnh.org)) seeks to fill a programmer position for bioinformatics applications. Candidates should hold a Computer Science or engineering BS or MS degree. Experience with medium sized to large applications is required, preferable in a functional language (ML, Lisp, Haskell, Ocaml), though not necessary (if selected, the programmer is expected to learn the OCaml language). Experience in parallel computing desirable. Experience in UNIX/LINUX environments is imperative. Competitive salary + Museum's benefits, in an academic environment. The position is open until filled (as soon as possible).

Candidates should contact Dr. Ward Wheeler ([wheeler@amnh.org](mailto:wheeler@amnh.org)) for more information.

Andres Varon <[avaron@amnh.org](mailto:avaron@amnh.org)>

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### BucknellU Genetics

BUCKNELL UNIVERSITY BIOLOGY DEPARTMENT

Geneticist

The Biology Department at Bucknell University invites applications for an entry-level, tenure-track Assistant

Professor position to begin August 2007. We are seeking a broadly trained geneticist who could teach an upper-level course in his/her area of specialty, contribute to our core genetics course, and participate in interdisciplinary programs. The successful candidate is expected to establish a research program that involves talented undergraduates and attracts extramural funding. Ph.D., postdoctoral experience, evidence of teaching effectiveness, and a strong research record are required. Bucknell University is a premier liberal arts university with a long-standing tradition of excellence in the sciences. Start-up funds and internal funding for research are available. To apply, please refer to website: <http://www.bucknell.edu/jobs>. Review of applications will begin on October 20, 2006. The search will remain open until the position is filled.

An Equal Opportunity/Affirmative Action Employer, Bucknell University especially welcomes applications from women and minority candidates.

Science Pedagogist

The Biology Department at Bucknell University invites applications for a tenure-track Assistant/Associate Professor to begin August 2007. We are seeking a broadly trained biologist with a specialty in science pedagogy who will teach non-major courses and participate in the development of new science curricular initiatives. The successful candidate is expected to establish a research program in college science pedagogy that involves talented undergraduates and attracts extramural funding. Ph.D., postdoctoral experience, evidence of teaching effectiveness, and a strong research record are required. Bucknell University is a premier liberal arts university with a long-standing tradition of excellence in the sciences. Start-up funds and internal funding for research are available. To apply, please refer to website: <http://www.bucknell.edu/jobs>. Review

of applications will begin on November 3, 2006. The search will remain open until the position is filled.

An Equal Opportunity/Affirmative Action Employer, Bucknell University especially welcomes applications from women and minority candidates.

Steve Jordan Department of Biology Bucknell University Lewisburg, PA 17837 Office: 310 Bio. Bldg. +1 570-577-1254 Lab: 331 Bio. Bldg. +1 570-524-3816 Fax: +1 570-577-3537 <http://www.facstaff.bucknell.edu/sdjordan/jordan.html>

sdjordan@bucknell.edu sdjordan@bucknell.edu

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## BuffaloStateC EvolPlantBiol

Evolutionary Plant Biologist Assistant Professor

Buffalo State College, tenure-track assistant professor, Biology Department, to begin September 1, 2007. Competitive salary. Buffalo State College offers greenhouse facilities, a teaching herbarium, and access to a variety of field facilities.

Responsibilities: Teach evolution and plant biology courses at undergraduate and graduate level. Develop plant biology research program involving undergraduate- and master's-level students. Teach courses in Intellectual Foundations curriculum. Service to department and college.

Required Qualifications: Doctoral degree in biological sciences. Broad training and research experience in plant biology with strong background in evolutionary biology.

Preferred Qualifications: Postdoctoral research and/or teaching experience. Research involving evolution, ecology, or physiology of plants.

Review of applications will begin December 1, 2006 and continue until position is filled. Send letter of application, curriculum vitae, statement of teaching and research interests, and contact information for 3 professional references to: Search Committee Chair, Biology Department, Buffalo State College, SC 314, 1300 Elmwood Ave., Buffalo, NY 14222-1095. For more information about the college, visit [www.buffalostate.edu](http://www.buffalostate.edu). Buffalo State is an affirmative action/equal opportunity employer.

Amy McMillan, Ph.D. Biology Department Buffalo State College 1300 Elmwood Ave. Buffalo, NY 14222 716-878-3756 phone 716-878-4028 fax

MCMILLAM@buffalostate.edu  
LAM@buffalostate.edu

MCMIL-

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## Cincinnati InvasiveSpeciesEvol

The Ecological Exposure Research Division (<http://www.epa.gov/eerd/>) of US EPA's National Exposure Research Laboratory is seeking an individual with a Master's degree or higher to support research at their Cincinnati, OH facility on the utilization of genetic tools for the detection and monitoring of invasive species. This work will include (1) the development of 'DNA barcode' reference libraries for species established in United States Pacific estuaries and in the Great Lakes; (2) the development of qualitative and quantitative PCR-based approaches for screening environmental samples (plankton, benthos and ballast water) for the presence of target invasive species; (3) the exploration of DNA-methods (such as community shotgun sequencing, community fingerprinting, and microarray approaches) for characterization of biodiversity in environmental samples; and (4) the exploration of 'next generation' methods for DNA-based identification and monitoring, including PCR-independent approaches. For a full announcement of the position and instructions for application, visit <http://www.epa.gov/oamrtpnc/q0700008/index.htm>. John Darling NERL Postdoctoral Fellow Molecular Ecology Research Branch US EPA 26 Martin Luther King Drive Cincinnati, OH 45268 (513) 569-7865

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## ColoradoStateU PlantEvol

Plant Evolutionary Biologist Department of Biology, Colorado State University [www.colostate.edu/Depts/-Biology](http://www.colostate.edu/Depts/-Biology) The Biology Department invites applications for a tenure-track position (ASSISTANT PROFESSOR) in plant evolutionary biology to join a growing group of evolutionary biologists. We seek a broadly trained plant biologist who addresses fundamental and integrative questions in evolutionary biology. Applicants should be well-versed in genetics, with the possibility of applying genomic tools to organismal questions. Examples of appropriate research interests could include evolution of morphology and life histories, mat-



ing systems, population genetics and adaptation, hybridization and speciation, invasive species, and conservation biology. The successful candidate will be expected to develop an extramurally funded research program and contribute to undergraduate and graduate teaching. Applicants must have a Ph.D. by the time of appointment; post-doctoral experience is preferred. To receive full consideration, apply online by November 8, 2006 ([www.natsci.colostate.edu/searches/Biology](http://www.natsci.colostate.edu/searches/Biology)). Include a C.V., statements of research/teaching interests, representative publications and the names and contact information for three referees. Referees will receive instructions by e-mail for submitting letters online, or may mail letters to Plant Evolutionary Biology Search Committee, Department of Biology, Colorado State University, Fort Collins CO 80523-1878. Complete applications of semi-finalists will be reviewed by all faculty in the Department. CSU is an AA/EO Employer. Office of Equal Opportunity and Diversity, 101 Student Services.

– John McKay Bioagricultural Sciences and Pest Management C129 Plant Sciences Building Fort Collins, CO 80523

office 970 491 5730 lab 970 491 0259 cell 970 402 4828  
fax 970 491 3862 email [jkmckay@colostate.edu](mailto:jkmckay@colostate.edu)  
[jkmckay@lamar.colostate.edu](mailto:jkmckay@lamar.colostate.edu)

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## ColumbiaU EvolLandscapeEcol

Evolutionary Landscape Biologist

Columbia University's Department of Ecology, Evolution, and Environmental Biology seeks to appoint a landscape biologist at the Assistant Professor level. Among evolutionary biologists, an eligible candidate might, for example, study biogeography, or evolutionary or population genetics, as long as the research program includes landscape-scale spatial analysis. The successful candidate will be expected to establish a vigorous, externally funded research program complementing and augmenting existing strengths within E3B and related institutions ([www.columbia.edu/cu/e3b/-job](http://www.columbia.edu/cu/e3b/-job)) and to participate in undergraduate and graduate teaching. Candidates should send statements of research and teaching, curriculum vitae, and contacts for 3 or more referees to Marina Cords, E3B Search Committee Chair, Columbia University, 1200 Amsterdam Avenue, MC 5557, New York, NY 10027, by November 20. A single pdf file of these materials should also be

sent to [eeeb-facsearch@columbia.edu](mailto:eeeb-facsearch@columbia.edu). Ph.D. required at time of appointment. Applications from women and minorities are encouraged. Columbia University is an Equal Opportunity/Affirmative Action Employer.

Marina Cords, Professor Department of Ecology, Evolution and Environmental Biology Columbia University 10th floor, 1200 Amsterdam Avenue New York, NY 10027

Marina Cords <[mc51@columbia.edu](mailto:mc51@columbia.edu)>

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## DukeU BaboonEvol

\*Position\* Database Technician \*Field\* Amboseli Baboon Research Project \*Institution\* Duke University  
\*Contact\* Leah Gerber, [lgerber@duke.edu](mailto:lgerber@duke.edu)

\*Description\* The Department of Biology at Duke University seeks a full-time research specialist for work on the Amboseli Baboon Research Project. Position entails maintaining and updating a large, relational database containing long-term behavioral, ecological, and demographic data from a field study of wild baboons. Maintenance of the database stresses accuracy, integrity, and precise protocol documentation for the addition of new data and revision of current datasets. Data extraction and statistical analysis will be required for use in presentations, grant proposals, and publications. Ability to coordinate with project collaborators and assist in the supervision of undergraduate and graduate student research projects is necessary, especially when PI is in the field.

\*Requirement\*s: Bachelors degree in relevant field, course work and research experience in behavioral ecology and evolutionary biology, experience with relational database management, ability to perform elementary statistics, and excellent organizational skills. Familiarity with Windows-based and/or UNIX-based computer programs and SQL a plus.

To apply, please send resume by email (preferred) to [lgerber@duke.edu](mailto:lgerber@duke.edu) or to Leah Gerber, Department of Biology, Box 90338, Duke University, Durham, NC 27708.  
[lgerber@duke.edu](mailto:lgerber@duke.edu)

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## DuquesneU EvolBiol

Duquesne University invites applications for a tenure-track position in the Department of Biological Sciences. The successful applicant is expected to develop a vigorous independent research program involving the study of molecular, cellular, and/or organismal processes. Areas of interest include, but are not limited to, cell biology, development, immunology, and physiology.

The successful candidate will join an active department of 17 faculty members with a commitment to combining externally funded research with excellence in teaching at both the graduate and undergraduate levels. Applicants must have post-doctoral experience, and are expected to mentor MS and PhD students. Hiring is expected to be at the Assistant Professor level; however, more senior candidates may also be considered. Competitive salary and start-up packages are available. Additional information about the Department can be found at <http://www.science.duq.edu/biology>.

To apply, send a cover letter, CV, statements of research and teaching goals, and three letters of recommendation to: Dr. Michael Jensen-Seaman, Biology Faculty Search Committee, Department of Biological Sciences, 201 Mellon Hall, 600 Forbes Avenue, Pittsburgh, PA 15282. Review of applications will begin December 15, 2006.

Please direct inquiries about the position to Michael Jensen-Seaman at [seamanm@duq.edu](mailto:seamanm@duq.edu).

Duquesne University was founded in 1878 by its sponsoring religious community, the Congregation of the Holy Spirit. Duquesne University is Catholic in mission and ecumenical in spirit. Motivated by its Catholic identity, Duquesne values equality of opportunity both as an educational institution and as an employer.

[seamanm@duq.edu](mailto:seamanm@duq.edu) [seamanm@duq.edu](mailto:seamanm@duq.edu)

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## Edinburgh EvolBiol

Three RCUK Fellowships in Complexity Science have been advertised on the University of Edinburgh jobs website, and will shortly be advertised in Nature:

[http://www.jobs.ed.ac.uk/vacancies/-index.cfm?fuseaction=vacancies.detail&vacancy\\_ref=-3006450](http://www.jobs.ed.ac.uk/vacancies/-index.cfm?fuseaction=vacancies.detail&vacancy_ref=-3006450)

These positions are essentially permanent lectureships, with the first five years free for research. One post may be available in evolutionary biology; for further details, please contact

[A.J.Leigh-Brown@ed.ac.uk](mailto:A.J.Leigh-Brown@ed.ac.uk) [A.J.Leigh-Brown@ed.ac.uk](mailto:A.J.Leigh-Brown@ed.ac.uk)

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## EmoryU DiseaseEvolution

Disease Ecologist

The Department of Biology at Emory University is seeking to recruit an ecologist who studies the fundamental ecological processes affecting the dynamics, spread and emergence of infectious diseases. The department will consider applicants holding a Ph.D. or equivalent degree from a wide range of specializations including, but not limited to: (i) theoretical and/or experimental work on the population dynamics of infectious diseases and/or the immune response within a host; (ii) molecular ecology and epidemiology of infectious disease; and (iii) experimental and field studies of pathogen-host interactions. The position is for a tenure-track assistant professor, although an appointment at a higher rank will be considered in exceptional circumstances. Applicants must provide evidence that they will develop a strong, independently funded research program. A commitment to undergraduate teaching is expected and the appointees will also participate in appropriate Ph.D. granting programs of the interdepartmental Graduate Division of Biological and Biomedical Sciences.

Applicants should submit a curriculum vitae and a statement detailing their current and future research plans, and arrange for submission of three letters of recommendation. Please address applications to: Dr. Leslie A. Real, Disease Ecology Search, Department of Biology, Emory University, 1510 Clifton Road, Atlanta, GA 30322; Tel: (404) 727-4234; Fax: (404) 727-2880; E-mail: [biol\\_srch@emory.edu](mailto:biol_srch@emory.edu). Review of completed applications will begin November 15, 2006. Information on the Biology Department can be found at <http://www.biology.emory.edu> and a description of the graduate programs in the Graduate Division of Biological and Biomedical Sciences is provided at <http://www.biomed.emory.edu> [tschlen@emory.edu](mailto:tschlen@emory.edu)

tschlen@emory.edu

dhoule@bio.fsu.edu dhoule@bio.fsu.edu

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## FloridaStateU GenotypeEvolution

Florida State University, Department of Biological Science INTEGRATING GENOTYPE AND PHENOTYPE

The Department of Biological Science invites applications from molecular and evolutionary geneticists working to understand the relationship between genotype and phenotype. Eight tenure-track positions at all ranks will be filled. Two types of applications are being solicited: (1) individual candidates interested in building an interactive group of faculty and (2) self-identified groups of candidates at any level whose research collectively fits the mission of the initiative. Emphasis will be placed on hiring groups or individuals exploring gene regulatory mechanisms and their consequences for phenotypic variation and evolutionary change, including, but not limited to, epigenetics, regulatory RNAs, chromatin biology, comparative genomics, quantitative genetics, and developmental biology. This initiative coincides with the construction of a new Life Science Research and Teaching Building and is part of the Pathways of Excellence Program aimed at propelling FSU into the top rank of public universities.

To apply, please submit electronic copies (PDF files preferred) of a cover letter, curriculum vitae, statements of research and teaching interests, and the names and e-mail addresses of four references to Dr. David Houle, Chair, Genotype-Phenotype Search Committee, e-mail [genphensearch@bio.fsu.edu](mailto:genphensearch@bio.fsu.edu). Group applications should, in addition, identify a primary contact person and provide a brief description of the integrative nature of the group and the anticipated collaborative interactions among its members. Informal inquiries about submitting group applications are encouraged before submission.

For detailed information please visit <http://www.bio.fsu.edu/genphensearch/> Review of applications will begin December 8, 2006.

FSU is an AA/EO employer. Applications from minority and female candidates are especially encouraged.

David Houle

Phone: 850-645-0388 FAX: 850-644-9829 <http://bio.fsu.edu/~dhoule/> Department of Biological Science Florida State University Tallahassee, FL 32306-1100

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## ImperialCollegeLondon EvolBiol

Lecturer/Senior Lecturer in Ecology & Evolutionary Biology (2 posts)

Imperial College London Division of Biology Silwood Park Campus

Salary: Lecturer scale £37,290 - £41,650 per annum, Senior Lecturer scale £46,000 per annum upwards

Imperial College is ranked in the top ten universities of the world, according to the 2006 Times Higher Education Supplement league tables.

We seek to appoint two new permanent members of academic staff in the Division of Biology. We will welcome applications from talented researchers in any area of ecological, evolutionary, conservation or environmental biology but we particularly encourage applications from candidates in the fields of community, landscape and complex systems ecology; molecular ecology; experimental field and microcosm ecology; population ecology; and the biological consequences of environmental change. The positions are also open across microbial, plant and animal systems.

The Division of Biology is an RAE 5\* department in the Faculty of Natural Sciences. The Division includes the Ecology & Evolution Section and the NERC Centre for Population Biology, both of which are based at Imperial College's Silwood Park campus. The new appointees will be based at Silwood Park, working alongside academics with international reputations in the fields of ecology, evolution, conservation and environmental biology.

The successful applicants will be highly motivated, with a PhD in a relevant subject, and will have a strong research record for their career stage. They will be expected to develop an independent and externally-funded research programme, and to contribute to teaching at undergraduate and postgraduate levels.

Applications and requests for further information and application forms should be made to Mrs Diana Anderson, Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berks, SL5 7PY, UK, [d.anderson@imperial.ac.uk](mailto:d.anderson@imperial.ac.uk).

Applications should include a completed application form, curriculum vitae, brief statement of research in-

terests and names and addresses of three referees.

For informal enquiries please contact Prof. Ian Owens (i.owens@imperial.ac.uk).

Closing date: 1 December 2006

– Prof. Ian P.F. Owens Division of Biology & NERC Centre for Population Biology Imperial College London Silwood Park Ascot, Berkshire SL5 7PY, UK

<http://www.imperial.ac.uk/people/i.owens> Ian Owens <i.owens@imperial.ac.uk>

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## IowaStateU EvolOfOrganisms

Ecology and Evolution of Organisms- Iowa State University, Ames

The Department of Ecology, Evolution, & Organismal Biology at Iowa State University seeks a tenure-track Assistant Professor who excels in any area compatible with our department's interests in the ecology and evolution of organisms.

Potential research areas include: form, function, and adaptation plasticity, perceptory systems and behavior population dynamics, species interactions, and ecological organization diversification and systematics.

The successful candidate will join a dynamic department of 34 faculty who use integrative approaches that bridge disciplines and span multiple levels of biological organization. Applicants must have a Ph.D. in a biological science and are expected to develop a nationally recognized research program and contribute to undergraduate and graduate teaching.

Submit cover letter, CV, 3 reprints, research & teaching statements, & 3 letters of recommendation electronically to: [eeobsearch@iastate.edu](mailto:eeobsearch@iastate.edu) by 15 Oct 2006 For more information and instructions, please see <http://www.eeob.iastate.edu/search>. Direct questions to Dr. Carol Vleck, Search Committee Chair ([cvleck\(at\)iastate.edu](mailto:cvleck(at)iastate.edu)).

The department is committed to fostering a culturally diverse educational environment. ISU is an Equal Opportunity /Affirmative Action Employer.

Stephen Proulx Assistant Professor Ecology, Evolution & Organismal Biology 253 Bessey Hall Ames, IA 50011-1020 (515)294-0272 [proulx@iastate.edu](mailto:proulx@iastate.edu)

Office: 339 Bessey Hall

[proulx@iastate.edu](mailto:proulx@iastate.edu) [proulx@iastate.edu](mailto:proulx@iastate.edu)

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## JohnCurtinSchoolMed Bioinformatics

ANU College of Medicine and Health Sciences The John Curtin School of Medical Research Division of Molecular Bioscience

Research Fellow/Fellow in Bioinformatics/Computational Biology Academic Level B/C Fixed Term - up to 5 years

Salary Range: \$62,985 - \$87,907 pa plus 17% super

Reference No: JC 3713

The John Curtin School of Medical Research is seeking to make a new appointment within the Division of Molecular Bioscience.

The successful applicant will have demonstrated experience in bioinformatics or computational biology with a strong interest in and understanding of genome or protein structure, function and diversity. He/she will be expected to run an internationally competitive research programme in their area of expertise.

The successful applicant will be expected to supervise postdoctoral fellows and PhD students, as well as apply for funding from national and international funding bodies.

Level of appointment will be according to experience and qualifications.

\* Salaries are subject to a 6% increase from 16 November 2006.

Selection Criteria: <http://info.anu.edu.au/hr/jobs/> or from HR Management Section, CHMS T: + 61 2 6125 2580 E: [hr@cmhs.anu.edu.au](mailto:hr@cmhs.anu.edu.au)

Enquiries: Professor Frances Shannon, T: + 61 2 6125 9690 E: [frances.shannon@anu.edu.au](mailto:frances.shannon@anu.edu.au)

Closing Date: 6 weeks from advertisement placement

Information for applicants: [http://info.anu.edu.au/hr/Jobs/How\\_to\\_Apply/index.asp](http://info.anu.edu.au/hr/Jobs/How_to_Apply/index.asp) Job Application Cover sheet: [http://info.anu.edu.au/policies/Forms/Human\\_Resources/Recruitment/HR86.asp](http://info.anu.edu.au/policies/Forms/Human_Resources/Recruitment/HR86.asp)

[Gavin.Huttley@anu.edu.au](mailto:Gavin.Huttley@anu.edu.au)

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## KentStateU EvolBiol

ECOLOGICAL/EVOLUTIONARY BIOLOGY. As part of an ongoing expansion of the Biological Sciences faculty, Kent State University invites applications for a tenure-track position in the Department of Biological Sciences at the rank of assistant professor beginning in August 2007. We seek applicants who complement departmental strengths in conservation biology, ecology, and evolutionary biology and are particularly interested in candidates using genomic and/or proteomic tools to address ecological and/or evolutionary questions. The department has access to a variety of field sites and superb core research facilities and offers competitive startup packages. The successful candidate is expected to establish a high-quality, extramurally funded research program and exhibit a commitment to excellence in graduate and undergraduate education. Applicants must have a Ph.D. degree and postdoctoral experience. For more information on this position and the faculty, see [www.kent.edu/biology/ecol.search.cfm](http://www.kent.edu/biology/ecol.search.cfm). Applicants should send their curriculum vitae and relevant reprints, statement of research and teaching interests, and three letters of recommendation to:

Chair, Ecological/Evolutionary Biology Search Committee  
Department of Biological Sciences Kent State University  
P.O. Box 5190 Kent, Ohio 44242-0001 Fax: 330-672-3713

Review of applications will begin October 31, 2006, and continue until the position is filled. Kent State University is an Affirmative Action/Equal Opportunity Employer and encourages applications from candidates who would enhance the diversity of the University's faculty.

orochoa@kent.edu

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## Kingston Tasmania PopGenet

Population Geneticist (Research Scientist)

Southern Ocean Ecosystems

APS Level 6 - Executive Level 1 - non-ongoing (approx-

imately 4 years)

Salary: \$59,316 - \$80,921 pa

Duties: The Population Geneticist will contribute to the development of the Australian Government Antarctic Division's (AGAD) research programme by working within the Australian Centre for Applied Marine Mammal Science (ACAMMS). The specific tasks of the Population Geneticist will be to design, execute, analyse and publish population genetic studies of marine mammals. He/she will work within a small team of marine mammal researchers and with a network of external collaborators in support of the priorities for ACAMMS and the AGAD's science strategic plan. The incumbent is expected to develop a population genetics research programme that includes post-graduate research projects.

Applications addressing the selection criteria together with the Application Cover Sheet and Medical Checklist Form should be forwarded to the Corporate Services Officer, Australian Government Antarctic Division, 203 Channel Highway, Kingston, Tasmania 7050 or via email to [recruitment@aad.gov.au](mailto:recruitment@aad.gov.au).

Closing date: Friday 13 October 2006

Contact Officer: Dr Nick Gales (03) 6232 3437 or email [nick.gales@aad.gov.au](mailto:nick.gales@aad.gov.au).

Note: Applications will not be acknowledged. Engagement may be subject to conditions including probation, qualifications, health and security/character clearance requirements. Applications from persons who are not Australian citizens will usually only be considered where there are no suitable Australian applicants. A relocation allowance may be payable where the successful candidate is recruited within Australia and is required to relocate to Southern Tasmania.

Australian Government Antarctic Division - Commonwealth of Australia IMPORTANT: This transmission is intended for the addressee only. If you are not the intended recipient, you are notified that use or dissemination of this communication is strictly prohibited by Commonwealth law. If you have received this transmission in error, please notify the sender immediately by e-mail or by telephoning +61 3 6232 3209 and DELETE the message. Visit our web site at <http://www.aad.gov.au/> Simon Jarman <[Simon.Jarman@aad.gov.au](mailto:Simon.Jarman@aad.gov.au)>



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**NCStateMuseum**  
**DirectorResearchCollections**

<http://osp.its.state.nc.us/positiondetail.asp?vacancykey=4328-0000-0028-150&printit=no>

\*Position\*: NATURAL SCIENCE RES CURAT  
Working Title: DIR OF RESEARCH & COLLECTIONS \*Vacancy Number\*: 4328-0000-0028-150  
\*Salary Grade\*: FR \*Salary Range\*: \$43641 - \$74371  
\*Hiring Range\*: \$43641 - \$74371 \*Department\*: ENVIRONMENT & NATURAL RESOURCES \*Division\*: N. C. MUSEUM OF NATURAL SCIENCES  
\*Type of Appointment\*: Perm Full-Time \*Location\*: WAKE \*Posting Date\*: 10/13/2006 \*Closing Date\*: 11/10/2006 \*Number of Positions\*: 1

**\*Description of Work\***

manages and supervises the research & collections section; develops relationships and collaborations/projects with scientific community and other agencies; conducts research and disseminates information. plays a key role in overseeing scientific content disseminated by the museum and the nature research center (planned new wing of the museum); will work closely with the nrc director and scientific advisory board on science content development of the nrc programming and research. the director of research and collections is the primary administrative position for the research and collections section. is a member of the museum's management team and reports to the museum director. directly supervises 8 curator iis and the research administrative assistant. will oversee the activities of 15 permanent positions.

**\*knowledge, skills and abilities\***

requires policy making skills. ability to develop procedures and recommendations to the museum director. ability to work with a wide range of people in a positive manner. requires scientific accuracy of the highest professional quality. ability to develop and present scientific papers acceptable to peer review groups. ability to work successfully both independently and with others, and must work with a wide variety of people from the general public to internationally recognized experts in biological fields.

ph.d. preferred. supervision and oversight of a natural resources unit, fundraising abilities, including experience in obtaining grant funds for research and special

projects related to collections.

**\*training and experience requirements\***

master's degree in biology, zoology, botany, or other natural science curriculum or related field and four years of progressively responsible experience, preferably in a natural science museum program; or an equivalent combination of education and experience. management prefers 10 years of research and administration in a university science, or science related, department or a natural history museum.

**\*How to Apply\***

The State Application for Employment (.PD-107-) <<http://www.osp.state.nc.us/jobs/gnrlnfo.htm#app>> and a comprehensive list of State Government vacancies are available on the Internet at <http://www.osp.state.nc.us/jobs/gnrlnfo.htm#app>.

The North Carolina Museum of Natural Sciences (MNS) uses the Merit-Based Recruitment and Selection Plan to fill positions subject to the State Personnel Act with highly qualified individuals. NC DENR-Museum of Natural Sciences is an Equal Opportunity Employer. All applicants must complete and submit a State Application for Employment (.PD-107-) <<http://www.osp.state.nc.us/jobs/gnrlnfo.htm#app>>. Resumes will not be considered official application of employment and will not be accepted in lieu of a State Application for Employment (.PD-107-) <<http://www.osp.state.nc.us/jobs/gnrlnfo.htm#app>>. Faxed applications will not be accepted. Be sure to indicate the position/vacancy number and job title in the section "Jobs Applied For". Applicants seeking Veteran's Preference for first time employment with State Government should submit either Form DD-214 or discharge orders. Application must be received in the MNS Division Personnel Office no later than 5:00 p.m. on the closing date. Salary rate depends upon training, experience, equity, and budgetary considerations. Degrees must be received from appropriately accredited institutions.

\*Contact Person\*: RHONDA CLAPP \*Contact Agency\*: MUS. OF NATURAL SCIENCES \*Contact Address\*: 11 W. JONES ST.

RALEIGH , NC 27601-1029 \*\*Contact Phone\*: \* 919-733-7450 \*Ext\*: \*00207

"Morgan Raley, Ph.D." <[Morgan.Raley@ncsu.edu](mailto:Morgan.Raley@ncsu.edu)>

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## NorthCarolinaStateU 2 Genetics

Please post to EvolDir:

Two Faculty Positions

Department of Genetics

North Carolina State University

The Department of Genetics at North Carolina State University seeks applications at the ASSISTANT PROFESSOR level for two tenure-track faculty positions. We seek outstanding individuals whose research interests and model systems add breadth to and complement the existing strengths of the Department (see <http://www.cals.ncsu.edu/genetics/> for additional information).

A Geneticist, with research interests exploring fundamental biological problems using eukaryotic model organisms. Dr. William R. Atchley, Chair of Genetics Search, position # 01-09-0610.

An Evolutionary/Population Geneticist, with research interests exploring fundamental problems in evolutionary and population genetics. Dr. Trudy F. C. Mackay, Chair of Evolutionary/Population Genetics Search, position # 01-09-0609.

Applicants must have a Ph.D., postdoctoral research experience, teaching experience and clear evidence of productivity, creativity and independence. Successful candidates will participate in undergraduate and graduate teaching and are expected to develop a vigorous extramurally funded research program.

Review of applications will begin October 30, 2006 and continue until the position is filled. To apply go to <http://jobs.ncsu.edu>, search by position number and provide a letter of application, curriculum vitae, a brief statement of research and teaching interests. Candidates should mail representative preprints or reprints and arrange to have at least three letters of recommendation sent to the appropriate search chair at the Department of Genetics, Box 7614, North Carolina State University, Raleigh, NC 27695-7614.

NC State is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, national origins, religion, sex, age, veteran status, or disability. NC State University welcomes all persons without regard to sexual orientation. ADA Accom-

modations: Jeffrey Hawley ([jeff.hawley@ncsu.edu](mailto:jeff.hawley@ncsu.edu); ph: 919-515-5727; fax: 919-515-3355).

Julie Douglas Pederson Department of Genetics North Carolina State University Raleigh, NC 27695-7614 Tel: 919-515-4248 Fax: 919-515-3355 email: [julie.pederson@ncsu.edu](mailto:julie.pederson@ncsu.edu)

Julie Pederson <[julie.pederson@ncsu.edu](mailto:julie.pederson@ncsu.edu)>

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## OhioStateU WorkflowProgrammer

The Ohio State University Department of Biomedical Informatics ([bmi.osu.edu](http://bmi.osu.edu)) seeks a programmer (BS to MS) to develop a workflow application to integrate results of whole genome phylogenetic analysis with geographic, environmental, and phenotypic data. Experience in data modeling, query interface development, and data management in the context of geographic information systems is important. Contact: Daniel Janies, ([danjanies@yahoo.com](mailto:danjanies@yahoo.com)) for more information.

[Daniel.Janies@osumc.edu](mailto:Daniel.Janies@osumc.edu) [Daniel.Janies@osumc.edu](mailto:Daniel.Janies@osumc.edu)

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## Paris EvolEcol

LECTURER (MAITRE DE CONFERENCE) IN EVOLUTIONARY ECOLOGY OF HOST-PARASITE INTERACTIONS The Laboratory of Evolutionary Parasitology (Universit Pierre et Marie Curie, Paris, France) intends to create a permanent position for a lecturer (Ma"tre de Confrence) in evolutionary ecology of host-parasite interactions. We seek candidates interested in experimental coevolution of microbial host-parasite systems. The candidate should have a broad background in evolutionary ecology (life history theory, population biology, population genetics). He or she should be interested in the interplay between ecological factors, epidemiology and the coevolutionary process and have experience with microbiology techniques and experimental evolution approaches. Teaching will include introductory lectures as well as advanced courses for masters students. The position will be officially advertised in spring 2007 and start in autumn 2007. Note that the French system requires that potential candidates be registered in the so-called "liste des qualifications" for which the deadline is October

16, 2006! For further information, contact Oliver Kaltz (okaltz@snv.jussieu.fr).

Oliver Kaltz Laboratoire de Parasitologie Evolutive CNRS-UMR 7103, CC 237 Université Pierre et Marie Curie 7 quai St. Bernard 75252 Paris Cedex France

tel: ++33-1-44273823 fax: ++33-1-44273516

okaltz@snv.jussieu.fr

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### ScrippsInst MuseumScientist

41101 MUSEUM SCIENTIST (100% Career) Filing Deadline: 11/01/2006 Payroll Title: Asst Museum Scientist. Full Salary Range: \$2,773 - \$3,308/month. Payroll Title: Museum Scientist. Full Salary Range: \$3,045 - \$4,900/month.

\*\*\* Level of the position will be based on candidate's experience and qualifications.

**DESCRIPTION:** Under supervision, perform curatorial, preparatory, and clerical activities of the SIO Benthic Marine Invertebrates research collection. Maintain best practice for specimen curation, storage, and mailing as well as data handling, and data sharing. Develop and maintain the Benthic Invertebrates website, including the online database and image library. Track institutional loans, including those for teaching purposes. Ensure proper permits and documentation are current for field collection and museum exchange of specimens. Assist the curator in identifying, and applying for, available extramural funding. Train volunteers in the use of the collection. Assist curators, faculty, scholars, and students in obtaining and identifying specimens for the research projects. Support institutional fund-raising efforts by providing tours and information regarding the collection. Host meetings and present talks to school and special interest groups on research and collection activities. Organize displays presenting collection material and research activities. Under supervision, research and publishing on invertebrate group/s of interest is possible.

**QUALIFICATIONS:** \* Experience in invertebrate diversity, systematics, scientific nomenclature and invertebrate literature. \* Prior experience with preservation techniques for large and small invertebrates. \* Experience with museum/collections operations and procedures. \* Experience in studying and identifying invertebrate materials. \* Experience with website creation and

maintenance, particularly those components which encompass a digital image library and an online database. \* Experience with field collection of benthic marine invertebrates. \* Graduate degree involving systematics and/or taxonomy or an equivalent combination of education and experience. \* Must be able to work around alcohol and other preservatives. \* Must be able to go to sea/remote location for collection purposes.

**SPECIAL CONDITIONS OF EMPLOYMENT:** Possess or be able to acquire a SCUBA diving license.

For application details follow this link:

<http://joblink.ucsd.edu/bulletin/job.html?job.id=-41101>

Note the job closing date is November 1, but this will be extended to November 17.

For further information you may contact

Greg Rouse Scripps Institution of Oceanography 0202 University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093-0202 USA

e-mail: grouse@ucsd.edu Phone: +1 858 534 7973 Fax: +1 858 534-7313

[grouse@ucsd.edu](mailto:grouse@ucsd.edu) [grouse@ucsd.edu](mailto:grouse@ucsd.edu)

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### UArizona EvolBiol

RE: Position in microbial ecology and evolution

Dear Colleague,

Please bring the position below to the attention of any qualified applicants. We seek an outstanding researcher who will take advantage of an excellent research set up and the opportunity to develop an independent and creative research program.

Sincerely,

Nancy Moran

Regents' Professor Department of Ecology and Evolutionary Biology University of Arizona Tucson Arizona 85721 nmoran@email.arizona.edu tel 520-621-3581 fax 520-621-9190

**FACULTY POSITION DEPARTMENT OF ECOLOGY & EVOLUTIONARY BIOLOGY UNIVERSITY OF ARIZONA**

A tenure-track position is available as part of a broad initiative in microbial sciences at the University of

Arizona. We seek applicants with independent research programs in microbial biology, as exemplified by any of the following areas: 1) microbial evolution and ecology; 2) microbial genomics and/or metagenomic analysis; 3) evolution and/or population biology of infectious disease agents; 4) bioinformatics, computational or evolutionary genomics; 5) systems biology and proteomics in microbial systems. Research organisms can be bacterial, archaeal or eukaryotic. The start date is flexible but may be as early as summer 2007. Curriculum vitae and statements of research and teaching interests must be submitted online at <http://www.uacareertrack.com/> www.uacareertrack.com (Job #35890). In addition, please arrange to have three letters of recommendation sent to:

Amanda Burke Microbial Biologist Search EEB Department - BSW 310 1041 E. Lowell Street, U of A Tucson, AZ 85721

Review of applications will begin October 31 and continue until position is filled. The University of Arizona is an EEO/AA Employer - M/W/D/V.

Amanda Burke <ajburke@email.arizona.edu>

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## UArkansas EvolGlobalChangeBiol

Brian, The endowed chair is directed to anyone who is involved in global change biology - ecologists, geneticists, evolutionary biologists, plant biologists, nutrient cycling folks, etc. The other is for an ecologist, but they are being advertised together in Science, etc soon, so I sent them together. We are simply hoping to find the best qualified persons to join our group in ecology and evolutionary biology.

### ENDOWED CHAIR, GLOBAL CHANGE BIOLOGY

The Department of Biological Sciences seeks applicants for an Endowed Chair (rank open) in Global Change Biology, working on the biotic consequences of environmental change. Candidates must have a Ph.D. and an established record of research productivity in a field relevant to Global Change Biology. The candidate will be expected to continue a well funded research program, supervise graduate students, teach at the graduate and undergraduate levels, and provide leadership at the department and university levels in developing research emphases in Global Change Biology.

ECOLOGIST

The Department of Biological Sciences seeks applicants for a tenure- track Assistant Professor in Ecology. Particular preference will be paid to those working in problems that emphasize community, ecosystem, or landscape ecology. The candidate must have a Ph.D., post-doctoral experience and an established record of research productivity and will be expected to develop an active research program, supervise graduate and undergraduate research, and teach at the graduate and undergraduate levels.

The University of Arkansas is a land grant institution with facilities for stable isotope analysis, molecular biology, GIS, tree- ring analysis, water and soil analyses, and the USGS Cooperative Fish and Wildlife Research Unit.

Application review will begin November 15, 2006, and will continue until the positions are filled. Send a curriculum vita, statements of research and teaching interests, and at least three letters of recommendation to Dr. Steven J. Beaupre, GCB Search Committee Chair, Department of Biological Sciences, or Dr. Gary R Huxel, Ecology Search Committee Chair, SCEN 632, University of Arkansas, Fayetteville, AR 72701. Please visit <http://biology.uark.edu/> . The University of Arkansas is an Equal Opportunity/Affirmative Action Employer. Applicants must have proof of legal authority to work in the United States at the time of hire.

William J. Etges Department of Biological Sciences SCEN 632 University of Arkansas Fayetteville, AR 72701 USA wetges@uark.edu <http://comp.uark.edu/~wetges/wetges.html> voice: (479) 575-6358 lab: (479) 575-7437 FAX (479) 575-4010

“Those who would sacrifice liberty for security deserve neither.” Ben Franklin.

“William J. Etges” <wetges@uark.edu>

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## UBritishColumbia EvolTheory

The Department of Mathematics at UBC is looking for a person in Mathematical Ecology and Evolution, with preference given to people working in evolutionary theory, e.g. adaptive dynamics or game theory.

The official ad is pasted below. The Math Department at UBC has a very good Math Biology group and a top notch Probability group. UBC also has a very good Ecology and Evolution group in the Zoology Department. Therefore, the position offers excellent opportu-

nities for scientific interactions. In addition, Vancouver is a very beautiful place to live and work.

Please don't hesitate to contact me with any questions regarding this position.

Best regards,

Michael Doebeli

The Mathematics Department at the University of British Columbia is seeking outstanding candidates for at least four positions, subject to funding, at the tenure-track Assistant Professor level, with a starting date of July 1, 2007. Postdoctoral experience is normally expected. Exceptional candidates at the Associate Professor or Professor level may be considered. Priority research areas are (see <http://www.math.ubc.ca/-priorities/>):

1. Mathematical Evolution and Ecology. Some preference will be given to applicants working in evolutionary theory, including but not limited to game theory, adaptive dynamics, or quantitative genetics.
2. Algebraic Groups, Representation Theory, or Automorphic Forms.
3. Geometric Analysis, especially differential/symplectic geometry via PDE methods.
4. Computational Applied Mathematics with a strong emphasis in scientific computation.
5. Mathematical Finance and Economics.

In any event, exceptional candidates in any area of Mathematics may be considered. Joint positions with other departments may be possible. The successful applicant is expected to work in an area of interest to current faculty, to interact with related groups in the Department and to have demonstrated interest and ability in teaching. The salary will be commensurate with experience and research record.

Applicants are strongly encouraged to apply online as described at: <http://www.math.ubc.ca/Dept/-deptJobs.shtml#Apply> Alternatively, applicants may send a current CV including a list of publications, statement of research and teaching interests, and should arrange for three letters of recommendation to be sent directly to:

Chair, Departmental Committee on Appointments  
Department of Mathematics, #121-1984 Mathematics Road  
University of British Columbia Vancouver, B.C., Canada, V6T 1Z2

The deadline date for receipt of applications is December 1, 2006.

The Department is one of the leading Mathematics Departments in Canada and has strong connections with other mathematical institutes, such as the Pacific Institute for the Mathematical Sciences (PIMS),

Mathematics of Information Technology and Complex Systems (MITACS), Banff International Research Station (BIRS), and the UBC Institute for Applied Mathematics (IAM). For more information see <http://www.math.ubc.ca> The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply; however Canadian citizens and permanent residents will be given priority.

Dr. Michael Doebeli Department of Mathematics University of British Columbia 1984 Mathematics Road Vancouver B.C. Canada V6T 1Z2

email: [doebeli@math.ubc.ca](mailto:doebeli@math.ubc.ca) phone: (604) 822-3326 fax: (604) 822-2416

web: <http://www.math.ubc.ca/~doebeli> web: <http://www.math.ubc.ca/~doebeli>

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## UCSantaCruz PlantEvoBiol

UNIVERSITY OF CALIFORNIA, SANTA CRUZ  
ECOLOGY & EVOLUTIONARY BIOLOGY Assistant Professor Position #799-07

The Ecology & Evolutionary Biology Department of the University of California, Santa Cruz, invites applications for a tenure-track faculty position in Plant Evolutionary Biology.

We are seeking candidates investigating broad themes in evolutionary biology, including but not limited to the fields of evolutionary physiology, paleoecology, phylogeography, the evolution of diversity, evolutionary ecology, and the application of phylogenetic methods to evolutionary questions. The successful candidate must be committed to excellence in research and in teaching at both the undergraduate and graduate levels, including courses in plant diversity and evolution, and contribute to the academic community through university service and close interactions with other faculty. The campus is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching, and/or service.

MINIMUM QUALIFICATIONS: A Ph.D. in a relevant field; postdoctoral or equivalent research experience; a demonstrated record of research excellence and potential for teaching and mentorship. POSITION AVAILABLE: Fall 2007

TO APPLY: Electronic submissions are required.



Please e-mail a curriculum vitae and a statement of research and teaching interests to [eebrecruit@biology.ucsc.edu](mailto:eebrecruit@biology.ucsc.edu). Please arrange for three letters of reference evaluating the candidate's scholarly contributions, teaching, and other professional accomplishments to be e-mailed directly by the referee to the e-mail address below. Letters will be treated as confidential documents (please direct referees to UCSC's confidentiality statement at <http://www2.ucsc.edu/ahr/policies/confstm.htm>).

EMAIL ADDRESS: [eebrecruit@biology.ucsc.edu](mailto:eebrecruit@biology.ucsc.edu)  
Please refer to position #799-07 in all correspondence.

CLOSING DATE: Positions are open until filled. Initial screening will begin on November 6, 2006. To ensure full consideration, applications must be received by that date.

For more information about the Biology Department, visit <http://www.biology.ucsc.edu>  
[parker@biology.ucsc.edu](mailto:parker@biology.ucsc.edu) [parker@biology.ucsc.edu](mailto:parker@biology.ucsc.edu)

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## UC Merced Bioinformatics

Assistant professor in Bioinformatics

UNIVERSITY OF CALIFORNIA, MERCED

The University of California is creating a dynamic new university campus and campus community in Merced, California, which opened in September 2005 as the tenth campus of the University of California and the first American research university built in the 21st century. In keeping with the mission of the University to provide teaching, research and public service of the highest quality, UC Merced will be providing new educational opportunities at the undergraduate, masters and doctoral levels through three academic schools: Engineering, Natural Sciences and Social Sciences/Humanities/Arts.

The School of Natural Sciences at the University of California, Merced invites applications for a tenure-track faculty position in Bioinformatics. The ideal candidate will develop state-of-the-art research on integrative data analysis and interpretation using mathematical and statistical models in biological systems. The research emphasis should be on integrative approaches, such as systems biology, networks analysis, comparative genomics, computational biology and bioinformatics that address fundamental biological questions in

model and non-model organisms. The candidate should demonstrate outstanding leadership potential, pertinent to developing an innovative research program and to promoting the success of the University of California's newest campus. The successful candidate will be expected to teach undergraduate and graduate courses in bioinformatics, as well as contribute to courses that further our goals in interdisciplinary education.

The University of California at Merced is an affirmative action/equal opportunity employer with a strong institutional commitment to the achievement of diversity among its faculty, staff, and students. The University is supportive of dual career couples.

Interested applicants should submit online: curriculum vitae, statements of research and teaching interests, and the names and addresses of five references (<http://jobs.ucmerced.edu/n/academic/position.jsf?positionIdp2>).

Applications will be considered starting on December 31, 2006.

For further information please contact Mónica Medina, School of Natural Sciences at: [mmedina@ucmerced.edu](mailto:mmedina@ucmerced.edu).

Monica Medina Assistant Professor and Founding Faculty School of Natural Sciences University of California, Merced P.O. Box 2039 Merced CA 95344 tel: 209-381-7863 fax: 209-228-4053 [mmedina@ucmerced.edu](mailto:mmedina@ucmerced.edu) <http://qsb.ucmerced.edu/mmedina/> Monica Medina <[mmedina@ucmerced.edu](mailto:mmedina@ucmerced.edu)>

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## UCaliforniaSantaBarbara EvolTheory

Assistant Professor: Evolutionary Theory University of California, Santa Barbara

The Department of Ecology, Evolution, and Marine Biology at the University of California, Santa Barbara seeks an interactive scientist who develops theory to address fundamental questions in evolutionary biology. Theorists whose research program additionally includes organismal, empirical or comparative approaches are also encouraged to apply. The appointment will be at the Assistant Professor level. The primary selection criteria for this position are excellence in both research and teaching. Applicants will be expected to teach courses at the undergraduate and graduate levels in evolutionary theory and in other ar-

eas according to their expertise. More details on the position can be found at <http://www.lifesci.ucsb.edu/-eemb/department/jobs/jobs.html/> Applicants should submit an application letter together with a curriculum vitae, a statement of research accomplishments and future plans, a statement of teaching experience and interests, up to five selected reprints, and arrange for three letters of reference to be sent to:

Evolution Search Committee Department of Ecology, Evolution, and Marine Biology University of California Santa Barbara, CA 93106-9610 U.S.A.

Alternatively, applications can be sent electronically to [evolutionsearch@lifesci.ucsb.edu](mailto:evolutionsearch@lifesci.ucsb.edu).

Review of applicants will begin January 3, 2007, and will continue until the position has been filled.

The department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service.

UCSB is an Equal Opportunity Affirmative Action employer.

Todd Oakley, Assistant Professor Ecology Evolution and Marine Biology University of California- Santa Barbara, CA 93106

[oakley@lifesci.ucsb.edu](mailto:oakley@lifesci.ucsb.edu) [oakley@lifesci.ucsb.edu](mailto:oakley@lifesci.ucsb.edu)

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## **UColoradoBoulder VertebrateCurator**

Please feel free to post this job advertisement widely within your institutions. Best, Rob Guralnick

Curator of Vertebrates and Assistant Professor in Ecology and Evolutionary Biology

The University Museum and Department of Ecology and Evolutionary Biology (EEB), University of Colorado Boulder invite applications for a joint, tenure-track, 9-month appointment as Curator of Vertebrates and Assistant Professor. Primary responsibilities will be to curate and develop the Museum's vertebrate collections, conduct research on vertebrates, and teach in Museum and Field Studies and EEB. Applicants must have a doctoral degree and published research; curatorial experience is important. Send curriculum vitae, representative publications, statements of research, teaching and curatorial experience, and names and addresses of four references to Dr. Robert Guralnick, Uni-

versity of Colorado Museum, 265 UCB, Boulder, CO 80309-0265. Review of applications begins December 1, 2006. The University of Colorado is committed to diversity and equality in education and employment.

Rob Guralnick <[Robert.Guralnick@colorado.edu](mailto:Robert.Guralnick@colorado.edu)>

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## **UConnecticut Bioinformatics**

Bioinformatics Scientist Biotechnology/Bioservices Center

The University of Connecticut seeks a Bioinformatics Scientist primarily to serve the biological science community through consultation in a Bioinformatics Facility in the Biotechnology/Bioservices Center. The Facility consists of a 17-node Apple Workgroup cluster that uses Sun Grid Engine for its distributed resource management and runs Bioteam's iNquiry as a portal to over 170 applications. A Systems Manager maintains the cluster and applications. The successful candidate will provide consultation to faculty and graduate students on the use of specific computing tools for solving a broad range of problems in biology, be able to interface with biologists and computer scientists, have an excellent command of verbal and written communication skills, and must use them effectively. Extensive experience is required in the application of software and databases used in computational biology, and in supporting desktop computing environments. Long range efforts will be to continue development and maintenance of an integrated bioinformatics network to serve a diverse research community.

Qualifications include a M.S. or Ph.D. in bioinformatics and experience or the equivalent skills to handle problems in phylogenetics, genomics, gene and protein expression analysis, database mining, molecular modeling, and structure-function analysis. Highly desirable are two or more years post M.S. work experience. The M.S. appointment will be as an Academic Assistant II or III. The successful candidate will function as a technical resource by providing support to faculty and students for on-going research activities. Candidates with a Ph.D. and a strong publication record may be eligible for an Assistant Professor In-Residence position. This position provides opportunities for research and an affiliation with an academic department. In addition, this position requires research activities supported by external grant funding, and may involve teaching. Both positions are non-tenure track annual 11-month appoint-

ments. Salary commensurate with qualifications.

Screening of candidates will begin immediately and remain open until filled. Interested candidates must submit a cover letter, curriculum vitae, and have three letters from professional referees sent to: Sue Levesque, University of Connecticut, Biotechnology/Bioservices, Unit 3149, 91 N. Eagleville Road, Storrs, CT 06269-3149.

The University of Connecticut encourages applications from under-represented groups, including minorities, women, and people with disabilities.

j.p.gogarten@uconn.edu j.p.gogarten@uconn.edu

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## UGeorgia EvolutionaryGenetics

### FACULTY POSITION IN ECOLOGICAL GENETICS

As part of a long-term effort to build on strengths in evolutionary biology, the Department of Genetics at the University of Georgia has committed to hiring five new faculty in evolutionary biology over a three year period. Last year, we added two faculty in the areas of molecular evolution and theory. This year, we invite applications for a tenure-track position in evolutionary biology at the Assistant Professor level. We are seeking a scientist using an experimental approach to study fundamental questions at the interface of genetics and ecology. Future faculty lines will be in the areas of evolutionary genomics, and evolution & development. For information about the department, see <http://www.genetics.uga.edu>. Applications should be sent by email as a single PDF file that includes a cover letter, CV, and brief statements of research and teaching interests to: "ecogen@uga.edu". Three letters of recommendation should also be sent, either as a PDF to the above e-mail address, or in hard copy, to the Ecological Genetics Search Committee, Department of Genetics, Davison Life Sciences Building, University of Georgia, Athens, GA 30602-7223. Review of applications will begin on November 20, 2006.

The University of Georgia is an affirmative action, equal opportunity employer and is committed to having a diverse faculty.

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Rodney Mauricio, Ph.D. Department of Genetics  
Phone: (706) 542-1417 University of Georgia FAX:  
(706) 542-3910 Athens, GA 30602-7223 e-mail: mauri-

cio@uga.edu

Lab Web Page: <http://www.genetics.uga.edu/-mauriciolab/mauriciohome.html> Evolution at UGA: <http://www.genetics.uga.edu/evolution/evoluga.html>  
mauricio@uga.edu mauricio@uga.edu

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## UGuelph BarcodingTech

Lab Technician Position(s) at the Canadian Centre for DNA Barcoding Location: Canadian Centre for DNA Barcoding, Biodiversity Institute of Ontario, University of Guelph, Guelph, Ontario, Canada.

Responsibilities: The Canadian Centre for DNA Barcoding invites applications for technicians to work in close association with scientists conducting research in species discovery and identification in fungi and protists using DNA barcodes. Research in our lab utilizes high-volume DNA isolation protocols optimized for use with robotic liquid handling systems. Barcode sequencing is performed using two ABI 3730 sequencers. DNA extraction, amplification and sequencing will generally be performed by a technician working independently, while sequence editing and analysis will be in closer collaboration with the supervising postdoctoral researcher. Applicants should be well-rounded individuals with a molecular biology and genetics background and strong time management skills.

\*Molecular biology: Preparation of DNA extractions, PCR, DNA sequencing, and DNA sequence analysis. Occasional use of robotics may be required, but training can be provided.

\*Computer work: Data analysis using a variety of software packages. Utilize molecular biology software (e.g. primer design, sequence alignment, database searches, etc.), and analysis of data Barcode of Life Datasystems (BOLD) software.

Qualifications: B.Sc. or M.Sc. in molecular biology or related field. Coursework and/or experience in genetics.

Closing Date: Open until filled. Preferred starting date November 1, 2006.

Contact: Send cover letter, résumé, to Dr Alex Smith, Biodiversity Institute of Ontario, Integrative Biology, University of Guelph, Guelph Ontario, N2G 1W1 or e-mail materials to [salex@uoguelph.ca](mailto:salex@uoguelph.ca)

– M. Alex Smith PhD Research Program Coordi-

nator Biodiversity Institute of Ontario Department of Integrative Biology University of Guelph Guelph ON N1G 2W1 (519) 824-4120 office ext. 52007 lab ext. 52709 [www.barcodinglife.org](http://www.barcodinglife.org) [www.biodiversity.ca](http://www.biodiversity.ca) [salex@uoguelph.ca](mailto:salex@uoguelph.ca)

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## UIdaho ReproductiveBiol

Brian,

Could you post the following on EvoDir? Though the position is focused on reproductive or developmental biology, people working on Evo-Devo or the evolution of reproductive systems would be a great fit in our department.

Thanks

Barrie Robison

Faculty Position in Vertebrate Reproductive/Developmental Biology

The Department of Biological Sciences at the University of Idaho invites qualified individuals to apply for a tenure-track position in reproductive or developmental biology. Preference will be given to individuals at the assistant professor rank whose research interests complement current areas of strength within the department ([www.sci.uidaho.edu/biosci/](http://www.sci.uidaho.edu/biosci/)): gamete physiology, developmental biology, evolutionary genetics, molecular biology of sex steroid receptors, gonad transplantation, endocrine disruptor toxicology, and reproductive behavior. The successful candidate will have the opportunity to conduct interdisciplinary research with faculty in the Center for Reproductive Biology ([www.crb.wsu.edu](http://www.crb.wsu.edu)), a joint initiative between the University of Idaho and nearby Washington State University. The University of Idaho has exceptional holding facilities for warm water (e.g., zebrafish) and cool water (e.g., trout) fish, mammals, and birds. The candidate will be expected to teach at both the undergraduate and graduate levels. A competitive salary and start-up package will be provided. A Ph.D. in Biology or a related field and postdoctoral experience are required. For more information and to apply online, visit: <http://www.hr.uidaho.edu>. Send inquiries to [biofac@uidaho.edu](mailto:biofac@uidaho.edu). Review of applications will begin on December 8, 2006; those completed by that date will have priority.

The University of Idaho is an affirmative action equal opportunity employer.

Barrie Robison <[brobison@uidaho.edu](mailto:brobison@uidaho.edu)>

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## Uillinois GenomicsBiol

The University of Illinois at Urbana-Champaign is devoting significant new resources to the further strengthening of its programs in genomic biology and related disciplines. The institute for Genomic Biology is co-sponsoring five new tenure-track faculty positions in the area of Evolutionary Genomics. Faculty hiring will be based in one or more academic departments, with the possibility of a joint appointment in an institute for Genomic Biology research theme (<http://www.igb.uiuc.edu/research.html>). As established leaders in the genomics of model organisms and integrative biology, the university seeks ambitious scientists who wish to work in an unparalleled interdisciplinary environment to pursue fundamental questions in evolutionary biology using genomic approaches.

The Department of Animal Biology (School of Integrative Biology) invites applications for a full-time (9-month), tenure-track faculty position at the assistant professor level to begin August 16, 2007, or negotiable. We seek candidates who can establish a vigorous, externally funded research program in vertebrate evolutionary-developmental biology, broadly construed. Areas of interest include, but are not limited to, evolution of phenotypic variation or plasticity, and genomic studies of selection or diversification. We are particularly interested in candidates using or developing genomic approaches. The successful candidate will be expected to collaborate with current faculty to develop major research initiatives in evolutionary genomics. For full consideration, applications must be received by December 8, 2006. For more information see [www.life.uiuc.edu/sib](http://www.life.uiuc.edu/sib), email [sib@life.uiuc.edu](mailto:sib@life.uiuc.edu), or call 217.333.3044.

The Department of Animal Sciences (College of Agricultural, Consumer, and Environmental Sciences) is searching for a fulltime (9-month), tenure-track assistant professor in evolutionary genomics. The successful candidate will contribute to departmental and campus-wide programs in evolutionary and statistical genomics, and bioinformatics. The successful candidate's research program will utilize genomic tools to address questions relating to the evolution of vertebrate genomes, the genomic basis of adaptive evolutionary responses, and genomic changes resulting from intensive selection and domestication. Questions should be

directed to Dr. Lawrence B. Schook at 217.265.5326 or schook@uiuc.edu. Applications received by October 31, 2006, will receive full consideration. Further application information is detailed at [www.ansci.uiuc.edu/-jobs/searches/evo\\_genomics/](http://www.ansci.uiuc.edu/-jobs/searches/evo_genomics/). The Department of Entomology and Department of Pathobiology seek an outstanding scientist with a background in interdisciplinary research involving the evolution of arthropod vector-pathogen interactions, genetics and genomics, for a full-time, tenured faculty position at the Associate Professor or Professor level to begin August 2007, or as negotiated. Candidates must have a Ph.D. in a relevant field, such as Molecular Evolution, Entomology, Microbiology, Parasitology or Genetics. The successful candidate will have developed an externally funded research program involving genome-wide studies to investigate the origin and evolution of genes essential to the establishment and maintenance of arthropod vector-pathogen interactions. For full consideration, applications must be received by December 8, 2006. For more information, see [www.life.uiuc.edu/sib](http://www.life.uiuc.edu/sib) and [www.life.uiuc.edu/sib](mailto:derosset@uiuc.edu) email derosset@uiuc.edu, or call 217.333.2449.

The Department of Natural Resources and Environmental Sciences seeks a full-time (9-month), tenure-track assistant professor of plant evolutionary genomics. Applicants should have a Ph.D. and a multidisciplinary background that combines plant evolution and genetics, molecular biology, and functional genomics. We prefer candidates who can apply genomics tools to study genetic patterns of perennial plant evolution in response to artificial selection and domestication, and who will develop an internationally recognized research program, direct graduate students, interact with undergraduates, contribute to teaching needs, and compete for research funds. For full consideration, applications must be received by October 16, 2006. For more information, see [www.nres.uiuc.edu](http://www.nres.uiuc.edu), or call 217.333.9738.

The Department of Psychology is searching for a full-time (9-month) faculty member with expertise in the area of molecular genetics and individual differences in human behavior, broadly construed. We are particularly interested in applications from scholars who study the biological and genetic epidemiological systems that contribute to

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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>

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## UKentucky BiologyChair

We seek a scholar of outstanding achievement to lead the Biology Department at the University of Kentucky in a significant expansion of its faculty, facilities and mission. This initiative to enhance our prominence in science and education is propelled by a major legislative mandate to augment the state's flagship university. The Lexington campus offers a highly collaborative life science community with complementary disciplines represented in the Colleges of Arts & Sciences, Agriculture, Allied Health, Medicine, and Pharmacy. In addition to vigorous commitments to frontline research and graduate training, the Department of Biology provides a thorough and diverse undergraduate experience to the largest academic major on campus. Visit the departmental website (<http://www.as.uky.edu/Biology>) for additional information.

Candidates should have distinguished records of extramurally funded research and scholarly achievements commensurate with appointment at the Full Professor level. Strong commitments to undergraduate and graduate education, as well as excellent communication, leadership and administrative skills are expected. Applications should include a curriculum vitae, names of at least three references, and descriptions of research interests, educational vision, leadership philosophy, and administrative experience. Materials should be addressed to the Chair Search Committee, Department of Biology, 101 Thomas Hunt Morgan Building, University of Kentucky, Lexington, KY 40506, or may be submitted electronically to [biochair@uky.edu](mailto:biochair@uky.edu). Review of applications will commence November 1 and continue until a suitable candidate is selected.

[srvoss@uky.edu](mailto:srvoss@uky.edu) [srvoss@uky.edu](mailto:srvoss@uky.edu)

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## UKonstanz EvolBiol

UNIVERSITY OF KONSTANZ/GERMANY

ASSISTANT PROFESSOR/JUNIOR GROUP LEADER IN EVOLUTIONARY BIOLOGY (molecular evolution/comparative genomics or devo-evo)

A position as "Assistant Professor" (German government SALARY SCALE BATIIA) in the Department of



Biology at the University of Konstanz in Germany is available from January 2007 on.

The person we are looking for should work on current research topics in the fields of either molecular evolution/phylogenetics, comparative genomics, and/or the evolution of developmental mechanisms. The position is for a Ph.D. biologist, ideally with prior postdoc experience in molecular or developmental biology. A total of three research groups, two of which are headed by Junior Group Leaders each representing their particular subdisciplines of evolutionary biology, make up the Evolutionary Biology group (Lehrstuhl Evolutionsbiologie) in the Department of Biology. Besides the group of Axel Meyer, one of those positions is currently filled with Dr. Gerrit Begemann who is working on zebrafish developmental biology. Thierry Wirth, who works on bacterial population genetics, is starting a professorship in Paris, held this post before.

The taxonomic emphasis is open, however, work on fishes, particularly the zebrafish and cichlid fish model systems is desirable. Most of the ongoing evolutionary research in Konstanz deals with comparative developmental and molecular evolutionary/genomic aspects of the origin of novelties (such as coloration and dentition) in cichlid fish adaptive radiations.

Some recent publications of the lab include: Verheyen et al. (2003). The origin of the superflock of cichlid fishes from Lake Victoria, East Africa. *Science* 300: 325-329. Salzburger et al. (2005). Out of Tanganyika: Genesis, explosive speciation, key-innovations and phylogeography of the haplochromine cichlid fishes. *BMC Evolutionary Biology* 5: 17. Barluenga et al. (2006). Sympatric speciation in Nicaraguan crater lake cichlid fish. *Nature* 439: 719-23 Braasch et al. (2006). Asymmetric evolution in two fish-specifically duplicated receptor tyrosine kinase paralogs involved in teleost coloration. *Molecular Biology and Evolution* 23:1192-1202.

Space in a modern animal care facility is available and the exclusive help of a half-time technician will be available to this new group. Excellent opportunities are available in terms of space, equipment, departmental facilities and annual financial support from the University of Konstanz for research expenses. The lab has state-of-the-art facilities for molecular and developmental biology, including 2 ABI 3100 DNA-Sequencers, a pipetting robot, a DNA-chip reader, etc. The University of Konstanz and the Department of Biology in particular are among the most highly rated institutions in Germany and provide a lively and academically outstanding research environment. Konstanz is a lovely historic town located on Lake Constance on the border to Switzer-

land.

Appointments are initially for two to three years, and are renewable for up to six years, with an annual gross salary (depending on age, marital status, etc.) of about 58,000 Euros before taxes and deductions (about 73.000 US\$). Habilitation is possible, and a modest amount of teaching (English or German) is required.

Additional information can be obtained from axel.meyer@uni-konstanz.de, (tel.+49 7531 884163, fax + 49 7531 883018) or directly from our WWW page, where you can find information on our research interests and recent publications. <http://www.evolutionbiologie.uni-konstanz.de>. Applications including a (short 2-3 page) statement of research interests, a full CV, and names and email addresses of 2-3 referees, should be emailed to axel.meyer@uni-konstanz.de. Applications should be received before October 31, 2006. The University of Konstanz is an equal opportunity employer.

– Axel Meyer, Ph.D. Professor of Zoology and Evolutionary Biology Department of Biology University of Konstanz Universitätsstr. 10 D-78457 Konstanz Germany

email: axel.meyer@uni-konstanz.de

tel. + 49 7531 88 4163 fax. + 49 7531 88 3018 tel. secretary + 49 7531 88 3069 email: (Ingrid.Bader@uni-konstanz.de)

<http://www.evolutionbiologie.uni-konstanz.de> Axel Meyer <axel.meyer@uni-konstanz.de>

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## UKwaZuluNatal PlantMolSyst

The University of KwaZulu-Natal is committed to employment equity and will give preference to appointable candidates from the designated groups. All appointments are based on individual merit, relative to criteria mentioned below. Candidates who do not meet all the minimum criteria will not be considered. The university reserves the right not to fill the post or to extend the recruitment process through re-advertising and head-hunting in order to meet its equity targets.

SENIOR LECTURER: PLANT MOLECULAR SYSTEMATICS SCHOOL OF BIOLOGICAL & CONSERVATION SCIENCES PIETERMARITZBURG CAMPUS REF NO.: SA51/2006

The School is well established with a very active re-

search profile and a substantial graduate school. It has excellent research facilities, including a comprehensive herbarium (NU) and botanical garden.

The successful candidate must have a strong background in plant molecular systematics, be familiar with modern molecular approaches to the study of biodiversity, evolution, conservation or related areas, and have a track record of publication in peer-reviewed journals. S/he will be required to teach at undergraduate and postgraduate levels, to supervise research students and to establish a strong research programme. Assumption of responsibility for curation of the NU Herbarium (assisted by dedicated technical staff) will be required.

#### MINIMUM REQUIREMENTS:

\* A PhD in a relevant field \* Evidence of current research activity with published papers in the international peer-reviewed scientific literature \* Experience in teaching at tertiary level

#### ADVANTAGES:

\* Successful supervision of postgraduate students \* Experience in herbarium curation

For further information see the School website at <http://www.ukzn.ac.za/biology> or contact Prof. David Ward at [ward@ukzn.ac.za](mailto:ward@ukzn.ac.za).

The remuneration package offered includes benefits and will be dependent on the qualifications and/or experience of the successful applicant. The selection process will commence on 30 October 2006 and will continue until a suitable candidate is appointed or a decision is taken not to fill the post.

Applicants are required to submit a covering letter highlighting their experience in, and providing evidence for, each of the minimum requirements and advantages listed above, together with a detailed CV including the names, full addresses, fax numbers and e-mail addresses of three referees, to Mrs. J Poulter, Human Resources Administration, University of KwaZulu-Natal, Private Bag X01, Scottsville, 3209, Fax. No. +27 (0) 33 260 5356 or e-mail [PoulterJ@ukzn.ac.za](mailto:PoulterJ@ukzn.ac.za).

Please find our Email Disclaimer here: <http://www.ukzn.ac.za/disclaimer/> Brothers@ukzn.ac.za  
Brothers@ukzn.ac.za

The University of KwaZulu-Natal is committed to employment equity and will give preference to appointable candidates from the designated groups. All appointments are based on individual merit, relative to criteria mentioned below. Candidates who do not meet all the minimum criteria will not be considered. The university reserves the right not to fill the post or to extend the recruitment process through re-advertising and head-hunting in order to meet its equity targets.

SENIOR LECTURER: PLANT MOLECULAR SYSTEMATICS SCHOOL OF BIOLOGICAL & CONSERVATION SCIENCES PIETERMARITZBURG CAMPUS REF NO.: SA51/2006

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#### MINIMUM REQUIREMENTS:

\* A PhD in a relevant field \* Evidence of current research activity with published papers in the international peer-reviewed scientific literature \* Experience in teaching at tertiary level

#### ADVANTAGES:

\* Successful supervision of postgraduate students \* Experience in herbarium curation

For further information see the School website at <http://www.ukzn.ac.za/biology> or contact Prof. David Ward at [ward@ukzn.ac.za](mailto:ward@ukzn.ac.za).

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Applicants are required to submit a covering letter highlighting their experience in, and providing evidence for, each of the minimum requirements and advantages listed above, together with a detailed CV including the names, full addresses, fax numbers and e-mail addresses of three referees, to Mrs. J Poulter, Human Resources

Administration, University of KwaZulu-Natal, Private Bag X01, Scottsville, 3209, Fax. No. +27 (0) 33 260 5356 or e-mail PoulterJ@ukzn.ac.za .

Brothers@ukzn.ac.za Brothers@ukzn.ac.za

fessor | Lab +1-410-455-2659 Department of Biological Sciences | FAX +1-410-455-3875 University of Maryland Baltimore County| Cellular +1-410-952-7951 1000 Hilltop Circle | Internet farabaug@umbc.edu Baltimore, MD 21250 <http://research.umbc.edu/~farabaug/farabaug.html> Philip Farabaugh <farabaug@umbc.edu>

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## UMaryland Bioinformatics

### Faculty Position in Bioinformatics

University of Maryland Baltimore County (UMBC)

The Department of Biological Sciences at UMBC invites applications for an Assistant Professor position in the area of Bioinformatics. A successful applicant will be expected to establish a vigorous externally funded in silico research program focused on one or more significant biological problems in the areas of genome biology or proteomics, including interactomics. An interest in developing tools to visualize complex bioinformatics data sets is also desirable. We will consider appointment of qualified candidates at the Associate or Full Professor level.

Applicants should provide a curriculum vitae, summary of current and proposed future research interests, and statement of teaching interests, and have three letters of reference sent to: Search Committee, Department of Biological Sciences, University of Maryland Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250. Electronic applications should be sent to [biosearch@umbc.edu](mailto:biosearch@umbc.edu). Review of completed applications will begin on November 15, 2006 and continue until the position is filled.

UMBC is a medium-sized research university in the Baltimore-Washington, D.C. area combining excellence in research with outstanding educational programs. UMBC is a national leader in mentoring minority undergraduates to high achievement in academics and research. The Department is developing in the area of bioinformatics to complement its existing strengths in molecular, cellular, developmental and evolutionary biology and neuroscience. For information about the Department and its graduate programs visit <http://www.umbc.edu/biosci/> . The University of Maryland Baltimore County is an Affirmative Action/Equal Opportunity Employer. UMBC values gender, ethnic, and racial diversity; women, members of ethnic minority groups and individuals with disabilities are strongly encouraged to apply.

– Philip Farabaugh | Office +1-410-455-3018 Pro-

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## USouthFlorida 2 EvoBiol

The new Division of Integrative Biology at the University of South Florida has 2 positions for assistant professors. We are looking for researchers in evolution and ecology. In particular, we are looking for scientists with research interests in one or more of the following three areas: 1) Molecular ecology. Most likely this will be someone working in population genetics, evolutionary genomics, or related areas. Our ad specifies that it be someone working “at the interface of ecology and evolution at any level, from organisms to ecosystems.”

2) Quantitative ecology. This will be someone with a strong theoretical component to their research, using mathematical and/or statistical models. This could certainly be a theoretical population geneticist.

3) Physiological Ecology. Our ad specifies that this be someone “with a research emphasis on the responses of organisms to environmental stressors or changing environmental conditions.” This description can include both short-term physiological as well as evolutionary responses.

Review begins December 1.

The full advertisement that will appear shortly in Science is attached.

Those with questions about the positions are welcome to contact me.

Gordon Fox

Assistant Professors in Ecology

The Department of Biology, Division of Integrative Biology at the University of South Florida invites applications for two tenure track positions in Ecology to begin in Fall 2007. We are especially interested in candidates whose work is focused in one of the following three areas: Quantitative Ecology, with a research emphasis in mathematical or statistical models; Molecular Ecology, with a research emphasis at the interface of ecology and evolution at any level, from organisms to ecosystems;

or Physiological Ecology, with a research emphasis on the responses of organisms to environmental stressors or changing environmental conditions. The Tampa Bay area has ready access to a variety of marine, freshwater and terrestrial habitats in a sub-tropical environment.

USF has been designated as a university with very high research by the Carnegie Foundation for the Advancement of Teaching. Faculty whose research complements existing strengths in the new Division of Integrative Biology are encouraged to apply (see: <http://www.cas.usf.edu/biology>). A Ph.D. in Biology or related field is required and post-doctoral experience is preferred. Evidence of potential to develop a strong externally-funded research program is desirable. Salary is negotiable. Applicants should submit a curriculum vita, statements of research and teaching interests, three representative publications and arrange to have three letters of recommendation sent to the Ecology Search Committee, Division of Integrative Biology, Department of Biology SCA 110, University of South Florida, 4202 East Fowler Avenue, Tampa, FL 33620. Women and minorities are encouraged to apply. Review of applications will begin on December 1st and continue until the position is filled. According to Florida Law, applications and meetings regarding them are open to the public. For ADA accommodations, please contact Janet Gauthier at (813) 974-3250 five working days prior to need. USF is an AA/EEO institution.

– Dr. Gordon A. Fox Voice: (813)974-7352 Fax: (813)974-3263 Dept. of Biology ((for US mail:)SCA 110) ((for FedEx etc:)BSF 156) Univ. of South Florida 4202 E. Fowler Ave. Tampa, FL 33620, USA <http://boojum.cas.usf.edu/index.pl/home> gfox@cas.usf.edu

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## USouthernCalifornia CompBiol

Any Professorial Level Computational Biology and Bioinformatics University of Southern California

The University of Southern California invites applications for a position at any level, tenure or tenure track as appropriate, in Computational Biology and Bioinformatics. Candidates with a strong background in computer science or statistics with applications to genomics, proteomics or systems biology are encouraged to apply. Ph.D. or equivalent degree required. The position is in the interdisciplinary Program in Molecular and Computational Biology in the Department of Biological Sciences. Many of the current faculty hold joint

appointments in other departments.

Interested candidates should send a curriculum vitae, including research plans and names of three references to: Michael S. Waterman, Search Committee, Department of Biological Sciences, MCB201, University of Southern California, Los Angeles, CA 90089-2910 (or e-mail [cmbsearch@college.usc.edu](mailto:cmbsearch@college.usc.edu)). Evaluations of applications will begin January 15, 2007. USC is an AA/EOE employer.

[magnus@usc.edu](mailto:magnus@usc.edu) [magnus@usc.edu](mailto:magnus@usc.edu)

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## UWashington MathematicalBiol

The Department of Applied Mathematics at the University of Washington has an opening, at the assistant professor level, for a mathematical biologist, interpreted broadly. (See ad below.) If you know of any qualified candidates, please encourage them to apply for this position.

Thank you.

Mark Kot Applied Mathematics University of Washington

Applied Mathematics - Assistant Professor

Assistant Professor, tenure-track. Applicants must hold a doctorate in applied mathematics, mathematics, or a related field of application, and should show outstanding promise and/or accomplishments in both research and teaching. Areas of interest include all aspects of mathematical biology (bioengineering, biofluids, computational biology, bioinformatics, genomics, neuroscience, physiology, etc.), and scientific computing and numerical analysis. However, applications from any area of applied mathematics will be considered. The successful candidate will complement the existing research expertise of the department while enhancing and broadening both its mathematical and scientific scope. Interdisciplinary research activity is especially encouraged, and interactions with the physical, engineering, or life sciences are expected. Information about the department can be found at <http://www.amath.washington.edu>. Preference will be given to applications received before November 15, 2006. In exceptional circumstances, appointment at the Associate or full Professor level may be considered for candidates who have demonstrated a commitment to mentoring underrepresented students in the sciences.



Applicants should send a curriculum vita and a description of research and teaching interests. Further, arrangements should be made to have three or four letters of references, at least one of which addresses the candidate's teaching experience or potential, sent directly to:

Hiring Committee Department of Applied Mathematics  
University of Washington BOX 352420 Seattle, WA  
98195-2420

The University of Washington is building a culturally diverse faculty and strongly encourages applications from women and minority candidates.

kot@amath.washington.edu  
kot@amath.washington.edu

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## UWyoming FunctionalGenet

### FACULTY POSITIONS IN Ecological/FUNCTIONAL Genetics

The Departments of Molecular Biology and Botany at the University of Wyoming seek outstanding scientists to fill two tenure-track positions, preferably at the Assistant Professor level. We seek interactive colleagues who use innovative genetic or genomic approaches to study significant questions in ecology. The successful candidates will be expected to establish independently funded research programs and participate in teaching at the undergraduate and graduate levels. Candidates must hold a Ph.D. in an appropriate field and show evidence of productive postdoctoral experience. These positions reflect a commitment of the University of Wyoming to enhance the integration among life science departments through interdisciplinary graduate programs in Ecology (<http://www.uwyo.edu/PIE>) and Molecular and Cellular Life Sciences (<http://www.uwyo.edu/mcls/>). The positions will specifically contribute to a broader initiative on campus that addresses ecological responses to global change, integrating across levels of inquiry ranging from the molecular to the ecosystem levels.

Ecological Geneticist (75% Botany/25% Mol. Bio. appointment) — Preferred candidates will use experimental and/or observational approaches to resolve the genetic underpinnings of traits and processes of ecological importance. We are especially interested in individuals committed to studying ecological genetics in contexts of community dynamics and/or global change, but candi-

dates with significant contributions in any area of ecological genetics will be considered.

Evolutionary and Ecological Functional Geneticist (75% Mol. Bio./25% Botany appointment) — Preferred candidates will study the molecular basis of ecological adaptations. Suitable approaches may include but are not limited to the identification and molecular characterization of genes involved in adaptation and comparative genomics or metagenomics. Research that combines computational and experimental approaches to link ecology, evolution and molecular function will also be considered.

The Departments are presently composed of 26 faculty members with diverse research interests supported by numerous grants. Salary and start-up packages will be competitive. The University enrolls 12,000 students including approximately 2500 graduate students. Laramie is located in southeastern Wyoming about 120 miles from Denver, Colorado. For additional information, see <http://www.uwyo.edu/uwmolecbioand> <http://www.uwyo.edu/botany/>. Any questions can be directed to [ecogen@uwyo.edu](mailto:ecogen@uwyo.edu). Candidates should submit by email a CV, description of research plans and teaching philosophy, and arrange to have three letters of recommendation submitted to the Ecological Genetics Search Committee via [ecogen@uwyo.edu](mailto:ecogen@uwyo.edu). PDF formatting is preferred for these documents. Applicant screening will begin on December 1 and continue until a suitable candidate is identified. The University of Wyoming is an AA/EO employer.

David Liberles <[liberles@uwyo.edu](mailto:liberles@uwyo.edu)>

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## UWyoming MolEvolMicrobes

Assistant Professor

Molecular Microbiology

The Department of Molecular Biology at the University of Wyoming seeks an outstanding scientist for a tenure-track position at the Assistant Professor level. We seek an interactive colleague who uses molecular approaches to address important problems in microbiology. We are particularly interested in candidates investigating molecular and cellular mechanisms of microbial pathogenesis and host-pathogen interactions. However, demonstrated excellence in research is more important than specific area. The successful candidate will be part of the Microbiology Program



that integrates microbiologists across departmental and college boundaries. The candidate will be expected to establish an extramurally funded research program and participate in undergraduate teaching of general or medical microbiology, as well as contribute to the Molecular and Cellular Life Sciences Graduate Program (<http://www.uwyo.edu/mcls/>). Salary and start-up package will be competitive. Candidates must have a Ph.D. degree and evidence of productive postdoctoral experience. The applications should be sent to [uwmbio@uwyo.edu](mailto:uwmbio@uwyo.edu) formatted as a single pdf file containing a cover letter, CV, research plans and teaching philosophy. Three letters of recommendation should be sent to [uwmbio@uwyo.edu](mailto:uwmbio@uwyo.edu) or to Chair, Microbiology Search Committee, Department of Molecular Biology, University of Wyoming, 1000 E. University Ave., Dept. 3944, Laramie, WY 82071. The Department of Molecular Biology consists of 14 faculty members with diverse research interests and significant extramural support. The University enrolls 12,000 students including approximately 2,500 graduate students. Laramie is located in the Rocky Mountains area of southeastern Wyoming, 120 miles from Denver, CO. For additional information see <http://uwacadweb.uwyo.edu/-UWmolecbio/.Screening> of applications will begin on November 15, 2006 and continue until a suitable candidate is identified. The University of Wyoming is an EO/AA employer.

David Liberles <[liberles@uwyo.edu](mailto:liberles@uwyo.edu)>

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## University College London Research Technician

### 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 NERC-funded 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](mailto:b.wertheim@ucl.ac.uk) e-mail: [b.wertheim@ucl.ac.uk](mailto:b.wertheim@ucl.ac.uk)

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## WashingtonStateU MolAnthropology

### FACULTY POSITION Molecular Anthropology

Washington State University-Pullman seeks a tenure-track assistant professor for a new full-time position in molecular anthropology to be jointly appointed in the Department of Anthropology and the School of Biological Sciences beginning Aug. 16, 2007. Required qualifications include a Ph.D. by July 1, 2007 in Anthropology or a life science; an active research program commensurate with rank using molecular genetic approaches to address questions at the interface of biology and anthropology; and demonstrated expertise in one or more of the following areas: human genetics, ancient DNA, phylogenetics, phylogeography and population history, human evolution, zooarchaeology, or molecular evolution. The candidate will participate in a new WSU/University of Washington IGERT program entitled <sup>3</sup>Model-based Approaches to Cultural and Biological Evolution<sup>2</sup> (<http://depts.washington.edu/ipem/-index.shtml>); preferred qualifications include previous successes in interdisciplinary work in anthropology and biology and strengths in teaching and in evolutionary theory. Teaching expectations will depend on expertise but will likely include an undergraduate Introduction to Physical Anthropology in addition to undergraduate and/or graduate courses in areas of expertise in

biology and anthropology. Full Notice of Vacancy at <http://libarts.wsu.edu/anthro/>. To apply, send letter of application, 2-pg research statement, 2-pg teaching statement, cv, and names and contact information for three references to Tim Kohler, Molecular Anthropologist Search Chair, Department of Anthropology, WSU, Pullman, WA 99164-4910. All materials including letters must be received by 4 December 2006. WSU is an Equal Opportunity/Affirmative Action educator and employer. Members of ethnic minorities, women, Vietnam or disabled veterans, persons with disabilities, and people over the age of 40 are encouraged to apply. WSU hires only U.S. residents or lawfully qualified non-U.S. residents.

roalson@mail.wsu.edu roalson@mail.wsu.edu

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## WilliamMaryC ConservationBiol

### CONSERVATION BIOLOGY

The Department of Biology at the College of William and Mary invites applicants for a tenure track position at the Assistant Professor level in CONSERVATION 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 biol-

ogy. The ideal candidate will have strong quantitative skills along with 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 one course each semester, usually alternating between an upper-level conservation biology course with lab, an introductory biology lecture course (genetics, organisms, ecology and evolution), and another course in the candidate's area of expertise. 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](http://www.wm.edu/biology). The College is an EEO/AA employer.

George W. Gilchrist Email: [gwgilc@wm.edu](mailto: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](mailto:gwgilc@wm.edu)

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## Agilent chips

We are in the market for in situ oligo microarrays. The purchase of the microarrays will represent a significant investment of our resources and dictate the course of several projects over the following months. Based on our needs, we are preparing to purchase our chips from Agilent. Before we do so, however, we would like to poll the community for any experiences, good and bad, that people may have had with Agilent chips.

If you have experience with Agilent chips and would like to share them with us (or would recommend an alternative vendor), we would appreciate your comments.

Thanks

Patrick Danley

Kerry Shaw

Patrick Danley, Ph.D.

Postdoctoral Researcher Department of Biology University of Maryland

phone 301.405.8303 fax 301.314.9358 email pdanley@umd.edu <http://www.life.umd.edu/biology/-shawlab/patrickdanley> Evolutionary Genetics Reading Group <http://www.life.umd.edu/biology/shawlab/-patrickdanley/evolgen/> patrick.danley@gmail.com

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## Alexandrium samples

Dear colleagues,

We are analysing *Alexandrium catenella* and *A. tamarense* (harmful algae) phylogeography all around

the world (all continents). For this, we need Alexandrium DNA, or alive cells, or frozen pellets, ... in order to obtain enough DNA for 10 to 20 PCR.

This is not so simple and needs probably more explanation. If you are interested in such a collaboration, please contact me, we'll explain how to do.

Patrick BERREBI UMR 5554 "Institut des Sciences de l'Evolution" Equipe Méta-populations, Conservation et Co-évolution Université Montpellier II CC 065. Place E. Bataillon 34095 Montpellier Cedex 5 (France)

Mél: berrebi@univ-montp2.fr Tél. France 04 6714 3732 - International 33 4 6714 3732

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## Choice Review IntelligentDesign

The following review is in the Nov. '06 issue of CHOICE, which is in many college/university libraries.

59. HUMANITIES-RELIGION (Indexed for: Humanities-Unspecified / Humanities-Religion) Intelligent thought: science versus the intelligent design movement Vintage Books, 2006, ISBN: 0307277224, \$14.00

Evan B. Hazard, Ph.D. Professor Emeritus of Biology Bemidji State University Bemidji, MN 56601-2699 ee-hazard@paulbunyan.net

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## ClemsonU AdaptationHawaiianGobies

GRADUATE OPPORTUNITY FOR DOCTORAL STUDENT IN EVOLUTION OF ADAPTATION IN HAWAIIAN GOBIES

Drs. Richard Blob and Margaret Ptacek are seeking a highly motivated doctoral student to participate in a study of adaptation and functional morphology of predator avoidance and waterfall climbing performance in Hawaiian stream gobies. The successful candidate will integrate population genetics estimates of migration with laboratory studies of genetic divergence and phenotypic plasticity. The project will also involve field-based studies of functional performance and biomechanics. Annual stipends of \$17,000 are guaranteed for 5 years (TAs in academic semesters, RAs in summer) for PhD students. In addition, applicants are eligible to compete for first-year fellowships from the graduate school of \$10,000 or \$15,000 in addition to the annual stipend. For more information regarding the ecology and evolutionary biology emphasis area in the Biological Sciences graduate program at Clemson, please visit our web site: (<http://www.clemson.edu/biosci/graduate/>) and our lab web pages: Rick Blob ([www.clemson.edu/~rblob](http://www.clemson.edu/~rblob)) and Margaret Ptacek ([www.clemson.edu/~mptacek](http://www.clemson.edu/~mptacek)). Inquiries should be sent to [rblob@clemson.edu](mailto:rblob@clemson.edu) and [mptacek@clemson.edu](mailto:mptacek@clemson.edu) and include a CV, a statement of research interests, and contact information for three references. Screening of applicants will begin December 1, 2006.

“Margaret B. Ptacek” <[mptacek@CLEMSON.EDU](mailto:mptacek@CLEMSON.EDU)>

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## Computational MolEvol

A book titled “Computational Molecular Evolution”, by Ziheng Yang, has been published by Oxford University Press on 5 Oct 2006.

The book has 376 pages, with 96 illustrations. It is written for upper-level undergraduate students, graduate students, and researchers in the fields of molecular phylogenetics, evolutionary biology, mathematics, statistics, and computer science.

The prices are UKP 27.50 paperback and UKP 60 hardback in the UK, or US\$ 49.5 paperback and US\$ 109.5 hardback at [amazon.com](http://amazon.com).

The books can be ordered at the following web sites. However, I understand if you order it at a meeting at an OUP bookstand, you get a 20% discount.

OUP web site: <http://www.oup.com/uk/catalogue/?ci80198567028> amazon.com: [http://www.amazon.com/Computational-Molecular-](http://www.amazon.com/Computational-Molecular-Evolution-Oxford-Ecology/dp/0198567022/ref=oe_p/102-1394520-6676140)

[Evolution-Oxford-Ecology/dp/0198567022/ref\\_oe\\_p/102-1394520-6676140](http://www.amazon.com/Computational-Molecular-Evolution-Oxford-Ecology/dp/0198567022/ref=oe_p/102-1394520-6676140)

amazon.co.uk: <http://www.amazon.co.uk/gp/product/0198567022/202-4313776-0220627?v=glance&n&6239&s=books&v=glance> Table of contents (a detailed one is at the book web site: <http://abacus.gene.ucl.ac.uk/CME/>)

Preface 1. Models of Nucleotide Substitution 2. Models of Amino Acid and Codon Substitution 3. Phylogeny Reconstruction: Overview 4. Maximum Likelihood Methods 5. Bayesian Methods 6. Comparison of Methods and Tests on Trees 7. Molecular Clock and Estimation of Species Divergence Times 8. Neutral and Adaptive Protein Evolution 9. Simulating Molecular Evolution 10. Perspectives Appendixes Reference

Ziheng Yang

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## Darwin works online

Information found on: <http://news.bbc.co.uk/2/hi/science/nature/6064364.stm> Thursday, 19 October 2006, 00:48 GMT 01:48 UK

Charles Darwin's works go online Darwin in 1881 (Darwin, F. and Seward, A. C. eds. 1903 - Cam Uni) His theory on evolution has influenced many science disciplines The complete works of one of history's greatest scientists, Charles Darwin, are being published online.

The project run by Cambridge University has digitised some 50,000 pages of text and 40,000 images of original publications - all of it searchable.

Surfers with MP3 players can even access downloadable audio files.

The resource is aimed at serious scholars, but can be used by anyone with an interest in Darwin and his theory on the evolution of life.

“The idea is to make these important works as accessible as possible; some people can only get at Darwin that way,” said Dr John van Wyhe, the project's director.

One big collection

Dr van Wyhe has spent the past four years searching the globe for copies of Darwin's own materials, and works written about the naturalist and his breakthrough ideas on natural selection.

The historian said he was inspired to build the library at [darwin-online.org.uk](http://darwin-online.org.uk) when his own efforts to study

Darwin while at university in Asia were frustrated.

Galapagos finches from Darwin, C. R. ed. 1839 (Cam Uni) Images as well as texts are available online "I wrote to lots of people all over the world to get hold of the texts for the project and I got a really positive reaction because they all liked the idea of there being one big collection," he told BBC News.

Darwin Online features many newly transcribed or never-before-published manuscripts written by the great man.

These include a remarkable field notebook from his famous Beagle voyage to the Galapagos Islands, where detailed observations of the wildlife would later forge his scientific arguments.

Free use

The real artefact was stolen in the 1980s and is still missing, but the text has been transcribed from a microfilm copy made two decades earlier.

"It is astonishing to see the notebook that Darwin had in his pocket as he walked around the Galapagos - the scribbled notes that he took as he clambered over the lava," said Randal Keynes, the great-great-grandson of Charles Darwin.

"If people can read it on the web and they learn that it was stolen then I think there is more chance that this very important piece of national heritage is recovered," he told BBC News.

The Beagle (London: John Murray - Cam Uni) Darwin travelled to the Galapagos in The Beagle Other texts appearing online for the first time include the first editions of the Journal Of Researches (1839), The Descent Of Man (1871), The Zoology Of The Voyage Of HMS Beagle (1838-43) and the 2nd, 3rd, 4th and 5th editions of the Origin Of Species, the pivotal tome that elucidated his thoughts on evolution.

There is no charge to use the website. Most texts can be viewed either as colour originals or as fully formatted electronic transcriptions. There are also German, Danish and Russian editions.

Users can also peruse more than 150 supplementary texts, ranging from reference works to contemporary reviews of Darwin's books, obituaries and recollections.

At the moment the site contains about 50% of the materials that will be provided by 2009, the bicentenary of the naturalist's birth.

"The family has always wanted Darwin's papers and manuscripts available to anyone who wants to read them. That everyone around the world can now see them on the web is simply fantastic," said Mr Keynes.

gerber@pierroton.inra.fr

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## Diversity Project

Dear Colleagues,

For the third consecutive year, we will be running The Diversity Project, a research opportunity at Boston University for under-represented minority undergraduate students. Students will integrate hands-on field research on Indonesian coral reefs and cutting edge genetic research at Boston University. The project will explore the origins marine biodiversity in the Coral Triangle in an effort to improve conservation of this remarkable ecosystems. Students are fully funded for both living and travel expenses. Visit <http://people.bu.edu/pbarber/Intro.htm> for more information and on-line application.

This research opportunity has been a remarkable personal and professional experience for the students who have participated. Please encourage any students whom you believe would benefit from such an experience to apply. For further information, please contact Dr. Paul Barber ([pbarber@bu.edu](mailto:pbarber@bu.edu)). We look forward to hearing from you.

Sincerely, Paul Barber – Dr. Paul H. Barber  
 Boston University Boston University Marine Program  
 5 Cummington St. Boston, MA 02215 617-358-4589 office 617-358-4590 lab 617-353-6340 FAX [pbarber@bu.edu](mailto:pbarber@bu.edu) <http://people.bu.edu/pbarber/> Paul Barber <[pbarber@bu.edu](mailto:pbarber@bu.edu)>

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## GallMidge specimens

Hello all,

I'm in need of some alcohol preserved or frozen specimens from the gall midge tribe Alycaulini for genetic work. Specifically, I need species from the following North American genera:

Astictoneura Calamomyia Chilophaga Edestochilus Edestosperma Meunieriella Neolasioptera Protaplonyx

If you have any specimens that you are willing to share, please e-mail me at [eric.janson@vanderbilt.edu](mailto:eric.janson@vanderbilt.edu).



Thanks!

Eric

Eric M. Janson Department of  
Biological Sciences Vanderbilt University  
eric.janson@vanderbilt.edu The Abbot Lab:  
<http://abbotlab.popgen.org> Personal Website:  
<http://sitemason.vanderbilt.edu/site/hiWbEk/>  
eric.janson@vanderbilt.edu eric.janson@vanderbilt.edu

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### Hardy-Weinberg

Dear evoldir members,

Nowadays, I am working in populations genetic in a fish specie. Exact Hardy-Weinberg tests to measure the significance of deviations from the null hypothesis of random union of gametes (Weir 1990, Guo and Thompson 1992) were carried out. Almost all isozyme loci analysed (seven loci) were fit Hardy-Weinberg equilibrium proportions, except one loci. Could we consider that whole populations are fit Hardy-Weinberg equilibrium?

Thank in advance,

Ana Fazeres

Departamento de Biología University of Las Palmas de  
Gran Canarias Las Palmas de Gran Canaria Canary  
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mgonza-

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canariensis750@hotmail.com

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### 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 microsatellite markers to compare the relatedness of populations breeding in different regions, and possibly for kinship studies within populations.

I have been unable to find any known microsatellite markers for hummingbirds 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

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### IntlJourPlantGenomics

>>>

International Journal of Plant Genomics

Special Issue on

Genomics of Major Crops and Model Plant Species

Call for Papers

Genomics of higher plants had its beginning in December 2000, with the publication of the whole genome sequence of the model plant species *Arabidopsis thaliana*, and the event was celebrated all over the world. This marked the beginning of plant genomics research and rapid progress has been made in this area during the last six years. Significant developments include the reports of several draft rice genome sequences during 2000-2002, publication of a high-quality rice genome sequence in August 2005, and the recent publication of poplar draft genome in 15 September, 2006 issue of Science. Sequencing of whole genomes of several other plant species is currently underway; these include *Sorghum*, *Brachypodium*, *Brassica*, and *Medicago*. In still other cases (e.g., wheat, corn, barley), where the large genome size prohibits whole genome sequencing, the gene rich regions, (GRRs) of the genomes are being identified to bring down the sequencing work to a manageable level. Besides other approaches, cot fractionation and methylation filtration are being used for this purpose. With the availability of whole genome sequences in at least three higher plants, comparative genomics studies and sequence annotations (gene iden-

tification and assigning functions to genes) are being undertaken at many centres around the world.

Authors should follow the International Journal of Plant Genomics manuscript format described at the journal site <http://www.hindawi.com/journals/ijpg/>. Prospective authors should submit an electronic copy of their complete manuscript through the International Journal of Plant Genomics Manuscript Tracking System at <http://www.hindawi.com/mts/>, according to the following timetable:

Manuscript Due March 1, 2007  
Acceptance Notification July 1, 2007  
Final Manuscript Due October 1, 2007  
Publication Date 1st Quarter, 2008

Guest Editors:

P. K. Gupta, Molecular Biology Laboratory, Department of Genetics and Plant Breeding, Faculty of Agriculture, Chaudhary Charan Singh University, Meerut 250004, India; [pkgupta36@gmail.com](mailto:pkgupta36@gmail.com)

<<<

Please visit <http://www.hindawi.com/journals/ijpg/> for more information about the journal. The articles of International Journal of Plant Genomics are published online as soon as they are accepted for publication. To submit a proposal of a special issue, please contact the journal's editor-in-chief.

In order not to receive any future "IJPG-C4P" alert messages, please simply click on the following link: <http://alert.hindawi.com/remove.asp?j=ijpg-c4p&e=golding@mcmaster.ca> >>>

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## Iranian Fish PopGenet

hi, i m safari, from international institue of acipenser fishes, iran . my majer is population genetic . i want to work on aquatic plants of iran , (phylogeny ). is there any body in the world that work on phylogeny and i can cooprate with her or him . i can send iranian sample.

roggi safari <[roggi\\_safari@yahoo.com](mailto:roggi_safari@yahoo.com)>

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## Mapped Markers

Dear EvolDir members,

I'm looking for genotyping data (preferentially microsatellites) obtained from natural populations with markers genetically mapped. Any species data are welcome as soon as the species is an outbred or partially outbred and has a low population structure. I need to have at least 8 markers located on a same linkage group. This set of data will be used to test an algorithm that we have developed to analyze the structure of linkage disequilibrium along linkage group.

If you have such data and you are willing to share them, I'll greatly appreciate.

Thanks in advance,

Cécile Edelist PhD student

[edelist@moulon.inra.fr](mailto:edelist@moulon.inra.fr) <<mailto:edelist@moulon.inra.fr>>

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## Marseilles 10thEBM Presentations

Most of the presentations presented at the 10th Evolutionary biology meeting at Marseilles are now available see : <http://www.up.univ-mrs.fr/evol-cgr/> best regards

Pierre Pontarotti EA 3781 Evolution Biologique

<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](mailto:Pierre.Pontarotti@up.univ-mrs.fr)

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## MetaAnalysis Synthesis

Dear Evoldir:

Mohamed Noor and Maria Servedio are coordinating a working group at NESCent (the National Evolutionary Synthesis Center: [www.nescent.org](http://www.nescent.org)) devoted to improving the coverage of meta-analyses and other synthetic works. As evolutionary biology continues to move from single case studies to broader, but more difficult questions regarding patterns and frequency, meta-analyses and other syntheses have become increasingly essential. Nonetheless, they sometimes suffer from problems including 1) publication bias (negative results often don't get into print), 2) difficulties in locating relevant data, 3) extensive unpublished data, etc.

Our working group, (SEED: Synthesis of Emerging and Existing Data) proposes a novel, community-input-based approach to facilitating such synthetic works. Essentially, the topic of the synthetic work will be posted broadly, and data (published or unpublished) will be solicited from the community (our system also has benefits for those who provide unpublished primary data). We have already secured statements of assistance from the major journals in evolutionary biology as well as NESCent. This does not replace the standard literature-review-based approaches, but it is intended to act as a supplement to improve coverage. We now seek a few researchers who are at the early stages of preparing a meta-analysis or other synthetic work to see if they would be willing to allow us to help, hence evaluating our approach.

If you are preparing such a synthetic work and are potentially interested in letting us help you, please contact either me (noor@duke.edu) or Maria (servedio@email.unc.edu). Just let us know the topic of your synthesis and what type of primary data you are seeking. We can then provide you with detailed information on our approach, and even do much of the legwork for you. From our perspective, there's virtually no cost to you, and perhaps we'd be able to help your work!

Thank you for your time.

Mohamed & Maria

noor@duke.edu noor@duke.edu

---

## Microsat problems

Hi all:

Do you know if DNA diluted with TE could affect the genotyping using labelled primers in a ABI automatic sequencer?

Thanks in advance. Regards

Rodrigo Badilla Biologo Marino. Programa de Doctorado en Acuicultura. Laboratorio de Genetica Marina. IUSA, ULPGC. Las Palmas, Gran Canaria. España. movil:+34 606237167  
[www.grupoinvestigacionacuicultura.org](http://www.grupoinvestigacionacuicultura.org) rodrigo.badilla@gmail.com

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## Mindell review

The following review appeared in the October 2006 issue of CHOICE.

44-0916 QH371 2005-58131 CIP Mindell, David P. The evolving world: evolution in everyday life. Harvard, 2006. 341p bibl index afp ISBN 0674021916, \$24.95

eehazard@paulbunyan.net eehazard@paulbunyan.net

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## Miniprep and Sequencing

Dear colleagues,

Recently I followed a course on molecular biology. In this course we had some practical lessons on gene expression using RT-PCR and cloning. At the plasmid purification step we carried out first a miniprep (NaOH/SDS lysis) to check inserts and after another miniprep (NucleoSpin Plasmid Quickpure) for plasmid purification and following sequencing. My question is: with the first miniprep can we go on with the sequencing without going to the purification miniprep?

Best wishes and thanks in advance!

Iruka

Iruka Kinsachi <irukakinsachi@yahoo.com>

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## Mite infestation in fruit flies

Hello all,

I have a low level mite infestation in some experimental lines of fruit flies I am keeping for a long-term selection experiment. The mites are white and not of the parasitic variety, but I am not sure what species or genus. I need to get rid of them, and had heard that *D. melanogaster* typically has a shorter generation time than the mite, so that doing several rapid generations might allow the population to 'outrun' its mite com-

petitors (coupled with a thorough cleaning and culture-room disinfection, of course). My flies are kept at 25 degrees Celcius.

Any suggestions or advice about this and/or other effective methods would be very greatly appreciated,

Thanks, Sam Yeaman

yeaman@zoology.ubc.ca

---

### Mite infestation in fruit flies answers

Hello all,

Many thanks again to all who wrote to me with advice on dealing with mite infestations...most helpful! Several people have contacted me who are interested in the responses as well, so I have pasted them below to share the wealth....

Cheers, Sam

\*\*\*\*\*

Hi Sam

it is fairly straight forward to get rid of mite infestations in fruit flies, especially if they are not specific parasites of the flies. First try to keep all lines quarantined so that you contain the mite infestation, best by keeping the bottles/vials in water baths (trays with water)-that prevents mites from spreading between lines. Then move flies onto new fly bottles/vials as soon as they emerge from the pupae, you can also move them to fresh vials in a series of 2-3 days. Make sure that you keep the fly room clean of dust, food sources for mites remove potential hiding places. Use cleaning ethanol or bleach to keep surfaces clean. Mites can be quite resistant to adverse conditions, so you need to keep this procededures up for some time. You can place trapping vials in your fly room in order to access how much flies there are around. Very important- if you recycle your containers then keep glass wear very clean and auto-clave foam stoppers- or use one way cotton wool.

good luck- you should be able to get rid of the mites in a couple of fly generations.

Markus

Dr. Markus Riegler School of Integrative Biology University of Queensland St. Lucia QLD 4072 Australia phone: (++617) 33469218 fax: (++617) 33651655 mriegler@uq.edu.au

\*\*\*\*\*

Hi Sam. You have food mites. I'm sure you've heard from others about this, but yes, you can try outrunning the mites. Transfer the flies to new food daily for a week or so. And make sure the food is relatively fresh. Also, bear in mind that there might be mite eggs everywhere. Use alcohol on all bench space and be scrupulously clean. You might also want to clean out the incubators that you have been using. As soon as you finish with food, dispose of or clean the vials. Old food sitting around is a common cause of mite infestations. Finally, remember Ashburner's warning from his 'Grey Book'-mites can appear by spontaneous generation. Oh, and don't trust anyone who sends flies claiming them to be mite-free. Always put incoming flies through quarantine. Good luck! Daniel Promislow

\*\*\*\*\*

Sam,

Good luck.

I may have sounded too negative about the Tedion. I may have helped, and it's certainly easy to use.

If hygiene and some judicious benzyl benzoate don't completely control things for you, try adding the Tedion paper bits to the mix to controls.

Ian

Ian A. Boussy iboussy@luc.edu Dept. of Biology 340 Quinlan Life Sciences Building Loyola University of Chicago 6525 N. Sheridan Rd. Chicago, IL 60626 tel. 773-508-3635 fax 773-508-3646 "Time flies like an arrow, but fruit flies like a banana." -Groucho Marx

>>> >>> <yeaman@zoology.ubc.ca> 10/08/06 10:56 AM >>> >>> Hi Ian, thanks for the advice! I was going to order some tedion but now I don't think I will bother...I'll probably try using multiple rapid transfers plus benzyl benzoate and a heavy cleaning to stop re-contamination. Cheers! Sam

Sam,

Mites can be difficult to deal with.

Without seeing them, from your description it sounds as though you're dealing with an Acarid mite, probably related to (but not the same as) the dreaded "red" mites that can form a hypopal form as a second instar. This hypopus is the "parasitic mite" that is shown on a website from Arizona. It's actually a travelling stage of the mite, which doesn't feed at all but only rides, and not actually parasitic at all. Unfortunately, large numbers of hypopi riding on a fly impede its ability to do anything, including mate or eat. For them, transfer definitely works with modest infestations because the

hypopi leave the flies eventually when they find themselves in a new place. The hypopi are reddish, and, when numerous, may crawl up the sides of a bottle and congregate at the plug, forming a red ring that strikes fear into the heart of a drosophilist!

I have had mites in the lab that a noted acarologist said were the same species as that which form hypopi, but that never formed hypopi! They are "food mites," related to stored grain pests, that are basically interested in the food, not the flies. Getting rid of them can usually be accomplished by changing flies to new food many times, and using cotton plugs, which they can't get through. Foam plugs are no barrier at all, and rayon may not stop them as well as cotton.

I've used bits of paper towelling with Tedion, a miticide, soaked into them. This is described, I think, in an old DIS. (I'm at home or I'd look up the reference for you.) It might give some protection to put a tab of Tedion-paper in each vial each generation, but Tedion-paper doesn't kill off mites already in residence. Although I have used Tedion-paper

— / —

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>

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## MolEvol textbooks

Dear EvolDir members,

I am teaching a course (16 hours) in Molecular Evolution to students in their 4th year in Biology whose major is Ecology and Evolution - sort of first year grad students in the US system.

I am looking for a textbook that covers molecular evolution, some relevant population genetics and phylogeography, phylogenetics, and possibly some practical applications.

In the last two years I have based the course on Futuyma and the Li and Graur series, but I see that these texts have a very mathematical approach to most of the problems - that is they start with some algebra and hence they derive biological concepts. Although this approach is excellent for advanced students, I am not sure of its appropriateness for this specific course, as students tend to learn the algebra and forget the biology.

I would, in turn, prefer a textbook that - not being necessarily easy or poor - has a more direct, qualitative, approach to the learning of concepts and principles.

Any suggestion would be highly appreciated.

Francesco Nardi

Francesco Nardi, Dr.

Dept. of Evolutionary Biology University of Siena

via Aldo Moro 2 - 53100 Siena Italy

Ph.: +39.0577.234420 (lab. 4398) Fax.: +39.0577.234476

nardifra@unisi.it nardifra@unisi.it

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## MolEvol textbooks answers

I posted a request for a textbook in Molecular Evolution, here is a list of the books that different people suggested. Many thanks to all who replied. Francesco

Page and Holmes "Molecular Evolution, a phylogenetic approach" (about one third of the e-mails suggested this one) [http://www.amazon.com/Molecular-Evolution-Phylogenetic-Roderic-Page/dp/0865428891/sr=8-2/-qid60460442/ref=pd\\_bbs\\_2/104-1739144-5944726?ie=UTF8&s=books](http://www.amazon.com/Molecular-Evolution-Phylogenetic-Roderic-Page/dp/0865428891/sr=8-2/-qid60460442/ref=pd_bbs_2/104-1739144-5944726?ie=UTF8&s=books) Stearns and Hoesktra "Evolution" <http://www.oup.com/uk/catalogue/?ci80199255634>

Joanna Freeland "Molecular Ecology" John Wiley and Sons. [http://www.amazon.com/Molecular-Ecology-Joanna-R-Freeland/dp/0470090626/sr=8-1/-qid60467310/ref=pd\\_bbs\\_1/102-8607095-8980932?ie=UTF8](http://www.amazon.com/Molecular-Ecology-Joanna-R-Freeland/dp/0470090626/sr=8-1/-qid60467310/ref=pd_bbs_1/102-8607095-8980932?ie=UTF8)

Lowe, Harris and Ashton "Ecological genetics: design, analysis and application"

Jonh C. Avise "Molecular markers, natural history and evolution"

Ridley "Evolution"

Halliburton "Introduction to Population Genetics"

Futuyma

Price

"Evolutionary Bioinformatics" <http://post.queensu.ca/~forsdyke/book03.htm> In addition:

Parker J.D (Ecology and Evolution Groups, School of Biological Sciences, University of Southampton) has some classroom practicals "BAMBED"

Nick Barton is writing a book, to be published by



Cold Spring Harbor Press. <<http://www.evolution-textbook.org/>><http://www.evolution-textbook.org>

Lindell Bromham is working on “Reading the story in DNA: using DNA sequences to understand evolution” To be published by Oxford University Press

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## NESCent phyloinformatics hackathon

The National Evolutionary Synthesis Center ([www.nescent.org](http://www.nescent.org)) invites community input on an upcoming Phyloinformatics Hackathon to leverage Bio\* open-source toolkits (e.g., BioPerl) to provide the “glue” for evolutionary analyses of various types that depend on automation, interoperability and data integration.

**BACKGROUND:** While powerful computational tools exist for comparison of evolutionary models, inferring trees, etc, these tools are largely isolated from the rest of bioinformatics (in terms of the input, output and control), making it difficult to achieve objectives of interoperability of diverse applications, large-scale automation of computational analyses, and integration of data from diverse sources. The Bio\* toolkits (BioPerl, BioJava, BioPython, BioRuby, etc.) are widely used as the “glue” code to achieve such objectives in a genomics context.

**OBJECTIVES:** The general plan for the first NESCent phyloinformatics hackathon is to leverage the Bio\* toolkits to facilitate evolutionary analysis, as described on the hackathon web site (see “Proposal”) here:

[https://www.nescent.org/wg\\_phyloinformatics/](https://www.nescent.org/wg_phyloinformatics/) The specific objectives are driven by “use cases”, that is, specific target problems of interest to evolutionary biologists. A diversity of use cases is being considered (click on the “Use Cases” link in the navigation bar).

**CALL FOR INPUT:** The organizers invite community input in order to focus efforts on the most urgent or pervasive problems. Community input may take several forms:

\* modifications (clarifications, additions) to the current list of use cases

\* actual data files (e.g., alignments, trees, other data) for use in testing

\* citations to published papers that exemplify use cases

\* your “wish list” for a phyloinformatics computing platform (see “Forum”)

The NESCent web site (the link is given above) is a “wiki” web, that is, it implements the “wiki” technology (used in wikipedia) to facilitate community-based authoring of web documents. Using your favorite web browser, you can simply start editing the “Use Case” document (the first time, you will be prompted to register), upload data files, or add comments to the “Forum” page. If you are not comfortable with this technology, you may email comments (and files) to [hlapp@nescent.org](mailto:hlapp@nescent.org) (please indicate if you don’t wish to share your comments or data files on the wiki). You may also contact any of the organizers with questions or comments.

**ATTENDANCE:** The hackathon is scheduled for Dec 11-15, 2006 in Durham NC. Space is limited, and attendance is by invitation. If you have not been contacted but desire to attend, please contact Hilmar Lapp ([hlapp@nescent.org](mailto:hlapp@nescent.org)).

**ORGANIZERS:** Hilmar Lapp (NESCent; [hlapp@nescent.org](mailto:hlapp@nescent.org)) Aaron Mackey (GSK; [aaron.j.mackey@gsk.com](mailto:aaron.j.mackey@gsk.com)) Mark Holder (FSU; [older@scs.fsu.edu](mailto:older@scs.fsu.edu)) Arlin Stoltzfus (CARB, NIST; [arlin.stoltzfus@nist.gov](mailto:arlin.stoltzfus@nist.gov)) Todd Vision (NESCent; [tjv@bio.unc.edu](mailto:tjv@bio.unc.edu)) Rutger Vos (UBC; [rvos@sfu.ca](mailto:rvos@sfu.ca))

[stoltzfu@umbi.umd.edu](mailto:stoltzfu@umbi.umd.edu)

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## NSF PEET Mar5 Deadline

Colleagues,

We are sending a reminder that the National Science Foundation’s program Partnerships for Enhancing Expertise in Taxonomy (PEET) is running a competition for 2007. The deadline for proposals will be Monday, March 5. The PEET program preferentially supports projects that work on understudied groups of organisms, and is an effort designed to encourage the training of new generations of taxonomists and to translate current expertise into electronic databases and other formats with broad accessibility to the scientific com-

munity. The PEET program is a biennial competition that has been in existence since 1995. To date 70 projects have been funded through the PEET program. Significant infrastructural developments (e.g., museum collections, databases) and international collaborations distinguish all the projects. We invite you to view the solicitation (announcement NSF 04-606; <http://www.nsf.gov/pubs/2004/nsf04606/nsf04606.htm>) for further details on the program and proposal! guidelines.

Please note that the Cognizant Program Officer since Dr. James Rodman's retirement is now Dr. Juan Carlos Morales ( [sbbi@nsf.gov](mailto:sbbi@nsf.gov) ).

Thank you, Systematic Biology and Biodiversity Inventories, NSF Juan Carlos Morales, Patrick Herendeen, W. Carl Taylor, Gera Jochum

SSB <[SSBMembership@BurkInc.com](mailto:SSBMembership@BurkInc.com)>

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### NSF inventory Benin

Dear all,

I am engineer agronomist (specialist in fauna and tropical flora) having more 10 professional experience years in forest inventory, of fauna mammal, of arthropods and in biologic resource conservation. Author of several scientific publications and techniques. Member of the subgroup of work Odonata Specialist Group of the International union for the Conservation of the Nature (IUCN) and of several associations (group of work of validation of documents of impact survey on the environment to the Beninese agency for the environment, Association Beninese of Environnemental assessment, etc.) of the natural resource conservation. Next to it I participated in all works of research (in sea and on the long of coasts) on cetacean (whales and dolphins) and the turtles marine of the Atlantic of Benin.

I search for taxonomists so that we propose for National Science Foundation a project of insects inventory, Reptilian, Amphibians, Spiders and Ferns of Benin.

I wait for your reactions. Please write me directly on: [tchisev@yahoo.fr](mailto:tchisev@yahoo.fr)

Sincerely,

M. Sévérin Tchibozo Centre de Recherche pour la Gestion de la Biodiversité et du Terroir 04 B.p. 0385 Cotonou, BENIN Tél: (+229) 95063950 / 21353095 / 21303084 Fax (+229) 21303084 E-mail: [tchisev@yahoo.fr](mailto:tchisev@yahoo.fr) <http://www.cerget.org/> <http://www.hyperinfo.de/arccona/tchisev@yahoo.fr>

<http://www.cerget.org/> <http://www.hyperinfo.de/arccona/tchisev@yahoo.fr>

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### Ohio election

Brian Would you please post this to EvolDir? Randy Mitchell, Prof Biology, University of Akron. [rjm2@uakron.edu](mailto:rjm2@uakron.edu)

Dear Fellow Scientists,

In 2003, our community pulled together in response to an attack on the teaching of evolution in Ohio. We electronically circulated a petition that was signed by over 6,800 scientists across our country. Many of you also wrote passionate comments about how this 10th grade "critique of evolution" lesson plan was just flat out bad science. We were able to take those signatures and comments to the Ohio Board of Education and show the moderates on the board the strength of support for the teaching of evolution within the scientific community. Unfortunately, at the time there were not enough moderates on the Board to overturn the lesson plan & it narrowly passed.

The architect of that anti-science lesson plan, Deborah Owens-Fink, is up for re-election on Nov. 7th. About one month ago, we again electronically circulated a similar request for help to our scientific community, this time requesting a small donation to help us to replace Owens-Fink with a pro-science candidate (former congressman Tom Sawyer) for the Ohio Board of Education. We assumed that if ~50% of those 6,800 people would donate \$5-10, we would be in a strong position to get our pro-science message out & counter what would likely be a well funded Owens- Fink campaign.

Unfortunately, our community has yet to pull through for us this time. We have only received 191 donations, & over half of these have been from non-scientists concerned with the state of science education in our country. Owens-Fink has raised three times as much money as we have, with her average donor giving over \$1000. She has been sending out more mailings & buying more advertising than we have been able to afford.

We would like to ask you to reconsider helping us out. If you would simply go to [www.votetomsawyer.com](http://www.votetomsawyer.com) and donate \$10 and then pass this message to a handful of your colleagues (much the same as you did with our 2003 petition), we will be able to afford the mailings we need to get our word out in these crucial final 2 weeks

of the campaign. We have the chance to depose the single most effective promoter of Intelligent Design in Ohio, and for a mere \$10, you can help us to eliminate the need to have to circulate the NEXT petition to once again implore the moderates on the Ohio BOE to reject the next anti-science lesson plan that Owens-Fink will assuredly propose if she is re-elected!

Thank you for your help,

Steve Weeks Randy Mitchell Peter Niewiarowski Francisco Moore Todd Blackledge Rich Londraville

PS please act soon - the Election will be November 7, and we need to be active well ahead of then.

Randy Mitchell <rjm\_akron@yahoo.com>

Thanks in advance for your help with two questions; if anyone requests, I will post your answers/contact info on the evolution net.

(1) how many yrs after dnaeasy kits expire are the components still effective in purifying genomic dna? evidence that genomic dna remains stable?

(2) how can I stop getting large air bubbles in gels (6% bis: acrylamide formamide-urea-0.5X TBE)?

Ann Eileen Miller Baker

Ann Eileen Miller Baker  
<mouse@lamar.ColoState.EDU>

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## Partitioned Bremer with TreeRot

I am trying to calculate partitioned Bremer scores using TreeRot, and I am getting non-standard output for some datasets. Instead of the standard output (tree length in left column, bremer score in right column), my output looks like this:

```
110 NAN(004) 236 236 1 sec (CPU time = 0.11 sec)
NAN(004) NAN(004)
```

The output isn't complete nonsense, as the numbers in the left column (110 and 236 above) are the number of steps each partition contributes to that constraint tree, so I can theoretically still calculate the Bremer scores. This only seems to happen with smaller datasets (around 25-30 taxa or fewer).

Has anyone experienced this? Do you have any suggestions as to what might be going on?

Thanks in advance.

– Leah Larkin, Ph.D. Research Assistant Professor Department of Biology MSC03 2020, 167 Castetter Hall 1 University of New Mexico Albuquerque, NM 87131-0001 (505) 277-2388 (Lab) (505) 239-6036 (Cell) (505) 277-4225 (Museum) (505) 277-0304 (FAX)

llarkin@unm.edu

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## Qiagen expiration answers

Overview

**DNAEASY QIAGEN EXPIRATION** One person found that 6-yr old dnaeasy gave dna that could be PCR'd. Several people said all reagents but proteinase K would probably be OK.

**LARGE AIR BUBBLES IN SEQUENCING GEL** Most suggested removing air in the gel using a vacuum; cleaning plate well; knocking± plate with hand to remove bubbles; putting something small btwn plates to fish out± the bubbles. The vacuum is applied before adding APS, temed. I was doing experiments to avoid large air bubbles: putting small glass plate in 100 gm NaOH per 1 L dd h2o for ca. 5 days resulted in no large air bubbles in two gels so far. I use this same NaOH solution to remove AgNO3-stained acrylamide gel from the small plate.

**EMAIL RESPONSES** (I omitted a few responses because most were redundant)

———— Forwarded message ———— Date: Sun, 15 Oct 2006 08:17:54 -0700 From: Ward Watt <wbwatt@stanford.edu> To: Ann Eileen Miller Baker <mouse@lamar.colostate.edu> Subject: Bubbles in gels

Dear Ann,

Can't help much with your question about the lifespan of DNeasy components, except to say that the spin columns themselves are pretty long-lived.

But as for the bubbles, have you been degassing your gel mix before adding catalyst? (I assume this is a sequencing or fragment-analysis gel?) What we do is to put a Nalgene plastic filter unit, 0.2-micron, on the standard building vacuum line (with a "trap" in between,

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## Qiagen expiration

of course) and filter the gel mix, pre-catalyst, through into the collection flask, then leave it under vacuum there for ten minutes before adding catalyst, gently swirling to mix, and then pouring the gel. The only bubbles that ever result then are from pouring/sliding plates too fast (we use an "OWL" casting rack rather than the insane ABI syringe-and-gaskets rig) or from incompletely cleaned plates.

Cheers,

Ward

Ward Watt Prof. of Biology

Dept. of Biological Sciences 371 Serra Mall  
Stanford University Stanford, CA USA 94305-5020  
Phone (650)-723-4297 FAX (650)-723-6132 Email wb-  
watt@stanford.edu

Summer – Rocky Mountain Biological Laboratory 8000  
County Road #317 (or P.O. Box 519) Crested Butte,  
CO USA 81224 Phone and FAX (970)-349-5668 Same  
email

A,

Weak acid = 100 mL glacial acetic with 900 mL dd  
h20? OR 10 mL glacial acetic with 990 mL dd h20?  
The first step after electrophoresis before putting into  
AgNO3 9no 32P) is to "fix" in 100 mL glacial acetic  
with 900 mL ddh20; my gel stays on the small plate  
until after I scored.

I would guess the 10% solution would be better, but  
have no personal experience. In my grad school lab we  
used 1N HCl to clean mineral deposits from glassware.

I use "glue" (ca. 30-letter name in Sigma catalog) on  
the shortplate; on the longplate, I now use a nonhaz-  
mat from Amresco (forgot name), but with Westneat  
we used "sigmacote".

Sigmacote is the one I've used.

Let me know what ends up working for you. Lucky me,  
I'm on to capillary sequencing now!

Brian

==== Original Message From Brian Ort  
<brianort11@msn.com ==== Hi, I think acid  
would work better. I have etched glass as a sort of  
art project and I think the etching paste is basic. You  
definitely don't want to etch your plates! Weak acids  
are very good at removing calcium and other hard  
water deposits (think of acid rain on the Acropolis in  
Athens or vinegar in your tea kettle). I would start  
with weak acid and don't leave it on the plates for  
more than a minute to start. Rinse well with di-water  
and wipe dry with soft paper towels. Then air dry for

a day or so.

One other thing I've used is a silica coating on the inside  
of one plate. That was to facilitate prying the plates  
apart after running so that the gel could be blotted onto  
filter paper, dried, and used for autoradiography. How-  
ever, I think the silica coating also incidentally helped  
with pouring the gel.

Cheers, Brian

Brian, Do you think NaOH (100 gm per 1 L dd  
h20) could be effective substitute for acid? I did lotsa  
tapping, but it was useless (so many large bubbles). Re-  
spectfully, A who never degassed acrylamide, but will;  
who routinely degassed starch gels

==== Original Message From Brian Ort  
<brianort11@msn.com ==== Hi, I assume you're  
talking about bubbles formed while pouring a slab gel  
between glass plates, as for sequencing or microsats.  
First, you should degas the gel solution under vacuum.  
You're probably already doing this since most protocols  
call for it. While pouring the gel, I've found it useful  
to, first, have the plates lying horizontally on some  
padded support, then use my knuckles to tap on the  
plate at the gel front while I'm injecting the gel with a  
large syringe at the notched end of the plates. Tapping  
causes the gel to advance past any rough spots inside  
the plates. If a lab partner is available, it's easier to  
have one person pour and the other tap. So that's a  
primitive technique.

— / —

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>

## RealTimePCR instrument advice

Please post Our laboratory, a molecular core facility,  
will be purchasing a real time PCR instrument shortly,  
we are looking for an instrument that can run mul-  
tiple fluors. Currently, we are looking at the iCycler  
from Bio-Rad, or one of the instruments from Applied  
Biosystems. I would be interested in hearing from expe-  
rienced users of these or other comparable instruments  
about their experiences. In particular, I would appreci-  
ate information on reliability, operating costs, and ease  
of use.

Cort L. Anderson Laboratory for Ecological and Conservation Genetics College of Natural Resources P.O. Box 441136 University of Idaho Moscow, ID 83844

tel: 208 885 8914 fax 208 885 9080 email: cla@uidaho.edu

cla@uidaho.edu

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## RealTimePCRmachine Advice

Dear EvolDir,

I am about to purchase a real-time PCR system for my lab.

I have been looking at the following:

1/ ABI 7300 2/ BioRad Chromo4 (this was MJR) 3/ BioRad DNA Engine Opticon 2 (this was also MJR) 4/ BioRad MyiQ

I have not yet looked at the Eppendorf machine.

If anyone has any opinions to offer or experience with one or more of these machines, I would really appreciate hearing from you.

Many thanks, Alex Wilson –

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> acwilson@bio.miami.edu

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## RealTimePCRmachine Advice answers

Thanks to all those who responded to my question about which real-time PCR machine to purchase. What follows is a summary of the responses I got.

Our company has used 3 of the 4 you mentioned: ABI 7300 BioRad DNA Engine Opticon 2 (this was also MJR) BioRad MyiQ And we've even tested out the Stratagene MX3005P It all comes down to what special preferences you would want from the machines. ABI: We've had some limitations in programming options

with this machine, however, we're not doing the typical real-time PCR assays. Opticon2/Stratagene: Very user friendly. Of these two, we prefer the Opticon2 because of the nice features in viewing your traces (you can roll over the trace and it will highlight in different colors which sample it is both on the plate position as well as in the description - VERY useful if running tons of samples at the same time). MyiQ: A busy & slightly complicated interface (lots of tabs and buttons to activate before you can edit/create anything) but after some practice, it isn't too difficult. Does not have the roll-over-trace feature; instead, you have to select the wells you want display or place your cursor over the trace and catch the little hand cursor for it to tell you which sample the trace is belongs to (a bit annoying when looking at several samples, but BioRad is working on the feature for their next software upgrade at least I hope). Bonus feature is that you can add cycles /during/ a run. The Opticon2 is limited to 99 cycles (again, the types of assays we're doing requires us to sometimes run the whole thing out for a long time to see when a product will form). It also has a much faster ramp time than the Opticon2. Something that is important to us is the ability to pause the run and add/remove small amounts of volume in our sample and both of the BioRad machines were the only ones that allowed us to do that (meaning the plate/tubes were not physically being blocked by the laser or whatnot when we interrupt a run). We currently own all three (ABI and both BioRads) and will probably consider buying another MyiQ.

----- you might look into the stratagene machine. we have one and love it. + -----

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Hello, Alex,

I'll forward to you my reply to Cort, who sent in a similar query to the evoldir not long ago.

Best of luck,

Bob

PS: Note that the Eppendorf is pretty high priced (around same as ABI 7500, I think). I'd stick with the Bio-Rad rather than the MJ, because I think you'll get better customer support on the iQ series.

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\*From:\* Robert E. Marra  
[mailto:Robert.Marra@po.state.ct.us] \*Sent:\* Wednesday, October 11, 2006 8:36 AM \*To:\* 'cla@uidaho.edu'  
\*Subject:\* realtime decisions

Hello Cort,



I shopped around for a realtime instrument a little over a year ago. Although there seems to be a penchant for the Cepheid Smartcycler in my field, for diagnostics, I dismissed it because of its sample size limitation (16 per run). I looked at the ABIs, the Bio-Rad iQ5, and the Eppendorf. I briefly looked into the Stratagene, but did not like several features, including the moving camera, and I was nervous about its low price, wondering if it wouldn't come back to haunt me; i.e., you get what you pay for. I only looked at the iQ5 from Bio-Rad, not the MJResearch, and that was in part because at the time, Bio-Rad was in litigation with ABI over licensing for their MJR line (perhaps you know that Bio-Rad purchased MJR some time ago). We (my technician and I) were interested in the software as well as the instrument itself. One thing that appealed to us about the iQ5 and the Eppendorf is that both instruments can be used as stand-alone thermalcyclers, so part of my purchasing was to buy one real-time unit and two stand-alone thermalcyclers, and I liked the idea that all three would share the same base unit, so that reaction optimization can be done any machine, and for endpoint real-time PCR, the reactions themselves can be done in a different unit, than transferred to the iQ5 to be read. The ABI units don't have this feature. I liked the Eppendorf best of all, both the instrument and the software, but there were holdups relating to the licensing litigation, and I had to make my purchase before the opportunity to use the money would run out. So I went with the iQ5, and for the most part, we've been very happy with our decision. For one thing, Eppendorf was not very flexible on the pricing, even considering that we were going to by the realtime unit as well as two thermalcyclers, whereas Bio-Rad worked out a nice deal for us. As with anything, since we've been using the iQ5 (and we use it a lot), we have found some quirks in the software, but they seem to be pretty responsive to suggestions for updates, and they've already incorporated a couple of our suggestions (which, apparently, others made as well). The tech support has been excellent, too. One of my fears with ABI is that while

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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>

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## Software DAMBE update

Dear All,

I have uploaded a major update of my DAMBE software. It includes the following new functions:

1. Hidden Markov model (HMM) for motif and gene finding and secondary structure prediction
2. Gibbs sampler for finding regulatory sequences and their locations
3. Other basic bioinformatics tools such as position weight matrix, perceptrons (often used to characterize signal sensors in gene finding) and discriminant function analysis (often used in gene finding involving content sensors)
4. Particularly relevant to evolutionary biologists is a new codon adaptation index (CAI) based on tRNA anticodons. Computation of CAI requires a set of reference genes known to be highly expressed. DAMBE's previous function of CAI is based on EMBOSS's .cut files (i.e., codon usage tables compiled and distributed with EMBOSS, e.g., Ehum.cut for human, Eeco.cut for E. coli) as the reference files. These EMBOSS .cut files suffer from two problems. First, the .cut files are poorly documented, which is typical of any open-source software. DAMBE users often ask me what are those EMBOSS .cut files, how are they compiled, why there are several .cut files for human, E. coli, etc. and which file is more relevant for computing CAI. Most users are unaware of the horrible answer that these .cut files are mostly not documented, and generally will be horrified to learn the answer. For bacterial species, some tables are from compilation of codon usage from ribosomal protein genes or from whatever genes known to be highly expressed. The other problem is that the .cut files do not follow any standard notation in file name. The early TransTerm files have names made from the first character of the genus name and first three characters of the species name, but this convention is not followed in EMBOSS.

My lab has used tRNA compilation from LoweLab and compiled the tRNA-anticodon-derived codons. Using such codon frequencies as the reference set results in not only a more coherent CAI, but also make it much more applicable to many more species. Currently it includes 215 eubacterial species, 21 archaeobacteria and 13 eukaryotes.

For teachers not familiar with HMM or Gibbs sampler (or position weight matrix or perceptron) but wish to include these materials in teaching, I have tutorial chapters to guide you through numerical illustrations (you will need a good calculator or be familiar with a spreadsheet program such as EXCEL), conditional on your providing comments.

The new version also fixed a few bugs.

The installation package for DAMBE is freely available at

[http://dambe.bio.uottawa.ca/-dambe\\_installation\\_instructions.asp](http://dambe.bio.uottawa.ca/-dambe_installation_instructions.asp) You need only a few mouse clicks to install it.

For those who do not know DAMBE, it is a Windows program with extensive functions for data analysis in bioinformatics, molecular biology and evolution.

Best Xuhua

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

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## SouthernUtahU SeminarProposals

The Department of Biology at Southern Utah University is inviting Faculty, Post-docs, and Graduate students to submit applications for the Invited Research Seminar Series at Southern Utah University ? Winter/Spring Semester 2007.

Southern Utah University is a small, undergraduate and Master?s University located in the scenic, southwest corner of Utah. Our pristine location offers some of the best slickrock trails, slot canyons, back country powder, and hiking anywhere (see links below). Pre-talk high country desert adventure will be strongly encouraged and facilitated.

Selected colleagues will be provided with room/board, recreational opportunities (resort ski pass, equipment rental, etc.), and travel to/from Salt Lake City, Utah or Las Vegas, Nevada.

Graduate students this is a great opportunity to add invited seminar sections to your CVs. International applications are welcome.

If interested, please send a CV, short research description, and available dates (see schedule below) to:

Dr. Jonathon Marshall  
jonathon.c\_marshall@hotmail.com

Subject heading: Research Seminar

<http://www.suu.edu/> Schedule 2007 January 16, 23,

30 February 6, 13, 20, 27 March 5, 19, 26 April 3, 10, 17, 24

Area Attractions Bryce Canyon National Park <http://www.nps.gov/brca/> Zion National Park <http://www.nps.gov/zion/> Cedar Breaks National Monument <http://www.nps.gov/cebr/> Kolob Fingers [http://www.utah.com/byways/-kolob\\_fingers.htm](http://www.utah.com/byways/-kolob_fingers.htm) Native American Rock Art [http://www.utah.com/playgrounds/parowan\\_gap.htm](http://www.utah.com/playgrounds/parowan_gap.htm) Brian Head Ski Resort [http://www.utah.com/ski/resorts/-brian\\_head.htm](http://www.utah.com/ski/resorts/-brian_head.htm) Gooseberry Mesa slick rock trail <http://www.utahmountainbiking.com/trails/goose.htm> Rock Climbing Areas <http://utahpictures.com/-SnowCanyon1.html> Remote overlook of the Grand Canyon <http://www.mmto.org/~swest/toroweap/-toroweap.html> John Ford/John Wayne Old Western Movie Sets <http://www.kaneutah.com/101things.htm> Birth place of Butch Cassidy <http://www.utah.com/-oldwest/butchcassidyoverview.htm> Jonathon C. Marshall, PhD. Dept. of Biology, SC116 Southern Utah University Cedar City, UT 84720

Phone (435) 586-7927 Fax: (435) 586-8605

Jonathon Marshall <jonathon.c\_marshall@hotmail.com>

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## Structure software bug

I would appreciate knowing if anyone else has encountered the same problems I describe below, and if there is a known "fix."

I am having difficulties with what seems to be a bug when using the program STRUCTURE with Windows XP, but may also be an incompatibility with the operating system. I'm using the Java-based "front end," running batch files with a datafile that has 180 individual genotypes at 8 loci (total of 6 populations). Typically, my batch files contain 2 or 3 different parameter sets with different settings for parameters like ancestry model (admixture, no admixture, use pop information), allelic relationships (correlated vs noncorrelated), etc, and are generally run at  $K = 2$  to  $K = 7$ . In all cases, burnin is 75000 and the run is 750,000 iterations.

Very often, during the fifth run of the program in a batch file, an error message comes up that apologetically tells me that STRUCTURE has to quit. I have the option of "debugging," and/or sending a report to Microsoft (yuk yuk...). Invariably, this happens when the program is scrolling the results for individuals across

the screen (while presumably writing to the results file), and it always happens at the same place in the batch file. The DOS prompt tells me that the system can't find the specified path, which does not make any sense, for it wrote to that path just fine for the previous run. I can get the program started again by clicking on the "debug" option displayed on the error window, but then it will never write to a results file again for that run. I have rechecked the data file several times, looking for hidden formatting or other errors, but found nothing amiss. I get the same error regardless of whether the program has to write to directories on its hard drive, to attached portable media, or to network drives

This computer is a newly set up system, using the latest upgrade of Windows XP and incorporating several security features mandated by my dept's computer people. Some colleagues here have suggested that this is a memory issue, but my machine is "maxed out" with respect to RAM, though I do suppose I could try allocating more memory to the program... Others have suggested that I am asking too much of the program (or its Java-based front end) and that I should be content with smaller batch runs. Still others have suggested that the problem is the Java itself. And some have suggested that I should switch to using the command line version of the program...

Any help or advice would be appreciated. I have written to the "structureHelp" address but have not yet received a response.

fishgen@vt.edu

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## Ugandan Forest

Dear EvolDir Members, Please help us sign an International Petition to save one of the largest remnant natural forest reserves in the heart of Uganda. Mabira forest (<http://www.natureuganda.org/html/Mabira.htm>; <http://www.traveluganda.co.ug/mabira.asp>) is a 36,000 ha natural forest that serves as the main water source for Lake Victoria, the second largest freshwater lake in the world and the latter is also the source of River Nile. It has important biodiversity and is a UNESCO and other international ecological and evolutionary research site.

Ever since the government of Uganda assumed power, there has been uncoordinated and un-researched giveaways of evolutionary and ecologically essential ecosystems to 'investors' for growing palm trees, planting

sugar cane, industrial developments, among other unsustainable uses. For Mabira, the initial 25% of the forest land is planned to be given to THE SUGAR CO-OPERATION OF UGANDA, a sugar exporting company to plant sugar canes!!!

We, the undersigned believed your kind effort to join us in this international petition to the government of Uganda will help them (the government and the 'investor') see the concerns that learned people including evolutionary biologists overall the world have for this natural resource. There are hundreds of thousands of alternative savannah bush lands in Uganda that the company could utilize to grow sugar canes.

Please visit the link below to sign and also see the people who have already signed the petition.

<http://www.savemabira.petitiontime.com/-ViewPetition.aspx?key=savemabira> Best regards,

Okello

J B A Okello, PhD Makerere University Institute of Environment & Natural Resources Molecular Genetics Laboratory P. O. Box 7298 Kampala, UGANDA

John B A Okello <jbaokello@muienr.mak.ac.ug>

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## r8s program problem answers

Dear all,

Thank you all for your comments. I've finally managed to make r8s run by putting the application on my directory and typing './r8s -f filename' directly on terminal. Since some people showed interest on any reply I had, here I send all the help e-mails I received.

Cheers,

Ramiro

Hi Ramiro,

I don't know if there's a problem with your copy of r8s, but the first thing I do when I encounter such a problem is to update my operating system (MacOS 10.4.7 is out), although it seems more probable that the issue is text encoding. Use a text editor like TextWrangler or BBEdit to play around with text encoding (Macintosh, Unix, DOS). Some programs like DOS line breaks, for instance.

You can get both programs from <http://www.barebones.com> On the main text window,

click the icon to the right of the “M” icon to select the text encoding of your choice. See a screenshot here: <http://www.macupdate.com/screenshot.php?id=11009>

Although the program does open when you execute it in the Terminal, I would just navigate to the directory where both r8s and the input Nexus file are and do this:

```
$./r8s -b -f inputfile.nxs > logfile.txt
```

and make sure your Nexus file has all the necessary r8s commands (run settings, priors, etc.). Of course, you may just enter the r8s prompt and use the “execute” command.

Cheers, sergios

Dr. Morales-Hojas,

I don't have experience with R8S, but I often have problems with NEXUS files not being recognized while trying to run phylogenetic programs (e.g. MrBayes) on a Mac. One common problem is with the taxon names. Look in your NEXUS file as text and see if the names have single-quotes around them, like this: 'Drosophila'. This was my problem with the NEXUS file generated by PAUP\* on a Mac. After removing these single-quotes (using find and remove in Word), the file was recognized as NEXUS.

Hope this helps.

John McCormack UCLA

Ramiro, the first thing to check is that your files are text only; I'm not sure about r8s but many programs won't recognize any other format (e.g. .doc files from Word).

Bill

Ramiro,

r8s is a console program, double clicking does not work well with those because when you double-click the program's start directory is your home directory. Use the Terminal.app (in /Applications/Utilities) and then learn a couple of commands to move around (typically you need to know: ls, cd, mv, cp [type man ls etc] or even better learn about the Terminal.app on [http://www.oreillynet.com/pub/a/mac/-2001/12/14/terminal\\_one.html](http://www.oreillynet.com/pub/a/mac/-2001/12/14/terminal_one.html) . Peter

Dear Ramiro:

I too had similar difficulties with r8s. I got around it by opening Terminal and then typing in:

```
./r8s -f filename
```

For some reason you must call r8s from the Terminal, not by double-clicking on the executable. Hope this helps!

Heather

Dear Ramiro,

I strngly suggest that you stop using your mouse all-together when using r8s and operate the program from the terminal window only. The manual lists the necessary unix commands for running the software. However, if you don't put the r8s program into the bin directory, you might rather run it with ./r8s command.

Good luck, Natalia

rmhojas@ibmc.up.pt

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## PostDocs

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## CornellU EvolGenetics

A postdoctoral position to study the evolutionary genetics of anti-malaria immune defenses in Anopheline mosquitoes is available in Brian Lazzaro's lab at Cornell University. Aims of the project include characterization of selective pressures on anti-malaria defense genes and quantitative genetic examination of variation among wild *An. gambiae* in the ability support Plasmodium development. Possible experiments the post-doc may engage in include population genetic analyses of immunity genes in *An. gambiae* and other species, molecular evolutionary comparisons of vector and non-vector mosquito species, and genotype-phenotype association studies in *An. gambiae* to link resistance to *P. falciparum* development with genotype in candidate genes. This project is funded by the NIH and is executed in collaboration with Ken Vernick's lab at the University of Minnesota.

Applicants should have a strong background in population genetics, molecular evolution, or quantitative genetics. Application materials should consist of a CV and brief statement of research background and interests sent to Brian Lazzaro at [BL89@cornell.edu](mailto:BL89@cornell.edu). Informal inquiries about the position may also be sent to the above address. Research in the Lazzaro lab revolves around the evolutionary genetics of immune defense in insects, especially antibacterial defenses in *Drosophila* and antimalarial defenses in Anopheles. More information about the lab can be found at <http://www.entomology.cornell.edu/~Lazzaro>.

This position is available immediately, but start date is flexible. Salary will be commensurate with experience in accordance with the NIH pay scale.

[BL89@cornell.edu](mailto:BL89@cornell.edu) [BL89@cornell.edu](mailto:BL89@cornell.edu)

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## CornellU TheoPopGenet

A postdoctoral position is available in Scott Williamson's lab in the Department of Biological Statistics and Computational Biology at Cornell University. Research in the Williamson lab focuses on developing theoretical models and statistical applications for population genomic data, with a particular emphasis on inference of natural selection and population demography. Ongoing biological application of this work includes investigations of: (1) natural selection and demographic change in human history, (2) the public health consequences of negative selection and mutation load in humans, (3) the relationship between viral adaptation and disease progression during chronic HIV infection, and (4) the impact of domestication on genetic variation in cultivated plants.

Applicants should either have a PhD in evolutionary genetics with a strong quantitative background or a PhD in a quantitative field (e.g. mathematics, statistics, computer science, etc.) and a strong interest in evolutionary biology and genomics. Applicants should also have experience with scientific programming, and experience with numerical analysis (especially numerical solution of partial differential equations) is helpful. To apply, send a cv to Scott Williamson ([sw292@cornell.edu](mailto:sw292@cornell.edu)) and arrange to have two letters of reference sent by email. Applications should be received by December 1 to ensure full consideration.

Scott Williamson Assistant Professor Dept. of Biological Statistics and Computational Biology Cornell University 167 Biotech (607) 254-8697 [sw292@cornell.edu](mailto:sw292@cornell.edu)



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## DukeU YeastPopEvolGen

Postdoctoral Position in Yeast Population Genetics and Genomics

A two year postdoctoral position is available in the Department of Biology at Duke University to study the effects of genetic variation on regulatory networks in yeast.

We seek a highly-motivated postdoctoral research associate who has the ability to utilize a combination of genetic and functional genomic experimental approaches to further our understanding of how variation in gene networks contributes to variation in cellular phenotypes. Prior experience in the application of techniques such as gene knockouts, allelic replacement and qPCR methods in budding yeast or related fungi is required.

To apply for this position please send a cover letter, CV and the names and contact information for three references to: Dr. Paul Magwene, email: paul.magwene@duke.edu. You may also send this information via post to: Paul Magwene, Department of Biology, Duke University, P.O. Box 91000, Durham, NC 27708.

pmmagic@gmail.com

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## ImperialCollegeLondon 5PopBiol

Five Postdoctoral Research Associate Positions in Population Biology/ Ecology/Biodiversity

NERC Centre for Population Biology Division of Biology Imperial College London Silwood Park

Salary: £23,560 - £34,330 per annum

The NERC Centre for Population Biology hosted by Imperial College London, and is funded by NERC to carry out research in all areas of population biology.

We seek five self-motivated postdoctoral Research Associates to join the centre. You will have a strong background in population biology or related areas, and will propose to develop work that complements current research at the CPB (see <http://www.cpb.bio.ic.ac.uk/>).

These posts will be funded until the end of the current core contract to 31 March 2009 with a possibility for renewal, subject to funds being available.

For Job description, Person specification, further information and an application form please use the links below or contact Sarah Snellin (s.snellin@imperial.ac.uk):

<http://www3.imperial.ac.uk/cpb/about/vacancies/researchassociatespositions>

Please send completed application forms along with a copy of your CV, details of two referees (please alert your referees to the application) and a one page outline of your current research interests to:

Sarah Snellin NERC Centre for Population Biology, Imperial College London Silwood Park Campus Ascot Berks SL5 7PY Tel: 020 7594 2346 e-mail: s.snellin@imperial.ac.uk

For further information please contact Sarah Snellin on the above details.

Closing date: 12 October 2006, 12.00 noon.

– Prof. Ian P.F. Owens Division of Biology & NERC Centre for Population Biology Imperial College London Silwood Park Ascot, Berkshire SL5 7PY, UK

<http://www.imperial.ac.uk/people/i.owens> Ian Owens <i.owens@imperial.ac.uk>

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## ImperialCollegeLondon FungalEvolution

A PDRA is sought for a 3 year, Leverhulme Trust-funded Research Associate to test the relative importance of sex versus asexual reproductive strategies in fungal evolution focused on the genus *Penicillium*. The goals of the project are threefold: to develop a multigene phylogeny and multilocus sequence typing (MLST) scheme for *Penicillium* species, to determine the spatial scaling of genetic diversity for section *Chrysogena* and subgenus *Biverticillium* using the a global sampling of isolates and ecological niche modelling, and to answer the historical question 'How lucky was Fleming?' by identifying the source of Fleming's original *Penicillium* isolate from his laboratory in St. Mary's Hospital, London.

In order to answer these questions, we are seeking an excellent candidate to develop and adapt phylogenetic and epidemiological approaches to charac-

terise the population genetic structure of the genus, with an emphasis on characterising the spatial distribution of mating-types and recombination. Required skills: a PhD in population genetics, molecular evolution or molecular epidemiology with experience in bioinformatics/statistical genetics. The Salary is on the scale 26,200 GBP to 29,170 GBP per annum. Recent publications on this, and allied research, can be found at <http://www1.imperial.ac.uk/medicine/people/matthew.fisher/> This project will be based at the Department of Infectious Disease Epidemiology at the St Mary's Medical school campus, Imperial College London and is in collaboration with Dr Rob Samson at the CBS, the NCAUR, Peoria USA and the Fleming Museum. The position is available from the 1st of December 2006. Please email [matthew.fisher@imperial.ac.uk](mailto:matthew.fisher@imperial.ac.uk) for further details. To apply, please send a C.V., covering letter and names and addresses of 2 referees to Dr. Matthew Fisher, Imperial College Faculty of Medicine, Dpt of Infectious Disease Epidemiology, St Mary's Campus, Norfolk Place, London, W2 1PG, United Kingdom by 15 November 2006.

[matthew.fisher@imperial.ac.uk](mailto:matthew.fisher@imperial.ac.uk)

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### KansasStateU EcolGenomics

POSTDOCTORAL OPPORTUNITY IN ECOLOGICAL GENOMICS: Genetic Control Over Responses of Prairie Grasses to Abiotic Stress

Postdoctoral Opportunity AVAILABLE at Kansas State University to participate in this newly emerging field at the interface of ecology and genomics. This research 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 specific research assembles investigators with complementary expertise in Ecology (Johnson) and Plant Molecular Biology (Shah) to elucidate the response and adaptation of prairie grasses to abiotic stresses. In particular, we are interested in understanding the molecular, genomics, and physiological response of roots of the dominant tall grass prairie species 'big blue stem (*Andropogon gerardii*)' to drought, nitrogen-limitation, and other abiotic stresses, and to correlate changes in gene expression in roots with ecological plant response. This work will take place at Konza Prairie Biological Station and in the laboratories of Drs. Johnson

([www.ksu.edu/johnsonlab](http://www.ksu.edu/johnsonlab)) and Shah in the Division of Biology at Kansas State University.

This post-doctoral opportunity is part of the Ecological Genomics initiative in Kansas. The program takes advantage of existing strengths at Kansas research universities (KSU, KU, WSU) in genetics and genomics, ecology and evolutionary biology to answer cross-cutting questions that lie at the interface of genomics and ecology. More information about the Kansas Ecological Genomics Institute can be found at [www.ksu.edu/ecogen](http://www.ksu.edu/ecogen).

For this postdoctoral position, we seek candidates with a Ph.D. in molecular biology and an interest in applying molecular and genomic tools to address ecological questions. Importantly, applicants should have the interest and willingness to cross disciplines. The successful candidates must be able to design and conduct independent experiments. Excellent oral and written communication skills and the ability to work well in a team-based/collaborative research atmosphere are essential.

Applications will begin to be reviewed on October 23, 2006, and will continue until the position is filled. Start date for the post-doctoral position is November 15, 2006. A complete application must consist of: 1) A cover letter detailing your qualifications and how they relate to the advertised position, 2) A professional resume, 3) Reprints/preprints of publications, and 4) Names and contact information for three referees.

You may submit a complete application package by e-mail to: [dmerrill@ksu.edu](mailto:dmerrill@ksu.edu)

Complete applications can also be mailed to: Doris Merrill, Program Coordinator Ecological Genomics Institute Division of Biology, Kansas State University Ackert Hall, Manhattan, KS 66506-4901 Phone: (785) 532-3482 Fax: (785) 532-6653

KSU is an Equal Opportunity Employer, and actively seeks diversity among its employees.

[dmerrill@ksu.edu](mailto:dmerrill@ksu.edu) [dmerrill@ksu.edu](mailto:dmerrill@ksu.edu)

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### MichiganStateU InvasiveEvol

Postdoc: Invasive Species Ecology, Policy, Management

A position is available for a postdoctoral associate to conduct research on the ecology, management and policy implications of invasive species in the Great Lakes region, with a primary focus on Michigan.

The successful candidate will oversee a newly established database of non-indigenous biota of Michigan and coordinate research, grant-writing and outreach activities as part of a multidisciplinary Invasive Species Initiative at Michigan State University (<<http://www.invasivespecies.msu.edu/>><http://www.invasivespecies.msu.edu/>). Applicants from all related disciplines are invited and persons with expertise in modeling or quantitative approaches are especially encouraged to apply. Excellent organizational skills and ability to work with researchers across a variety of disciplines is required. The successful candidate will work both as part of a multidisciplinary group, and with a mentor who has parallel research interests. Applicants must have a PhD before hiring. Starting salary will be \$36,000 plus benefits and the initial appointment will be for 18 months. Review of applications will begin on November 15, 2006, and continue until a suitable candidate is identified. Preferred starting date is early 2007. To apply, send statement of interest, curriculum vitae, and the names and contact information of three references to:

Dr. Doug Landis 204 Center for Integrated Plant Systems Michigan State University East Lansing, MI 48824 [landisd@msu.edu](mailto:landisd@msu.edu) (517) 353-1829

Douglas A. Landis Professor of Entomology Insect Ecology and Biological Control 204 Center for Integrated Plant Systems Michigan State University E. Lansing MI 48824-1311

Phone (517) 353-1829 FAX (517) 353-5598 E-Mail [landisd@msu.edu](mailto:landisd@msu.edu)

Visit our websites at: Enhancing Beneficial Insects with Native Plants <http://www.ipm.msu.edu/plants/home.htm> Invasive Species Ecology and Biological Control Lab <http://www.landislab.ent.msu.edu/> Garlic Mustard Project <http://www.ipm.msu.edu/garlicmustard.htm> The Purple Loosestrife Project at MSU <http://www.miseagrant.umich.edu/pp/index.html> [landisd@msu.edu](mailto:landisd@msu.edu) [landisd@msu.edu](mailto:landisd@msu.edu)

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## Munich Adaptation

\* PhD and Postdoc Positions in Evolutionary Biology in Munich\*

The University of Munich, Munich Technical University and the University of Applied Sciences Weihenstephan are pleased to announce the establishment of a Col-

laborative Research Center under the theme Adaptation: Selection Pressures, Phenotypic Responses, Genetic Mechanisms and Resulting Differentiation. Pending final funding approval by the German Research Foundation, multiple PhD and postdoc positions (including one slot for a computer programmer) will be available. The Research Center will include 14 individual projects employing both experimental and theoretical approaches to the study of adaptation. Areas of research include population genetics, evolutionary functional genomics, QTL analysis and phenotypic evolution.

Participating faculty include:

Wolfgang Stephan, Research Center Coordinator (University of Munich) John Baines (University of Munich) Susanne Foitzik (University of Munich) Wilfried Gabriel (University of Munich) Bernhard Haubold (University of Applied Sciences Weihenstephan) Joachim Hermisson (University of Munich) Wolfgang Ludwig (Munich Technical University) Beate Nuernberger (University of Munich) Joerg Overmann (University of Munich) Martin Parniske (University of Munich) John Parsch (University of Munich) Peter Pfaffelhuber (University of Munich) Susanne Renner (University of Munich) Laura Rose (University of Munich)

PhD students will also have the opportunity to participate in a newly established Graduate Program in Evolution, Ecology and Systematics (EES) at the University of Munich. This program is supported by the Volkswagen Foundation and includes team-taught courses for entering PhD students, a student-organized external-speaker seminar series and yearly workshops and excursions.

For more information about the Collaborative Research Center, EES Program and details of the individual projects and positions available, please visit the following website:

[http://www.biologie.uni-muenchen.de/ou/sfb\\_adaptation/index.htm](http://www.biologie.uni-muenchen.de/ou/sfb_adaptation/index.htm) Applications are now being accepted. Pending final approval, positions will be available starting January 1, 2007, but will remain open until filled. Applicants should specify which project(s) and position(s) (Phd or postdoc) they wish to be considered for and provide (preferably as PDF files) a CV, statement of research interests/experience and the name and contact information of 2 references. Applicants for PhD positions should also provide a transcript of their academic record. Informal inquiries and formal applications should be sent to Pleuni Pennings ([pennings@lmu.de](mailto:pennings@lmu.de)).

The University of Munich is an Equal Opportunity/Affirmative Action Employer and has an affirmative action policy for the disabled.

– Pleuni S. Pennings

\* Program Coordinator of the Munich Graduate School for Evolution, Ecology, and Systematics

\* Postdoc in theoretical evolutionary biology

Evolutionary Biology, Department Biologie II University of Munich (LMU) Großhaderner Str. 2 D-82152 Planegg-Martinsried

Tel: 0049 89 2180 74 234 <http://www.biologie.uni-muenchen.de/ou/theopopgen/index.htm>

pennings@zi.biologie.uni-muenchen.de skype: pleunipennings

pennings@zi.biologie.uni-muenchen.de

pennings@zi.biologie.uni-muenchen.de

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## Munich Adaptation 2

\* PhD and Postdoc Positions in Evolutionary Biology in Munich\*

The University of Munich, Munich Technical University and the University of Applied Sciences Weihenstephan are pleased to announce the establishment of a Collaborative Research Center under the theme Adaptation: Selection Pressures, Phenotypic Responses, Genetic Mechanisms and Resulting Differentiation. Pending final funding approval by the German Research Foundation, multiple PhD and postdoc positions (including one slot for a computer programmer) will be available. The Research Center will include 14 individual projects employing both experimental and theoretical approaches of the study of adaptation. Areas of research include population genetics, evolutionary functional genomics, QTL analysis and phenotypic evolution.

Participating faculty include:

Wolfgang Stephan, Research Center Coordinator (University of Munich) John Baines (University of Munich) Susanne Foitzik (University of Munich) Wilfried Gabriel (University of Munich) Bernhard Haubold (University of Applied Sciences Weihenstephan) Joachim Hermisson (University of Munich) Wolfgang Ludwig (Munich Technical University) Beate Nuernberger (University of Munich) Joerg Overmann

(University of Munich) Martin Parniske (University of Munich) John Parsch (University of Munich) Peter Pfaffelhuber (University of Munich) Susanne Renner (University of Munich) Laura Rose (University of Munich)

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[http://www.biologie.uni-muenchen.de/ou/-sfb\\_adaptation/index.htm](http://www.biologie.uni-muenchen.de/ou/-sfb_adaptation/index.htm)

Applications are now being accepted. Pending final approval, positions will be available starting January 1, 2007, but will remain open until filled. Applicants should specify which project(s) and position(s) (Phd or postdoc) they wish to be considered for and provide (preferably as PDF files) a CV, statement of research interests/experience and the name and contact information of 2 references. Applicants for PhD positions should also provide a transcript of their academic record. Informal inquiries and formal applications should be sent to Pleuni Pennings (pennings@lmu.de).

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– Pleuni S. Pennings

\* Program Coordinator of the Munich Graduate School for Evolution, Ecology, and Systematics

\* Postdoc in theoretical evolutionary biology

Evolutionary Biology, Department Biologie II University of Munich (LMU) Großhaderner Str. 2 D-82152 Planegg-Martinsried

Tel: 0049 89 2180 74 234 <http://www.biologie.uni-muenchen.de/ou/theopopgen/index.htm>

pennings@zi.biologie.uni-muenchen.de

Pleuni Pennings <pennings@zi.biologie.uni-muenchen.de>

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## NESCent DurhamNC EvolBiol

Call for Proposals: NESCent Postdoctoral Fellows, Sabbatical Scholars, Working Groups and Catalysis Groups

The National Evolutionary Synthesis Center (NESCent) is now accepting proposals for Postdoctoral Fellows, Sabbatical Scholars, Working Groups and Catalysis Groups. The deadline is December 1, 2006. For more information, please see our website at <http://www.nescent.org/proposals/>. Regards, Karen

– Karen Henry Assistant Director of Research Administration National Evolutionary Synthesis Center 2024 W. Main Street, Suite A200 Durham, NC 27705

email: [khenry@nescent.org](mailto:khenry@nescent.org) telephone: 919-668-4574 fax: 919-668-9192

[khenry@nescent.org](mailto:khenry@nescent.org)

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## Paris TheoPopEvol

Postdoctoral position in Paris: modelling ecological invasion

We are seeking a postdoctoral fellow who will study the invasion of France by the maize beetle *Diabrotica virgifera virgifera*, a Coleopteran pest attacking maize roots. This insect of American origin has recently appeared in France and several invasion foci have been identified.

The postdoctoral fellow will -aggregate all available data -build a spatial statistical model resting on these data -build a dynamic spatialized model for predictive purposes -identify parameter values -run simulations

Previous experience in spatial dynamic modelling is required.

Funds from INRA and INAPG are available for two years. Contract will be on a yearly basis. Salary between 2000 and 2500 euros/month depending on level of experience. Applications will be reviewed as they arrive and the call will remain open until the position will be filled.

Interested candidates must submit the following by e-mail to [<arditi@inapg.fr>](mailto:arditi@inapg.fr):

-application letter -CV with list of publications -two or three relevant publications -names and e-mail addresses of three referees

Our research group has strong ties with a large community of scientists at INRA, CNRS, INRIA, University Pierre-et-Marie-Curie and University Paris-Sud.

Prof. Roger Arditi Ecologie des populations et communautés (USC-INRA 1285) Institut national agronomique Paris-Grignon, 16 rue Claude Bernard, 75005 Paris, France Tel. +33 1 44 08 72 15. Fax: +33 1 44 08 72 57. <mailto:arditi@inapg.fr> [http://www.inapg.fr/ens\\_rech/bio/Ecologie/ecologie.htm](http://www.inapg.fr/ens_rech/bio/Ecologie/ecologie.htm) [arditi@inapg.fr](mailto:arditi@inapg.fr)

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## PennStateU EvolDisease

Post doctoral scientist with an understanding and keen interest in trophic interactions, population dynamics, Parasitology and evolution are invited to apply for a research position working closely with Peter Hudson and a group of post-doctoral workers at the Center for Infectious Disease Dynamics (CIDDD) [www.ciddd.psu.edu](http://www.ciddd.psu.edu) [<http://www.ciddd.psu.edu/>](http://www.ciddd.psu.edu/) at Penn State University, USA from January 2007, initially for one year, but with potential for extension to 3 or more years.

The candidate will be expected to work on parasite community interactions using existing field-data collated databases, (e.g. long time series of grouse, rodents and fish hosts and their parasite community), but also to develop their own field research project in the area of disease dynamics, parasitology, etc in tune with CIDDD's research themes <http://www.ciddd.psu.edu/research/index.html>.

Desirable skills include:

- Strong analytical skills of long-term data sets - Modeling skills - Database management and team work - Knowledge of experimental design - Excellent field skills

The successful candidate will join a research group consisting currently of several advanced research staff, post-docs, PhD and MSc-students. Research projects within CIDDD have a strong emphasis on interdisciplinary collaboration and interactions with other CIDDD researchers are strongly encouraged. Salaries will follow the schemes of Penn State University.



The proposed start date is January 2007. The closing date for applications is Dec 1st 2006. Candidates are asked to submit their CV including the names of 2 referees and a list of publications, plus a brief outline (maximum one page) of their research interests. Applications should be sent by email to:

Peter Hudson - pjh18@psu.edu

Peter Hudson Center for Infectious Disease Dynamics  
208 Mueller Penn State University State College PA  
16803, USA

sep18@psu.edu sep18@psu.edu

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## Princeton DNARecombination

Postdoc Opportunity: Princeton University DNA Recombination, Rearrangement and Small RNAs

PRINCETON UNIVERSITY

A postdoctoral position is available in the Department of Ecology and Evolutionary Biology to study the mechanism of scrambled gene and genome rearrangements in ciliates, particularly the role of noncoding RNAs or epigenetic factors, using experimental tools. Strong experimental training and experience from the Ph.D., ability to work independently and creatively, and strong research and written/oral communication skills are necessary.

The initial appointment is for one year, and can be extended, upon mutual agreement. Send CV and names and email addresses of three references to: Laura Landweber lfl@Princeton.edu Dept. of Ecology & Evolutionary Biology Princeton University, Princeton, NJ 08544. <http://www.princeton.edu/~lfl> Princeton University is an equal opportunity/affirmative action employer. For information about applying to Princeton, please link to <http://web.princeton.edu/sites/dof/ApplicantsInfo.htm> . Laura Landweber <lfl@Princeton.EDU>

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## RiceU DictyosteliumMolEvol

POSTDOCTORAL RESEARCH POSITION: Molecular evolution and comparative genomics of Dic-

tyostelium (social amoebas)

Department of Ecology and Evolutionary Biology, Rice University

We seek a self-motivated postdoctoral researcher to take advantage of the multiple genomes of social amoebae (*Dictyostelium*) that are or soon will be available, a unique opportunity for high-profile work on genes likely to be important in social interactions, microsatellite evolution, and other questions. Successful applicants should have experience with handling genomic data sets and with analyses in molecular evolution and phylogenetics. Experience with social insects, *Dictyostelium*, or molecular biology is welcome, but not necessary. Hands-on *Dictyostelium* experiments suggested by genome studies are also possible, if desired.

The Strassmann/Queller Lab is a large and highly interactive group focusing on social evolution, with extensive collaborations with genomic and *Dictyostelium* researchers at Baylor College of Medicine, a 10-minute walk away. Rice University is located in Houston, Texas, a vibrant, international city famous for outstanding low cost restaurants, arts, and outdoor activities such as bird-watching and kayaking.

The position is available now (start date negotiable) and will last for at least 2 years. 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:

Joan Strassmann (strassm@rice.edu) or David Queller (queller@rice.edu) <http://www.ruf.rice.edu/~evolve/>

Joan Strassmann, David Queller Department of Ecology and Evolutionary Biology MS 170 Rice University  
6100 Main St. Houston TX 77005-1892

Joan Strassmann <strassm@rice.edu>

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## SantaFeInst EvolBiol

Hi Everyone,

I would like to draw your attention to the Postdoctoral Fellowship Program at the Santa Fe Institute. If you have any questions about the application process, or concerning what an evolutionary biologist would do in Santa Fe, just let me know.

The text of the postdoc ad follows.

Jon

Jon Wilkins wilkins@santafe.edu (505) 946-2755

#### POSTDOCTORAL FELLOWSHIP OPPORTUNITIES AT THE SANTA FE INSTITUTE

The Santa Fe Institute (SFI) anticipates offering several Postdoctoral Fellowships to begin in September 2007.

The Postdoctoral Fellowship program at SFI provides up to three years of research support for independent research to scholars who have recently received a doctoral degree. Unlike traditional postdoctoral positions, SFI Postdoctoral Fellows pursue research questions of their own design, and engage in collaborations with members of the faculty, other SFI postdocs, and other researchers from around the world. Fellows pursue projects that lie at the boundaries of the traditional academic disciplines, and that create new fields of inquiry.

We provide a number of benefits that are not available in most postdoctoral positions. In addition to salary, health benefits, and retirement contributions, Fellows have access to funds to support travel to meetings, to visit collaborators at other institutions, and to bring collaborators to visit SFI. Fellows are encouraged to participate in all SFI activities, to invite speakers for the colloquium series, and to organize workshops and working groups.

Research at SFI is integrative, and there are no formal programs or departments. Individual research projects draw input from a variety of fields, including biology, chemistry, computer science, physics, mathematics, economics, sociology, anthropology, and political science. We welcome applications from any of these fields, as well as others not listed here. Descriptions of the research interests of the faculty and current Postdoctoral Fellows can be found at <http://www.santafe.edu/research/researchers.php>. Most research at SFI focuses on theoretical and computational approaches, although applicants whose research includes an experimental or data-collection component in collaboration with off-site colleagues are also encouraged to apply.

Candidates should have a Ph.D. (or expect to receive one by September 2007), a strong academic record, and a proven ability to work independently. We are particularly favorable toward applicants with an interest in trans-disciplinary interactions and collaboration, and who have demonstrated the potential to think outside traditional paradigms. Applications are welcome from candidates in any country. Women and minorities are especially encouraged to apply. Successful foreign applicants must acquire an acceptable visa (usually a J-1) as a condition of employment.

#### APPLICATION REQUIREMENTS

1. Curriculum vitae (including publications list, if any).
2. Statement of research interests (2-3 pages). In this statement, tell us what you are interested in, and why you are interested in it. Also tell us why you would like to come to SFI, rather than pursuing a traditional postdoc. On the last point, think about addressing one or more of the following: What sort of input from other fields would most improve your future research? What type of trans-disciplinary workshop might you want to organize during your Fellowship? What aspects of your present or future research are difficult to pursue in a traditional academic environment?
3. Three letters of recommendation from scholars who know your work. (The letters should be sent independently of the application. When you complete the online application, please be prepared to provide e-mail addresses of the three individuals who will recommend you. SFI will contact them directly with instructions for submitting letters.)
4. (Optional) A copy of one paper you have written in English, either published or unpublished.

Online Application: You may submit your materials using our online application form, which can be found at <http://www.santafe.edu/education/postdocinst07.php>. We strongly encourage you to apply online to expedite your application.

Postal Mail/Courier: Application packages sent via postal mail will also be accepted. Do not bind your application materials in any manner. Include your e-mail address and/or fax number. Mail application materials to:

Postdoctoral Committee

Santa Fe Institute

1399 Hyde Park Road

Santa Fe, NM 87501 USA

DEADLINE: For full consideration, please submit all application materials, including three letters of recommendation, electronically (preferred) or via post by November 15, 2006. Candidates who are

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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>

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## ScrippsInst EvolGenetics

### POSTDOCTORAL POSITION IN EVOLUTIONARY GENETICS/ HYBRID BREAKDOWN

A postdoctoral position is available to participate in on-going research concerning the molecular basis of intraspecific hybrid breakdown (outbreeding depression). The work will employ the intertidal copepod *Tigriopus californicus* as a model system. Experiments focus on the molecular, physiological and fitness consequences of hybridization between genetically divergent natural populations. Areas of interest include interaction of nuclear and mitochondrial genes on mitochondrial ATP synthesis, regulation of gene transcription in interpopulation crosses, and environmental effects on the physiology and fitness of hybrids. The successful candidate will also be encouraged to participate in a range of other projects as appropriate.

Interest and experience in the field of evolutionary genetics is desirable, and laboratory experience in the analysis of DNA/RNA/ proteins is essential. Initial appointment is for one year. The position is available immediately and screening of applications will begin Nov 1. Applicants should submit (email preferred) a letter of interest and a complete CV, reprints of one or two papers, and a list of three references to:

Ron Burton Marine Biology Research Division Scripps Institution of Oceanography Phone: 858.822-5784 University of California, San Diego FAX: 858.534-7313 La Jolla, CA 92093-0202 email: rburton@ucsd.edu

Ron Burton <rburton@ucsd.edu>

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## ScrippsInst MarineActinomycetes

A post-doctoral research position is available to work on the comparative genomics, population genetics, and ecology of marine actinomycetes. Research includes the identification of marine adaptation genes and the genetic basis for ecological differentiation. The role of horizontal gene transfer in genome evolution and niche adaptation is also a focus of these studies. Ecological studies relate to actinomycete diversity, distributions, and activities in the sea, as well as the chemical ecology of secondary metabolism. This position may also

include the experimental characterization of gene function. Candidates should have a Ph.D. in microbiology or related field and a strong background in bioinformatics, population genetics, and molecular evolution. The initial appointment will be for one year with a possibility of renewal for up to 1 additional year. Questions about the position may be directed to Paul Jensen (pjensen@ucsd.edu@ucsd.edu).

Rank and salary are commensurate with experience and based on UC salary scales. Applicants should send a current curriculum vitae including a publication list and names of three references to:

Dr. Paul R. Jensen Center for Marine Biotechnology and Biomedicine Scripps Institution of Oceanography La Jolla, California, USA 92093-0204

University of California is an equal opportunity and affirmative action employer.

– Paul R. Jensen, PhD Assistant Research Microbiologist Scripps Institution of Oceanography Mail Code 0204 La Jolla, California 92093 USA (tel) 858-534-7322 (fax) 858-558-3702 (email) pjensen@ucsd.edu

Courier address: Scripps Institution of Oceanography Room 201 Kaplan Laboratory 8645 Discovery Way La Jolla, CA 92037

pjensen@ucsd.edu pjensen@ucsd.edu

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## SmithsonianInst EvolBiol

Post-Doctoral Fellowships at the Smithsonian Tropical Research Institute.

### 3-Year Tupper Postdoctoral Fellowship

The Smithsonian Tropical Research Institute (STRI), in the Republic of Panama, a division of the Smithsonian Institution in Washington D.C., invites applications for the Earl S. Tupper three-year postdoctoral fellowship. Disciplines include ecology, anthropology, paleontology, evolutionary biology, molecular phylogenetics, biogeography, animal behavior, soil sciences and physiology of tropical plants and animals. Research should be based at one of the STRI facilities; proposals that include comparative research in other tropical countries will be considered. One fellowship is awarded annually.

In order to apply send a detailed research proposal with budget (less than 10 pages), a curriculum vitae, 2 letters of reference, names and telephone numbers

of 3 additional professional references and reprints of most important papers. We suggest applicants consult with the STRI scientific staff member who will serve as their host before submitting final application. Staff and research interests are listed at <http://www.stri.org> Annual stipend is \$35,000 with yearly travel and research allotments. Send documents by January 15 to: 3-Year Postdoctoral Fellowship, Smithsonian Tropical Research Institute, Unit 0948, APO AA 34002-0948. We also request that you send a single PDF file to: FELLOWS@SI.EDU with the proposal, budget and CV.

Awards are based upon merit, without regard to race, color, religion, sex, national origin, citizenship, age or condition of handicap of the applicant.

More information: [http://www.stri.org/english/-education\\_fellowships/fellowships/tupper.php](http://www.stri.org/english/-education_fellowships/fellowships/tupper.php) SI Postdoctoral Fellowships

Postdoctoral and Senior Fellowships - Postdoctoral Fellowships of three to twelve months are available for scholars who have held the doctoral degree or equivalent for fewer than seven years as of the application deadline. Senior Fellowships of three to twelve months are available for scholars who have held the doctoral degree or equivalent for more than seven years as of the application deadline. Applications for senior fellowships may be made up to eighteen months in advance. Stipends for senior fellowships are the same as for the postdoctoral program, but the Smithsonian's stipend may be matched by other sources of funding such as a sabbatical salary.

Stipends: Senior and Postdoctoral - \$40,000 per year Earth and Planetary Sciences Senior and Postdoctoral - \$45,000 per year Predoctoral - \$25,000 per year Graduate Students - \$5,500

Deadline: January 15th (postmark) for awards to begin on or after June 1st

More information: <http://www.si.edu/ofg/ofgapp.htm>

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>

## StellenboschU AbaloneGenetics

Post Doctoral position available in the Department of Genetics, Stellenbosch University, South Africa (2 Oct 2006)

A Post Doctoral position in biotechnology is available in the Aquaculture Division, Department of Genetics, Stellenbosch University with the project title "Genetic improvement of the abalone *Haliotis midae*."

*Haliotis midae*, known locally as 'perlemoen', occurs along the Western, Southern and Eastern shores of South Africa and is the only one of the six species that occurs in South Africa that is commercially exploited. *H. midae* displays a very slow growth rate, taking two to five years to reach market size. This is an obstacle in the profitable farming and global competitiveness of this species. In order to increase the productivity and the profitability of the commercial activity, a research program has been designed that makes use of the modern technology currently applied to other aquaculture species. The research program consists of three main parts: a) establishment of breeding programs with the assistance of genetic markers, b) generation of linkage maps and QTL identification, c) and the application of gene transfer technology.

The successful candidate will be primarily responsible for establishing gene transfer technology in the perlemoen, *Haliotis midae*. This will include gene construct development and gene transfer by means of primarily electroporation. This is an extremely exciting new project that will establish a biotechnology platform for abalone in southern Africa. This will be the first biotechnology application to a species used for commercial application in Africa.

Applicable knowledge in gene transfer system, especially in aquatic species (finfish or shellfish) will be a strong recommendation

The position is available for 2 years

Interested researchers are requested to send their CV to Dr. Rouvay Roodt-Wilding at roodt@sun.ac.za

Closing date: 30 October 2006.

Dr. Rouvay Roodt-Wilding Aquaculture Division Department of Genetics JC Smuts Building Room 213 University of Stellenbosch Private Bag X1 Matieland SOUTH AFRICA 7602

Tel: +27 (0) 21 808 5831 Fax: +27 (0) 21 808 5833  
 roodt@sun.ac.za

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## UBritishColumbia Biodiversity

### BIODIVERSITY

We seek applicants for a 2-year postdoctoral fellowship in the U.B.C. Biodiversity Research Centre ([www.biodiv.ca](http://www.biodiv.ca)). The Centre is currently made up of over 40 members of the U.B.C. Science Faculty with interests in ecology, evolution, systematics, biodiversity and conservation. Preference will be given to candidates with bold ideas, demonstrated research ability, and strong communication skills. The successful candidate will be expected to: conduct original research on core problems in biodiversity, foster interactions within the Centre, run a seminar series and help maintain the Centre's web site. Starting date, 1 September 2007. Salary \$40,000 per yr. Research stipend: \$7,000 per yr. Send curriculum vitae, three letters of reference, and a brief statement of goals to Search Chair, Biodiversity Research Centre, U.B.C., 6270 University Blvd., Vancouver, B.C., Canada V6T 1Z4. (Fax 604-822-0653, e-mail [biodiversity.centre@ubc.ca](mailto:biodiversity.centre@ubc.ca)). Closing date for application, 8 January 2007. The University of British Columbia hires on the basis of merit and is committed to employment equity. We encourage all qualified candidates to apply.

Luke Harmon Postdoctoral Fellow Biodiversity Centre, University of British Columbia 6270 University Blvd. Vancouver, BC V6T 1Z4, Canada [harmon@zoology.ubc.ca](mailto:harmon@zoology.ubc.ca) (604) 822-5937

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## UFerrara MHC PopGenet

Postdoc in MHC population genetics

Applications are invited for a postdoctoral research position in the population genetics group, Department of Biology, University of Ferrara, Italy.

Applicants must have a Ph.D. (or at least three years of research experience after graduation) in one of these research areas: population genetics, bioinformatics, or statistical genetics.

The appointee will organize, statistically analyse, and interpret (in collaboration with the other group members), the genetic data of MHC (Major Histocompatibility Complex) and STR (microsatellites) markers typed in different populations of five different vertebrates. This is the final analytical part of a project funded by the Italian Ministry of Education, University and Research (PRIN project), realized in collaboration between the Universities of Ferrara, Florence, and Padua. The title of the whole project is "The relative roles of selective and demographic processes in shaping MHC genetic variation: a comparison between populations across vertebrates". A more detailed description will be sent on request.

Experience with the analysis of population genetics data is essential, as well as enthusiasm and independence.

The position is for a one-year period, possibly extended to a second year. Salary is 15.200 Euros p.a. Health insurance is provided. To be compared with current life costs, the average cost of a room in a shared apartment in Ferrara is between 180 and 300 Euros per person per month.

If you wish to apply, please send as soon as possible a curriculum vitae and the names of at least two referees (via e-mail) to:

Giorgio Bertorelle [ggb@unife.it](mailto:ggb@unife.it)

Selected candidates will be interviewed by phone not later than October, 23.

The appointee is expected to start between January and February 2007.

Giorgio Bertorelle Department of Biology University of Ferrara <http://web.unife.it/progetti/genetica/-Giorgio/giorgio.html> Phone +39 0532 291743 Fax: +39 0532 249761

Giorgio Bertorelle <[ggb@unife.it](mailto:ggb@unife.it)>

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## UFlorida Speciation

Postdoc position available to study speciation and extinction

I have funding available for a postdoc to study speciation/extinction dynamics and their relationship to patterns in biodiversity. The postdoc would join my laboratory in the Department of Zoology at the Uni-



versity of Florida. The overarching goal of this collaborative research project is to link micro- and macro-evolution using an exciting new approach based on individual energetics. The research will employ a combination of approaches, including laboratory experimentation, field studies, and modeling. The postdoc will have the opportunity to take part in any/all aspects of this research, as well as to pursue personal research interests. Individuals from groups underrepresented in science are especially encouraged to apply.

To apply, please send a CV and cover letter to me via e-mail ([gillooly@zoo.ufl.edu](mailto:gillooly@zoo.ufl.edu)). Start date is negotiable.

James F. Gillooly Assistant Professor Department of Zoology University of Florida Gainesville, FL, USA 32611-8525 Phone: 352-392-2743, fax: 352-392-3704 web site: <http://www.zoo.ufl.edu/gillooly> Jamie Gillooly <[gillooly@zoo.ufl.edu](mailto:gillooly@zoo.ufl.edu)>

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## UGlasgow PlantMatingSystems

UNIVERSITY of GLASGOW Faculty of Biomedical & Life Sciences Division of Environmental and Evolutionary Biology

POST-DOCTORAL RESEARCH ASSISTANT IN POPULATION GENETICS OF PLANT MATING SYSTEMS

LEVEL 6/7 £22,774 - 28,010 per annum (under review)

A PDRA is available on a NERC-funded project concerned with evaluating how the mating “decisions” that plants make affect their potential to respond to environmental change, as a result of changes in genetic diversity resulting from different levels of inbreeding. This project will address this question by examining naturally occurring populations of a species that is normally outcrossing (i.e., is only able to breed with unrelated individuals), but for which populations have been identified that have experienced a change in the genetic machinery required to maintain this mating strategy. Since the plants used in this study are restricted to habitats that have been fragmented as a result of human population growth, the study could have implications for predicting how changes in breeding strategies will influence the ability of populations to adapt to changes in population size or restriction of migration between populations as a result of human activities.

Objectives: 1) To investigate how loss of genetically controlled self-incompatibility (SI) affects diversity in

the female genes (SRK) controlling the self-recognition phenotype: Sequence diversity at SRK will be compared within and between S-haplotypes in predominantly self-compatible (SC) and predominantly self-incompatible (SI) populations to establish whether selective constraints are altered when the mating system is changed. 2) To investigate whether loss of SI affects recombination rates between SRK and its flanking genes: Sequence diversity in flanking genes demonstrated to be tightly linked to SRK (i.e. based on reduced levels of recombination compared to the physical distance that separates them), as well as their linkage disequilibrium with SRK will be compared in SC and SI populations to determine whether suppression of recombination (characteristic of the S-locus) is altered when the mating system is changed. 3) To investigate how loss of SI is related to population genetic structure based on reference loci that are not related to the S-phenotype or linked to the S-locus: Sequence diversity at reference loci located in different parts of the nuclear genome will be compared in SC and SI populations to establish how population substructure, historical population size and gene flow influence the loss of diversity predicted in inbreeding populations and to set a baseline for interpreting patterns of variation seen at the loci that are linked to the S-locus.

Further particulars about the post and the research environment can be found at: <http://www.gla.ac.uk/-ibls/news/posts.html> and <http://www.gla.ac.uk:443/-ibls/staff/staff.php?who=PQdGnd> Letters of application, including two CVs, the names, postal and e-mail addresses and fax numbers of two academic referees, should be sent to: Lesley Frew, IBLS, West Medical Building, University of Glasgow, Glasgow, G12 8QQ, UK quoting the reference number 12694/DPL/A3.

Closing Date: 17 November, 2006. This post is available for up to 3 years.

Please send notes of interest or informal enquiries by email to Barbara Mable ([b.mable@bio.gla.ac.uk](mailto:b.mable@bio.gla.ac.uk)) as soon as possible.

– Dr. Barbara Mable NERC Advanced Research Fellow Division of Environmental and Evolutionary Biology Rm 404 Graham Kerr Building University of Glasgow Glasgow, Scotland G12 8QQ email: [b.mable@bio.gla.ac.uk](mailto:b.mable@bio.gla.ac.uk) Phone: +44 (0)141 330 3532 Mobile: +44(0)7910 833 819 Fax: +44 (0)141 330 5971  
[b.mable@bio.gla.ac.uk](mailto:b.mable@bio.gla.ac.uk) [b.mable@bio.gla.ac.uk](mailto:b.mable@bio.gla.ac.uk)

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## UIowa MicrobialEukaryoteEvol

### POSTDOCTORAL RESEARCH FELLOW

For the National Science Foundation-funded project in reconstructing the eukaryotic tree of life.

Department of Biological Sciences Laboratory of Dr. Debashish Bhattacharya 446 Biology Building [http://www.biology.uiowa.edu/faculty\\_info.php?ID=120](http://www.biology.uiowa.edu/faculty_info.php?ID=120)

Position Description: We seek a highly qualified post-doctoral scientist for a 2-year position to work on the evolution and phylogeny of microbial eukaryotes. The individual will be responsible for participating in a project in which 10 genes will be isolated and analyzed from over 200 different protists to infer a tree of eukaryotes. A comprehensive knowledge of phylogenetic methods within the context of complex, multi-gene data sets, and proficiency in basic and advanced molecular biological methods such as degenerate PCR and automated sequencing are required. This is a collaborative project therefore the individual must have strong interpersonal skills and the willingness to travel to group meetings. Previous experience and a publication record in molecular evolution and phylogenetics are required. A strong background in computational biology and basic programming skills and experience in protist (in particular, algal) evolution and taxonomy is desirable. Applicant should have a Doctoral Degree in Biology with concentration in evolutionary biology and systematic or equivalent combination of education/experience.

Please send curriculum vitae, names of three references and a cover letter that describes your qualifications and research interests to:

Dr. Debashish Bhattacharya, Department of Biological Sciences, 446 Biology Building,

Iowa City, IA 52242-1324; or email at [debashi-bhattacharya@uiowa.edu](mailto:debashi-bhattacharya@uiowa.edu)

Second Position: POSTDOCTORAL RESEARCH FELLOW

For the National Science Foundation-funded project in genome analysis of the alga *Cyanophora paradoxa*.

Department of Biological Sciences Laboratory of Dr. Debashish Bhattacharya 446 Biology Building [http://www.biology.uiowa.edu/faculty\\_info.php?ID=120](http://www.biology.uiowa.edu/faculty_info.php?ID=120)

Position Description: We seek a highly qualified post-

doctoral scientist for a 2-year position to work on genomic and bioinformatic analysis of microbial eukaryotes. The individual will be responsible for participating in a project in which the complete genome sequence is being determined from the photosynthetic alga *Cyanophora paradoxa*. These data will be combined with an extensive collection of genome information from other eukaryotes. A comprehensive knowledge of bioinformatic methods within the context of comparative genomics and a strong background in computational biology and basic programming skills are required. This is a collaborative project therefore the individual must have strong interpersonal skills and the willingness to travel to group meetings. Applicant should have a Doctoral Degree in Biology/Computational Sciences with concentration in genomics or evolutionary biology or equivalent combination of education/experience. Previous experience and a publication record in bioinformatics and comparative genomics are required. A strong background in biology and experience in protist (in particular, algal) evolution is desirable.

Please send curriculum vitae, names of three references and a cover letter that describes your qualifications and research interests to:

Dr. Debashish Bhattacharya, Department of Biological Sciences, 446 Biology Building, Iowa City, IA 52242-1324; or email at [debashi-bhattacharya@uiowa.edu](mailto:debashi-bhattacharya@uiowa.edu).

Eileen Sullivan Human Resources Biological Sciences 143 BB Phone: (319)335-1051 Fax: (319)335-1069

“Sullivan, Eileen R” <[eileen-sullivan@uiowa.edu](mailto:eileen-sullivan@uiowa.edu)>

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## ULausanne FuncEvolGenomics

UNIVERSITY OF LAUSANNE

POSTDOCTORAL POSITION IN FUNCTIONAL EVOLUTIONARY GENOMICS

Center for Integrative Genomics (CIG), University of Lausanne, Switzerland

A research assistant/postdoctoral position (2 years with possible extensions up to 5 years) is available immediately to study the functional evolution of recently emerged duplicate genes in the human genome.

We are seeking highly qualified and motivated applicants with strong experimental lab skills in molecular biology, cell biology, and/or biochemistry.

Some recent publications from the lab:

Vinckenbosch, N., Dupanloup, I. & Kaessmann, H. (2006) Evolutionary fate of retroposed gene copies in the human genome. *Proc. Natl. Acad. Sci. USA* 103, 3220-3225.

Marques, A., Dupanloup, I., Vinckenbosch, N., Raymond, A. & Kaessmann, H. (2005) Emergence of young human genes after a burst of retroposition in primates. *PLoS Biol* 3:e357.

Burki, F. & Kaessmann, H. (2004) Birth and adaptive evolution of a hominoid gene supporting high neurotransmitter flux. *Nature Genet.* 10, 1061-1063.

Emerson, J. J., Kaessmann, H., Betr&aacute;n, E. & Long, M. (2004) Extensive gene traffic on the mammalian X chromosome. *Science* 303, 537-540

For more information about the group please see: <http://www.unil.ch/cig/page7858.en.html> The language of the CIG is English, and its members form an international group that is rapidly expanding. The institute is in Lausanne, a beautiful city at Lake Geneva with an impressive alpine scenery.

Please submit a CV, statement of research interest, and two letters of recommendation (and/or names of referees) to:

Prof. Henrik Kaessmann Center for Integrative Genomics Genopode building University of Lausanne CH-1015 Lausanne Switzerland Phone : +41-(0)21-692-3907/3960 Fax : +41-(0)21-692-3965 E-mail : Henrik.Kaessmann@unil.ch

Annick.Crevoisier@unil.ch

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## ULiverpool MullerianMimicry

THE UNIVERSITY OF LIVERPOOL  
SCHOOL OF BIOLOGICAL SCIENCES  
POSTDOCTORAL RESEARCHER

£27,193 - £28,849 pa

You will join an international team on a three-year NERC funded project which aims to test alternative hypotheses that explain Mullerian mimicry between defended prey. We seek to test alternative causal hypotheses for the existence of Mullerian mimicry using laboratory methods and to investigate their theoretical evolutionary implications. You will be involved in the

design, execution and analysis of behavioural experiments with captive (and possibly free living birds) and subsequently theoretical analysis of empirical findings. You should have a PhD in an appropriate discipline, with knowledge of statistical packages.

Quote Ref: B/851 Closing Date: 20 October 2006  
speedm@liverpool.ac.uk speedm@liverpool.ac.uk

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## UMontana PopGenetics

Post Doctoral Position in Parasite Population Genetics/Disease Ecology

Division of Biological Sciences, University of Montana, Missoula, MT

I am seeking a postdoctoral research associate to collaborate on a research project at the interface of disease ecology and population genetics. The study will use parasite population genetics as a tool for inferring multi-species contact rates and pathways of parasite transmission between sympatric ungulates in Montana. The project focuses on the genetics of multi-host nematode parasites and the ecology and behavior of their ungulate hosts. The preferred applicant will have expertise in population genetic laboratory techniques (microsatellite genotyping), population genetic data analysis, and an interest in applying these techniques to disease ecological questions. Previous experience working with parasites is a plus. Interested candidates should have a Ph.D. in ecology, evolutionary biology, or a related field by the start date. The position is available for at least one year, beginning as early as January 2007, with continuation depending on available funding.

For additional information or to apply, please email Vanessa Ezenwa ([vanessa.ezenwa@umontana.edu](mailto:vanessa.ezenwa@umontana.edu)). Applications should include a cover letter and CV, including the names and contact information of three references. Review of applications will begin December 1, 2006.

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Vanessa Ezenwa Assistant Professor Division of Biological Sciences University of Montana Missoula, MT 59812 phone: 406-243-5668 email: [vanessa.ezenwa@umontana.edu](mailto:vanessa.ezenwa@umontana.edu)

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## UMunich PhenotypicPlasticity

Postdoc:

UNIVERSITY of MUNICH, Department Biology, Evolutionary Ecology

POST-DOCTORAL POSITION IN THEORETICAL EVOLUTIONARY ECOLOGY: GENERAL GENETIC MODELS ON PHENOTYPIC PLASTICITY

A unifying quantitative genetic model that includes spatial and temporal variations of the environment, irreversibly and reversibly plastic phenotypic traits, reliability of inducing cues and time delays for phenotypic response will be developed to study the role of phenotypic plasticity in the process of adaptation by modifying and directing the evolutionary response of organisms under diverse selection regimes.

Pending final approval of a Collaborative Research Center in Munich under the theme "Adaptation: Selection Pressures, Phenotypic Responses, Genetic Mechanisms and Resulting Differentiation", the position is available starting January 1, 2007, but will remain open until filled. The post is available for up to 4 years. Initial appointment is for one year. A solid background in evolutionary biology and previous experience in modeling are desirable. The successful candidate is expected to interact also with other scientists of the Collaborative Research Center. See [http://www.biologie.uni-muenchen.de/ou/sfb\\_adaptation/index.htm](http://www.biologie.uni-muenchen.de/ou/sfb_adaptation/index.htm) for more information. Applicants should submit (email preferred) a letter of interest, a complete CV, reprints (pdf-files) of not more than three papers, and name and contact information of at least two references to:

wilfried.gabriel@lmu.de <mailto:wilfried.gabriel@lmu.de>

Wilfried Gabriel Professor of Ecology Evolutionary Ecology Department Biologie II University of Munich (LMU) Grosshaderner Str. 2 D-82152 Planegg-Martinsried Germany Tel: ++49 89 2180 74 202 The University of Munich is an Equal Opportunity/Affirmative Action Employer and has an affirmative action policy for the disabled.

wilfried.gabriel@LMU.de wilfried.gabriel@LMU.de

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## USouthFlorida SandSkink

OCTOBER 2006

The Department of Biology at the University of South Florida invites applications for a post-doctoral position to conduct genetic research on the sand skink [*Plestiodon (Neoseps) reynoldsi*]. The possibility exists that the selected individual will have the opportunity to teach an upper level course in their specialty, if so desired. The selected individual will work with Drs. Henry R. Mushinsky and Earl D. McCoy. A brief description of the position follows. Please contact either Mushinsky or McCoy for more details at the address below.

The sand skink is a small burrowing federally threatened species endemic to seven counties on the Lake Wales Ridge in central Florida. During the past two decades it has been influenced by the rapid urbanization and spread of agriculture throughout its highly restricted range. We are seeking a colleague who will use molecular techniques to understand the population structure and dispersal capabilities of the sand skink. The genetic post-doc will work closely with an ecology post-doc (already on board), a Ph.D student and the two PIs. Salary is \$36,000 per year plus full benefits. This position may be renewed for up to three years. Interviews will begin at the end of October (2006) and continue until the position is filled. Please contact Henry R. Mushinsky ([mushinsk@cas.usf.edu](mailto:mushinsk@cas.usf.edu)) or Earl McCoy ([McCoy@cas.usf.edu](mailto:McCoy@cas.usf.edu)) if interested, Department of Biology, University of South Florida, Tampa, FL 33620. 813-974-5218 (HRM)

Cheers, Henry

Henry R. Mushinsky Professor and Graduate Director  
Department of Biology, SCA 110 University of South  
Florida Tampa, Florida 33620 813-974-5218 FAX 813-  
974-3263

"Mushinsky, Henry" <[mushinsk@chuma1.cas.usf.edu](mailto:mushinsk@chuma1.cas.usf.edu)>

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## USouthernCalifornia Hybridization

POSTDOCTORAL POSITION, UNIVERSITY OF

## SOUTHERN CALIFORNIA

A Postdoctoral Fellow position is available in the laboratory of Suzanne Edmands at the University of Southern California in Los Angeles. This is a one-year position with the possibility of extension for a total of 2.5 years.

The goal of the funded research is to assess the long-term consequences of hybridization between highly divergent populations of the copepod *Tigriopus californicus*. The postdoc will take the lead in maintaining breeding experiments, conducting fitness and morphometric measurements, and genotyping samples using microsatellites. Work will also involve the development and mapping of new microsatellite and SNP markers.

The ideal candidate would be a recent Ph.D. with a background in evolutionary biology and/or quantitative genetics. Experience with automated genotyping (esp. CEQ or ABI) is highly desirable. The position is available immediately (start date negotiable) and applications will be considered until the position is filled.

Please apply via email to Suzanne Edmands (sedmands@usc.edu) and include your CV, a brief description of research interests and contact information for three references.

sedmands@usc.edu sedmands@usc.edu

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## Utrecht EvolAvianInfluenza

Dear colleague,

In a co-operative project between University of Utrecht and the Netherlands Institute of Ecology there is a vacancy for a postdoc on behaviour-based and epidemiological modeling of avian influenza in populations of migratory birds

The postdoc will be working on the project 'Combining behaviour-based and epidemiological models to identify the role of Arctic breeding migratory birds in the ecology of diseases, notably Avian Influenza' within the Theoretical Epidemiology group of the Department of Farm Animal Health, University of Utrecht. Detailed information on this vacancy can be obtained at <http://www.nioo.knaw.nl/JOBS/indexNL.htm> <<http://www.nioo.knaw.nl/JOBS/indexNL.htm>>

The project is funded by the Netherlands Organisation for Scientific Research NWO (Earth and Life Sciences) in its International Polar Year program. The work will be conducted in close co-operation with

the department of Plant-Animal interactions of the Netherlands Institute of Ecology, the Department of Virology of Erasmus University - Rotterdam, and the Arctic Centre - Groningen University. The project is part of a suite of projects called BIRDHEALTH.

We are looking for an enthusiastic candidate with a PhD degree in the field of population biology or epidemiology. You have substantial experience in mathematical modeling, preferably within the field of epidemiology or metapopulation dynamics. Because of the multidisciplinary character of the parent project you should be able to collaborate closely with epidemiologists, virologists, waterfowl and behavioural ecologists and theoreticians. You have good communication and writing skills, especially in English, and are a good player in a team of PhD-students and postdocs.

There is a possibility to transform the project into a regular 4 year PhD position, but only if there is a talented student with proven substantial experience in epidemiological modelling.

We offer a temporary full time appointment of maximally 3 years. The gross income is dependent on age and experience, but is between 2252, and 3239, (salary scale 10 Collaborative Labour Agreement of the Dutch Universities) for a full time position.

For more information please contact Prof. Hans (J.A.P.) Heesterbeek at the Faculty for Veterinary Medicine, Theoretical Epidemiology, +31(0)30 253 1574 (email: [j.a.p.heesterbeek@vet.uu.nl](mailto:j.a.p.heesterbeek@vet.uu.nl) <<mailto:j.a.p.heesterbeek@vet.uu.nl>> ) or dr Silke Bauer at the Netherlands Institute of Ecology (NIOO-KNAW) (email: [s.bauer@nioo.knaw.nl](mailto:s.bauer@nioo.knaw.nl)).

How to apply? Respond in writing with a letter of motivation, curriculum vitae and addresses of 2 references before 27-10-2006. Please send your response to the Veterinary Faculty, Department P&O, drs M.A. Heins, Yalelaan 1, 3584 CL Utrecht, The Netherlands with vacancy number 70650 or by e-mail [vacatures1@vet.uu.nl](mailto:vacatures1@vet.uu.nl).

Please forward this message to any colleagues that may consider this vacancy of interest. I apologize for the inconvenience in case you receive this message via multiple sources.

Plant Animal Interactions Centre for Limnology Netherlands Institute of Ecology (NIOO-KNAW) PO Box 1299, 3600 BG Maarssen tel. +31-294-239317 fax +31-294-232224 <http://www.nioo.knaw.nl/CL/PDI/-index.htm> [S.Bauer@nioo.knaw.nl](mailto:S.Bauer@nioo.knaw.nl)



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## UWyoming Bioinformatics

Postdoctoral Researcher in Bioinformatics/Computational Comparative Genomics

A position is currently available for a postdoctoral researcher in bioinformatics/computational comparative genomics in the Liberles Research Group at University of Wyoming. The position has guaranteed funding for one year and the salary is \$35,000 plus benefits. There may be possibilities to extend this term. Applicants should have good programming skills and familiarity with linux, be familiar with statistics, have good knowledge of molecular biology, and an interest in evolutionary biology/molecular evolution. For more details on research in the Liberles Research Group, please see <http://www.wyomingbioinformatics.org/LiberlesGroup>. To apply, please send a CV, contact information for three references, and 2 .pdf copies of your favorite (significant) papers you have published together with a cover letter to liberles@uwoyo.edu.

The application deadline for this position is December 1, 2006.

David Liberles <liberles@uwoyo.edu>

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## UZurich ThermalAdaptation

Post-doctoral Research Position (3 years)

available in a project on Latitudinal thermal adaptation in dung flies on three continents, in loose connection with an ESF programme on Thermal adaptation in Ectotherms (URL given below). Central to the project are investigations of latitudinal variation in body size and associated life history traits, as well as corresponding genetic variation in molecular markers (allozymes, microsatellites, gene sequences), in dung flies of the species *Scathophaga stercoraria* (yellow dung fly) and *Sepsis (neo)cynipsea* from three continents: North America, Europe and Japan. A copy of the original proposal can be sent upon request; for a summary see <http://www.research-projects.unizh.ch/p6409.htm>. Our international group investigates the

integrated biology of several fly species at the molecular, physiological, quantitative-genetic, behavioral, ecological and life history levels in the laboratory and the field ([http://www.unizh.ch/zoolmus/zmneu/englisch/lehre/lehre\\_2\\_e.html](http://www.unizh.ch/zoolmus/zmneu/englisch/lehre/lehre_2_e.html)).

We expect good theoretical and experimental background in evolutionary ecology and well developed oral and written communication skills. Experience with molecular methods, quantitative genetics, statistics and/or modeling is highly desirable. We offer a stimulating research group with room for collaboration and independence. Working languages are English and German. The position is for 3 years, starting in early 2007 (negotiable). Salary according to Swiss National Fund scale ca. SFr 90'000.- per year.

Send Curriculum vitae plus names and addresses of two references by 30 November 2006, best by e-mail, to

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

Phone: +41 44 635.47.55 Fax: +41 44 635.47.80 e-mail: [wolfman@zoolmus.unizh.ch](mailto:wolfman@zoolmus.unizh.ch) [http://www.unizh.ch/zoolmus/zmneu/englisch/forschung\\_e/blanckenhorn\\_wolf\\_e.html](http://www.unizh.ch/zoolmus/zmneu/englisch/forschung_e/blanckenhorn_wolf_e.html) [http://www.esf.org/esf\\_article.php?language=0&articlea0&domain=3&activity=1](http://www.esf.org/esf_article.php?language=0&articlea0&domain=3&activity=1)

[wolfman@zoolmus.unizh.ch](mailto:wolfman@zoolmus.unizh.ch)  
[wolfman@zoolmus.unizh.ch](mailto:wolfman@zoolmus.unizh.ch)

[wolfman@zoolmus.unizh.ch](mailto:wolfman@zoolmus.unizh.ch)

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## WilliamsCollege Bioinformatics

HHMI Postdoctoral Research Fellow in Bioinformatics, Genomics and Proteomics

Williams College seeks to hire a postdoctoral fellow in its Bioinformatics, Genomics and Proteomics (BIGP) Program. This position is funded by a Howard Hughes Medical Institute grant to encourage future faculty development. The HHMI Fellow will conduct independent research under the mentorship of one or more of the 20 members of the BIGP Program at Williams (<http://www.williams.edu/BIGP>). In this context, the HHMI Fellow will assist in supervising undergraduate students performing thesis and independent research and will teach one BIGP Winter Study course of his/her own design.

This position for a scientist with training in bioinformatics, genomics, and/or proteomics is ideally suited for those who seek teaching and research experience at

a premiere liberal arts college. Candidates must have a recent Ph.D. in a relevant field. This is a full-time, one-year position with a flexible start date and the possibility of renewal for one additional year. Salary is competitive and funds for professional travel are included.

Applications are due December 11, 2006 for fellowships that will begin in 2007. Questions about the fellowship program can be answered by Dr. Wendy Raymond, wraymond@williams.edu, (413) 597-3536.

Please send a cv, names and contact information of three references, and a cover letter that 1.) identifies possible Williams College BIGP mentors, 2.) includes a proposed title and a few sentences describing a one-

month BIGP course you might teach, and 3.) includes job number (300259-SCIENCE) to hr@williams.edu .

Only complete applications will be accepted.

Office of Human Resources e-mail: hr@williams.edu  
Williams College welcomes diversity AA/EOE

–

Jason A. Wilder Assistant Professor of Biology  
Williams College Williamstown, Massachusetts  
01267 413-597-4811 (phone) 413-597-3495 (fax)  
jwilder@williams.edu

Jason.Wilder@williams.edu Jason.  
son.Wilder@williams.edu

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## WorkshopsCourses

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### BocasResStation Panama CoralEvol Jul23-Aug2

Short course in “Taxonomy and Ecology of Caribbean Gorgonians and Black Corals”

Dates: July 23-August 2, 2007 Location: Bocas Research Station, Bocas del Toro, Panama Instructors: Dr. Mary Alice Coffroth, State University of New York at Buffalo Dr. Howard Lasker, State University of New York at Buffalo Dr. Juan A. Sanchez, Universidad de los Andes Dr. Dennis Opresko, Oak Ridge National Laboratory

Organizer: Dr. Rachel Collin, STRI

Course Description The course is aimed at graduate students, post-docs, or professionals who are interested in learning and applying knowledge about the diversity and ecology of Caribbean Gorgonians and Black

Corals. An additional aim is to standardize the taxonomic treatment of gorgonians throughout the region, and to foster a network of interested gorgonian workers with participants of the Cnidarian Tree of Life and the DNA barcoding initiatives. The students participating in this course will:

1. Learn to describe and identify Caribbean Gorgonians and Black Corals.
2. Learn general biological and ecological characteristics of the group.
3. Assist in developing species lists, keys and ID guides for the Bocas fauna.
4. Learn the most recent advances in gorgonian phylogenetics and systematics.
5. Participate in the initiative to develop DNA barcodes for the reefs of Bocas del Toro.
6. Conduct short independent projects.

Diving will be a required component of the course.

Course Registration Fee \$250 (STRI registration, room and board at the station is included) Need-based travel fellowships will be available

Application Procedure This course is directed towards graduate students and advance Licenciado candidates and will be conducted in English. Please e-mail your

CV, 1 letter of recommendation, and a 1-2 page statement explaining your background and reasons for taking the course, to Rachel Collin at CollinR@si.edu before March 1, 2007. Limit 12 students. To be considered for a need-based fellowship, applicants should send a description of their need and their efforts to obtain funding for available sources. For more information see [http://striweb.si.edu/taxonomy\\_training/](http://striweb.si.edu/taxonomy_training/) -

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>

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## Caracas Conservation Genetics Jan21-31

\*\*\*\*\*VERSION EN CASTELLANO ABAJO\*\*\*\*\*

ACCEPTING APPLICATIONS for the third intensive course of the Red de Genética de la Conservación (ReGeneC): "Genetics at the Service of Conservation," 21-31 January, 2007.

Application deadline: November 5th, 2006. See "Preinscripción," <http://regenec.cecalc.ula.ve/taller/-2007/> for application process details and availability of scholarships.

This 11-day intensive course is directed primarily to Latin American postgraduate students and young professionals will be offered entirely in Spanish at Simón Bolívar University (Caracas, Venezuela). It is confirmed the participation of faculties from seven Latin American countries (Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, and Venezuela), with a wide array of scientific perspectives within this emerging field: - Marisol Aguilera, Universidad Simón Bolívar, Venezuela - Moises Burachik, Universidad de Buenos Aires, Argentina - Susana González, Universidad de la República Oriental del Uruguay, Uruguay - Jesús E. Maldonado, Smithsonian Institute, USA - Angela M.G. Martino, Universidad Experimental Francisco de Miranda, Venezuela - Claret Michelangeli, Universidad Central de Venezuela, Venezuela - Cristina Miyaki, Universidade de Sao Paulo, Brazil - María Oliveira-Miranda, Universidad Simón Bolívar - Andrés Pinzón, Centro de Bioinformática Center, nodo EMBnet de

Colombia, Colombia - Elie Poulin, Universidad de Chile, Chile - Andrea Premoli, Universidad Nacional del Comahue, Argentina - Kathryn Rodríguez-Clark, Instituto Venezolano de Investigaciones Científicas, Venezuela - Antonio Solé-Cava, Universidade Federal de Rio de Janeiro, Brazil

The course will combine discussion sessions, hands-on data analysis labs, and presentations of ongoing research by participating students, with formal lectures covering the following topics:

How can (and cannot) genetics help conservation? An overview of main concepts related with the field using case studies, demonstrating the range of questions and hypotheses relevant to the field, along with those perhaps less relevant. Theory behind genetic approaches in conservation: A brief refresher of basic population genetics, molecular evolution, quantitative genetics and other relevant disciplines.

Obtaining and preparing basic data: Marker types and their applications, sample collection and storage, primer design and amplification protocols, consensus sequence assembly and alignment, and use of specialized databases. Data analysis I: Phylogeography & phylogenetics. Data analysis II: Population applications, in-situ (structuring, effective sizes, historical events, ongoing interactions). Data analysis III: Individual applications, in-situ (parentage, capture-recapture methods, behavior, forensics) Data analysis IV: Population applications, ex-situ (genealogies, quantitative genetics) Round Table I: Biosecurity and bioethics in conservation. Round Table II: The role of biological collections in conservation genetics.

This course is organized by Simón Bolívar University (Caracas, Venezuela) in collaboration with ReGeneC members, and is supported by the Venezuelan National Fund for the Advancement of Science and Technology, the Biotechnology for Latin American and The Caribbean Program of the United Nations University, the American Genetics Association, UNESCO via the Centro Internacional de Ecología Tropical (Caracas), and the Centro de Investigaciones de Biotecnología Agrícola (CIBA).

For more information, please see our website or send an email to [regenec@gmail.com](mailto:regenec@gmail.com) or [regenec@cecalc.ula.ve](mailto:regenec@cecalc.ula.ve).

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PREINSCRIPCIÓN ABIERTA para el tercer curso intensivo de la Red de Genética de la Conservación (ReGeneC): La genética al servicio de la conservación, el 21 al 31 de enero de 2007.

Fecha límite: 5 de noviembre de 2006. Ver

“Preinscripción,” <http://regenec.cecalc.ula.ve/taller/2007/> para detalles del proceso de preinscripción y becas disponibles.

Este curso intensivo de 11 días, dirigido principalmente a estudiantes de posgrado y jóvenes profesionales latinoamericanos, se ofrecerá en Castellano en la Universidad Simón Bolívar (Caracas, Venezuela). Participan, en el curso, investigadores de siete países latinoamericanos (Argentina, Brasil, Chile, Colombia, México, Uruguay y Venezuela), con una amplia gama de enfoques dentro de este campo emergente: - Marisol Aguilera, Universidad Simón Bolívar, Venezuela - Moises Burachik, Universidad de Buenos Aires, Argentina - Susana González, Universidad de la República Oriental del Uruguay, Uruguay - Jesús E. Maldonado, Smithsonian Institute, USA - Angela M.G. Martino, Universidad Experimental Francisco de Miranda, Venezuela - Claret Michelangeli, Universidad Central de Venezuela, Venezuela

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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>

## Leicester PopDynamics Mar7

Dear Colleagues,

We are going to host a one-day international workshop in the University of Leicester under a tentative title

“Waves and patterns in models of population dynamics and evolution”

The date of the workshop has currently been fixed on March 7, 2007. Participation in the workshop is mostly by invitation but we may also have a possibility for several contributed talks. Those who may be interested to participate, please contact Sergei Petrovskii <sp237@le.ac.uk> as soon as possible.

“Petrovskiy, Dr S.” <sp237@leicester.ac.uk>

## Netherlands AdaptiveForaging Nov5-9

International Ph.D. course on Consumer Resource Interactions: Adaptive foraging, adaptive defences and ecosystem engineering, November 5-9, 2006, The Netherlands

Aim of the course Consumer-resource interactions in all its variations (i.e. plant-nutrient, plant-herbivore, predator-prey, host-parasitoid, and host-parasite) are central to ecological and evolutionary research. This one-week course aims at providing an introduction to three selected topics within this broad field: adaptive foraging, adaptive defenses and ecosystem engineering. These topics will be introduced by world leading experts, with a focus on the latest developments and ongoing research efforts. The introductions will provide the starting point for practical work by the participants in small groups to make the acquired knowledge operational. In these groups, students are challenged to develop ideas for their own research. This can be writing a proposal, planning an experiment, developing a model or writing a paper. So, each group of students can choose between these three topics and four work forms. The pool of experts will be available to all groups during the practical work. Hence, the course offers a great opportunity for PhD students to interact with expert world leading scientists. The main goal of the course will be achieved if the participating PhD students go home with novel ideas and techniques for their own research.

Organizers This course is jointly organized by the Netherlands research schools FE, PE&RC and SENSE. Dr. Wolf Mooij (Netherlands Institute of Ecology, FE, w.mooij@nioo.knaw.nl) Dr. Bart Nolet (Netherlands Institute of Ecology, FE) Dr. Max Rietkerk (University of Utrecht, SENSE) Dr. Frank Van Langevelde (Wageningen University, PE&RC)

Invited lecturers Peter Abrams (University of Toronto) Don DeAngelis (University of Miami) John Fryxell (University of Guelph) Herbert Prins (Wageningen University) Moshe Shachak (Ben Gurion University) Franjo Weissing (University of Groningen)

Location Hotel and Conference Centre De Bergse Bossen, Traaij 229, Driebergen, The Netherlands

Duration November 5 - November 9, 2006

Information <http://www.rug.nl/biologie/onderzoek/-onderzoekScholen/functionalEcology/> phd-Courses/consumerResourceInteractions (or search Consumer-Resource Interactions with Google)

Symposium The course will be preceded by a symposium on 'Ecological consequences of adaptive behaviour'. The symposium will take place in Wageningen on Friday November 3. For more info on

the symposium go to [www.currentthemesinecology.nl](http://www.currentthemesinecology.nl) . W.Mooij@nioo.knaw.nl W.Mooij@nioo.knaw.nl

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## 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](mailto:evoldir@evol.biology.McMaster.CA). Do not include encoded attachments and do not send it as Word files, as HTML files, as L<sup>A</sup>T<sub>E</sub>X files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

## Afterward

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by L<sup>A</sup>T<sub>E</sub>X do not try to embed L<sup>A</sup>T<sub>E</sub>X or T<sub>E</sub>X in your message (or other formats) since my program will strip these from the message.