E v o l D i r

February 1, 2007

Month in Review

Forward

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

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

____/ ____

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Conferences

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${\bf AmMusNatHist}\\ {\bf MicrobesConservation~Apr 26-27}$

Thinking Small: Microbial Diversity and Its Role in Conservation The Center for Biodiversity and Conservation's Twelfth Annual Symposium American Museum of Natural History April 26 and 27, 2007 http://cbc.amnh.org/symposia/microbes/ Symposium Theme Microscopic organisms comprise the majority of life on Earth-and we are discovering more all the time. They play a multitude of roles in every ecosystem. While recent attention has focused on microbial involvement in spreading disease, many microorganisms are beneficial or even crucial to the sustainability of life; and yet they may be threatened by human-induced environmental change. This symposium brings together microbiologists and conservationists to raise the profile of these unseen organisms and stress the critical need to include microbes in conservation research and resource planning.

Speakers will address the broad questions of how much microbial diversity exists on the planet; how this diversity affects other organisms, both positively and negatively; and how conservation practices take microbial life into account?

Audience: Scientists from the traditionally disparate fields of microbiology and conservation, including biogeochemists, marine microbiologists, disease ecologists, and microbial systematists, as well as conservation practitioners, wildlife managers, policy makers, educators, students, and interested members of the general public.

Website: The conference's full agenda, speaker bios and abstracts, glossary of terms, links to resources, etc., will all be posted to the CBC's website: http://cbc.amnh.org/symposia/microbes/ CALL FOR POSTERS: The symposium will include a poster session. Details for content guidelines and abstract-submission requirements are available at http://cbc.amnh.org/symposia/microbes/. Deadline: February 1. SPECIAL STUDENT PRICING and EARLY-BIRD DISCOUNTS!

TO RECEIVE SYMPOSIUM UPDATES AS THEY BECOME AVAILABLE, email biodiversity@amnh.org. perkins@amnh.org

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Basel PopulationBiology May17-19

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+ 41 61 267 3503 sylvia.martinez(at)unibas.ch

First call - Popbio2007 in Basel, Switzerland

Dear Members of the Plant Population Biology Section of GfOe,

I herewith invite you all to the 20th Annual Conference of the Plant Population Biology Section of the Ecological Society of Germany, Switzerland and Austria.

Perspectives of Plant Population Biology for the next 20 years

The conference will take place from 16/17 - 19 May 2007 at the University of Basel, Switzerland, and will be organized by the Institute of Botany, Section Ecology, University of Basel, Switzerland. http://pages.unibas.ch/botschoen We will offer two days of talks with attractive keynote speakers, a 20th birthday party on Friday night, and excursions on Saturday.

Organising Committee: Jürg Stöcklin Georg Armbruster Sylvia Martinez Katrin Rudmann-Maurer Daniel Scherrer Heinz Schneider

Important Dates: 15. Feb 2007: Website and online registration open, (http://pages.unibas.ch/botschoen/popbio2007) 31. Mar 2007: Deadline for submission of talks/posters 31. Mar 2007: Deadline for reduced fee registration 15. Apr 2007: Full programme announcement

Here's a choice of inexpensive accommodations in Basel City Hostel, Pfeffingerstr. Basel: 8, 4053 http://www.youthhostel.ch Basel Pack Basel. Pack, Dornacherstrasse 192, 4053 Basel. http:/-/www.baselbackpack.ch Jugendherberge Basel, Albankirchrain 10, 4053 Basel. http://www.vouthhostel.ch Basel is a lifely town with an active cultural life: http://www.baseltourismus.ch Looking forward to meeting you all in Basel

Jürg Stöcklin

PS: Do not hesitate to forward this information to interested colleagues.

PD Dr. Jürg Stöcklin Botanical Institute, Dep. of Ecology, University of Basel Schönbeinstr. 6, 4056 BASEL, Switzerland

+41 61 267 35 01, juerg.stoecklin@unibas.ch http://-pages.unibas.ch/botschoen/stoecklin/index.shtml -

ChristchurchNZ SSE2007 StudentTravelAwards 2

SSE student travel awards to new zealand The Society for the Study of Evolution (SSE) is providing Travel Awards for 60 student SSE members to attend the 2007 Annual Meeting in New Zealand. Students can obtain an online membership to the society for just \$20.00! To join vist: http://www.blackwellpublishing.com/memb.asp?ref http://www.blackwellpublishing.com/memb.asp?ref

The awards will be \$750 US dollars each. Students will be able to use the award to defray travel or other meeting costs. An application form can be found on the SSE website at http://www.evolutionsociety.org/.

Note that the application deadline is January 15, 2007.

Information regarding the meeting, including registration, schedule, accommodations, and submission of titles for talks and abstracts is available on the conference web site at: http://www.evolution2007.com.

For Dr. Dale Clayton clayton@biology.utah.edu Secretary, Society for the Study of Evolution

Carey Madsen careymadsen@bioscience.utah.edu

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Tel 801-585-1791 Fax 801-581-2174

Carev Madsen <carevmadsen@bioscience.utah.edu>

$\begin{array}{c} \textbf{ColdSpringHarbor} \\ \textbf{PopulationGenomicVariation} \\ \textbf{May 8-12} \end{array}$

Dear Colleagues,

We have been invited to organize a session on Pop-

ulation Genomic Variation for the Cold Spring Harbor meeting on The Biology of Genomes organized by Michael Ashburner, Kelly Frazer, Kerstin Lindblad-Toh, and Richard Wilson. The CSH Genome meeting is arguably one of the most important conference in genomics, and the organizers have paid increasing attention to both molecular evolution and particularly population genetics. A session on analysis of genomewide polymorphism data is very timely. If you have been engaged in analysis of genetic variation data at a genomic scale, we would like to encourage you to submit an abstract to present your work at this meeting. A meeting notice and general information are attached for your information.

The meeting will begin on Tuesday evening, May 8, 2007 at 7:30 PM and conclude after lunch on Saturday, May 12.

Please note the deadline for abstracts is February 14, 2007

We hope that you will consider attending by registering at this website: https://meetings/meetingsregistration.asp and following instructions on abstract submission.

Sincerely, Pardis Sabeti and Andy Clark ac347@cornell.edu

Cologne EvolBiology Mar22-23

Dear Colleagues,

We are happy to announce our first "Crossroads in Biology" symposium organized by students of the International Graduate School in Genetics and Functional Genomics at the University of Cologne.

Our meeting is a free-of-charge event that will be held in the center for Biochemistry on 22-23 March, 2007. It will be a multidisciplinary meeting which aims to bring together outstanding scientists and students from diverse backgrounds and provide a forum for multidisciplinary discussions.

Three individuals of direct interest to Evolutionary Biologists will give talks. Opening Speaker Nipam Patel, and Michael Akam and Peter Holland in the Evolutionary Developmental Biology Session the following day.

There will be a student poster session, for which you are invited to submit and abstract. Small discussion groups will be held during the lunch break of the second day to allow students and speakers to talk about science in an informal setting. As the number of students in these groups is limited, we ask that you register early.

Additional information is supplied on our homepage http://crossroads.uni-koeln.de/ and you may also register for the symposium and discussion groups at http://crossroads.uni-koeln.de/ We look forward to seeing you in Cologne in March!

Crossroads in Biology Organizing Committee

– Rick J Scavetta Abteilung fuer Evolutionsgenetik Institut fuer Genetik Universitaet zu Koeln Zuelpicherstrasse 47 50674 Koeln - Germany Tel: ++49 221 470 3402 Fax: ++49 221 470 5975 rscavett@uni-koeln.de

KentStateU MidwestEcoEvol Mar9-11

Dear colleagues,

The Department of Biological Sciences at Kent State University would like to invite you to participate in the 27th Annual Midwest Ecology and Evolution Conference (MEEC) to be held March 9-11 2007.

This posting is a Call for Papers for this increasingly popular and productive annual professional meeting. We cordially invite undergraduate, graduate, and post-doctoral researchers in ecology, evolution, anthropology, environmental sciences, and other related fields to submit abstracts for either oral or poster presentations. While most participants of MEEC are from the Midwest, we encourage and welcome all interested individuals, nationally or internationally, to submit abstracts and/or attend. Early registration and abstract submission deadline is January 31st 2007, and may be completed at the following web site:

www.midwesteec.org

Awards for both the best oral presentation and the best poster presentation will receive a one year membership to the very prestigious international journal Nature

MEEC is a migratory conference that is organized and run solely by students of the hosting university. The purpose of this conference is to provide a venue for students (graduate and undergraduate) and post-doctoral researchers to present their research to peers in a relaxed environment. In addition, the conference fosters an atmosphere for collaboration and communication between future scientists. MEEC typically has ~ 250 total attendees each year and Kent State University is excited to be this year's host.

We are also proud to announce the keynote speaker for MEEC 2007 will be Dr. Robert T. Paine.

To maximize attendance while minimizing costs, early registration by January 31st is only \$40.00 (\$50.00 thereafter until February 19th) and covers meeting attendance, a MEEC 2007 travel mug, a social mixer Friday night, continental breakfast on Saturday and Sunday, as well as a Saturday dinner banquet with the keynote address.

Registration, abstract submission, travel/lodging information, and contact information may all be found at the MEEC web site:

www.midwesteec.org

Please feel free to pass this message on or print it out and post it for interested people to see! There is also a flyer on the web site which we strongly encourage you to post where everyone can see it!

We look forward to seeing you at Kent State University for the 27th Annual Midwest Ecology and Evolution Conference in March!

Constance E. Hausman Ph.D. Candidate Kent State University Dept. of Biological Sciences chausman@kent.edu

chausman@kent.edu

Leibniz Apomixis 2007

Dear Colleagues,

We are pleased to announce that the "Abstract Submission and Preregistration" webpage for the 3rd INTERNATIONAL CONFERENCE ON APOMIXIS is now online. Please point your browsers to:

http://meetings.ipk-gatersleben.de/apomixis2007/-index.php Here you can register your attendance, abstract, selected session, and preference of poster or presentation.

The hotel and conference fee registration site will soon follow.

Very best wishes, and we are looking very much forwards to seeing you all this June!

Tim and Emidio

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/ International Max Planck Research School (IMPRS) http://imprs.ice.mpg.de/people/Faculty_Members.htm?mp=-12

IPKWebpage www.ipk-gatersleben.de tel: +049 (0)39482 5608 fax: +049 (0)39482 5137

sharbel@ipk-gatersleben.de sharbel@ipk-gatersleben.de

Lund EMPSEB EvolBiol Aug13-18

We want to inform you about the 13th EMPSEB meeting (Annual European Meeting of PhD Students in Evolutionary Biology) which will be held in Sweden from 13-18 august 2007 http://www.biol.lu.se/empseb13 EMPSEB is an annual meeting of European PhD students of Evolutionary Biology that takes place in a different European country each year and is organized by current students in that country. This year a group of students from Lund University, Sweden, took up the task of organizing the 13th meeting in 2007.

The meeting provides a platform for Evolutionary Biology PhD students to present their work and to meet their peers from all over Europe in a friendly, social, environment, without any of the intimidation or nerves that may come with presenting at a senior conference. We will be able to welcome about 100 PhD students from allover Europe. Additionally we will invite a number of academics from different European countries and different areas of research for plenary lectures and workshops. The meeting aims at addressing a wide range of topics within evolutionary biology, in the broadest sense.

Best wishes from the EMPSEB 2007 committee.

Dirk-Jan ten Brink (PhD student) Plant Ecology and Systematics Dept. of Ecology, Lund University Ecology Building, 223 62, Lund, Sweden Phone: +46 73 803 3521 Email: dirk-jan.ten.brink@ekol.lu.se http://www.planteco.lu.se/people/dtb/ http://-www.planteco.lu.se/people/dtb/

Dirk-Jan ten Brink <dirk-jan.ten_brink@ekol.lu.se>

EvolDir February 1, 2007

Marseilles 11thEvolBiol Sep19-21

Next evolutionary biology meeting at marseilles will take place in September 19-21 The following subjects will be discussed: - Evolutionary biology concepts and modelisations for biological annotation; - Biodiversity and Systematics; - Comparative genomics and postgenomics (at all taxonomic levels); - Functional phylogeny; - Environment and biological evolution; - Origin of Life and exobiology. more information are avalaible at the meeting web site http://www.up.univ-mrs.fr/evol-cgr/ all the best Pierre

– Pierre Pontarotti EA 3781 Evolution Biologique Université d'Aix Marseille I Centre St Charles 3 Place Victor Hugo 13331 Marseille Cedex 3 33491106489 http://www.up.univ-mrs.fr/evol Pierre.Pontarotti@up.univ-mrs.fr

Roscoff EvolGenomiics May2-6 2

Conference Jacques Monod: *EVOLUTIONARY GENOMICS*, 2- 6 May 2007, Roscoff (France)

LAST ANNOUNCEMENT

The deadline for application is 1 February 2007; In addition to selected talks, there will be open poster sessions

The conference, organized by Michel Veuille (Paris) and Laurent Excoffier (Bern), aims to present the current state of a research field that has emerged over the last ten years. It does not intend to show final results, but rather to identify new research directions and fields of synergy. The program is therefore structured into questions corresponding to conceptual issues, in a field based on a very broad theoretical framework in mathematics and bioinformatics.

Topics covered and confirmed speakers: - Population genomics (Thomas. Bataillon, Montgomery Slatkin, Montserrat Aguadé, Michel Veuille) - Constraints and adaptation of gene expression (Peter D. Keightley, Erick Denamur, Marc Robinson-Rechavi) - Evidencing the consequences of gene interactions (Daniel M. Weinreich, Csaba Pal, Dominique Schneider, Andrew G.

Clark) - Divergence between populations and speciation (Jody Hey, Pierre Boursot, Xavier Vekemans, Axel Meyer) - Genomic signature of selection (Wolfgang Stephan, Maud Tenaillon, Catherine Montchamp-Moreau, Lluis Quintana-Murci) - Diversity resulting from mutation, recombination, and their interaction (Stewart T Cole, Gil Mc Vean, Vincent Daubin, Laurent Duret) - Inferring demography from DNA diversity (Rasmus Nielsen, John R Wakeley, Noah A Rosenberg, Evelyne Heyer, Laurent Excoffier)

For more information, registration, abstract submission and contact, please refer to the meeting's webpage (URL: http://www.cnrs.fr/sdv/cjm/cjmveuille.html)

Catherine Montchamp-Moreau UPR 9034 Laboratoire Evolution, Génomes et Spéciation (LEGS) CNRS Avenue de la Terrasse 91198 Gif sur Yvette Cedex Tel: 01 69 82 37 20 Fax: 01 69 82 37 36 http://www.legs.cnrs-gif.fr/

Catherine.Montchamp@legs.cnrs-gif.fr

SanFrancisco LandscapeGenetics Sep2-6

This year the annual meeting for the American Fisheries Society (AFS) will be in San Francisco over the period September 2-6. The Genetics Section of AFS is sponsoring a symposium entitled "Applications of Landscape Genetics to Fisheries Management in Freshwater and Marine Realms". Individuals interested in contributing should contact Kim Scribner with a title and contact information at scribne3@msu.edu by 12 January. A brief description of the goals of the symposium are listed below.

Description

The purpose of this workshop is to familiarize fisheries professionals with landscape genetics theory and empirical applications to species inhabiting freshwater and marine realms. One important question in fisheries management is over what spatial scales are population characteristics (e.g., demographies, abundance, genetic characteristics) autocorrelated or non-independent, and at what scales and by what criteria should populations be managed? Fish species exhibit geographic structure at various spatial scales, usually resulting from ecological, physiological, or behavioral aspects of the species' biology that limits dispersal, or as a result of discontinuities in habitat. Genetic markers provide a

powerful means to address spatial questions that are important for fisheries management. Landscape genetics provides information regarding how landscape and environmental features influence gene flow, population structure, and local adaptation. Another goal is to identify spatial genetic discontinuities (i.e., stock boundaries) and landscape or environmental variables responsible for spatial heterogeneity. Historically, population genetic analyses were restricted to traditional measures that were performed for pre-defined populations. Exciting new technological advances including availability of remotely sensed data, advances in spatial analyses, and hypervariable genetic markers allow researchers to incorporate landscape features in population genetic studies, creating exciting opportunities for both basic and applied research. Researchers are increasingly able to test hypotheses regarding landscape processes or hydro-geomorpholigical features of marine or freshwater habitats that shape population genetic structure. Understanding landscape effects on genetic connectivity improves insight into fundamental biological processes including metapopulation dynamics, speciation, and ultimately biogeographical distributions and species' limits. Landscape genetic analyses also provide information that can be applied to manage fisheries. Methods can be used to identify populations and evaluate the level of connectivity between them. Landscape genetics can also be aid in the design of protected areas and identify important linkages between areas by helping researchers understand what geographic features facilitate and impede gene flow.

scribne3@msu.edu

SienaItaly EvolMammals Sep21-26 EMC5CallForAbstracts

CALL FOR ABSTRACTS

Dear Evoldir members

The 5th European Congress of Mammalogy will be held in Siena (Tuscany), Italy, from the 21st to the 26th of September 2007. The Congress will be organized into four sessions: Rodents and Lagomorphs; Insectivores and Bats; Ungulates; Carnivores, and 15 workshops. Participants wishing to give an oral presentation or to present a poster should submit an informative abstract through the Congress website (http://www.euromammalcongress.org/index_file/home.htm>http://www.euromammalcongress.org/-

index_file/home.htm). Submitted abstracts will be reviewed by the Scientific Committee and the authors will be notified of their decision by June 30, 2007.

The conveners would like to invite all those with an interest to join and contribute to the following workshops:

W4 - Sunday, September 23: Phylogeography in Southern Europe: The role of glacial refuges in shaping mammalian genetic diversity

Conveners: A. Grill <grill@science.uva.nl>, E. Randi <met0217@iperbole.bo.it>

Workshop outline Distributions and structure of natural biomes in Europe have been largely affected by the Quaternary glaciations. Aim of this symposium is to evaluate the evolutionary consequences of Pleistocene climatic changes, and the roles of glacial refuges in southern Eurasia as generators of mammalian diversity for the entire continent. Paleo-ecological and molecular research indicated that both Mediterranean and non-Mediterranean refuges hosted temperate species during the last glaciations. The integration of recent methodological approaches to phylogeographic analysis, and updated empirical data-sets, will led to a deeper understanding of the biogeography, taxonomy and conservation biology of European mammalian fauna.

 $\rm W15$ - Wednesday, September 26: Non-invasive genetic methods for monitoring populations of elusive mammalian species

Conveners: P. Taberlet cpierre.taberlet@ujf-grenoble.fr>, E. Randi <met0217@iperbole.bo.it>

Workshop outline Recent methodological advances in non-invasive genetic sampling and genotyping (NGS) are providing relevant information on individual locations in space and time, population size and dynamics, sex ratios and genetic structure of natural mammalian populations. DNA can be extracted and reliably typed from a variety of biological samples collected non-invasively in the field without the need of capturing the animals. This workshop is aimed to discuss laboratory procedures, new statistical approaches and research results, and evaluate strength and weakness of NGS as a tool for monitoring elusive carnivore populations. Results of ongoing NGS projects show that molecular identification procedures are stimulating issues in both theoretical and practical mammalian population biology.

Each workshop will last 3 hours and its organisation will be the responsibility of the conveners. If you are interested, please contact directly the workshop organizers.

Congress deadlines: Registration Fee and Abstract Submission: 30th March, 2007 Oral Presentation/Poster Acceptance: 30th June, 2007

Further information may be requested to: ECM5 Scientific Secretariat Email: scientifics@euromammalcongress.org

Ettore Randi

Istituto Nazionale per la Fauna Selvatica Laboratorio di Genetica Via Cà Fornacetta, 9 40064 Ozzano Emilia (BO) Italy

Tel: $+39\ 051\ 6512\ 111$ (int. 252) Fax: $+39\ 051\ 796628$ E-mail: met0217@iperbole.bo.it

Ettore Randi <met0217@iperbole.bologna.it>

StAndrews ArcticAlpineFlora Jun25-27

Dear Colleagues

Please note the following international symposium:

HISTORY, EVOLUTION AND FUTURE OF ARCTIC AND ALPINE FLORA

to be held in St Andrews, Scotland, June 25-27, 2007.

To Register please go to http://biology.st-andrews.ac.uk/aafcon. Arctic and Alpine Floras are particularly affected by climate change. In the last decade much has been learnt about the history and evolution of these floras, and how they might respond to current global warming. This conference will bring together palaeobotanists, ecologists and evolutionary biologists, to provide a synthesis of what is currently known on these topics and to identify promising areas for future research.

Keynote speakers: Hilary Birks (Bergen) Christian Brochmann(Oslo) Robert Crawford (St Andrews) Joachim Kadereit (Mainz) Pierre Taberlet (Grenoble)

Additional speakers: Dirk Albach (Mainz) Inger Alsos (Longyearbyen) John Birks (Bergen) Pernille Bronken Eidesen (Oslo) Anne Brysting (Oslo) Pilar Catalan (Zaragoza) Peter Comes (Salzburg) Elena Conti (Zurich) Eric DeChaine (West Washington) Mary Edwards (Southampton) Rolf Holderegger (WSL, Switzerland) Pete Hollingsworth (RBG Edinburgh). Elvira Hörandl (Vienna) Frank Kienast (Potsdam) Marcus Koch (Heidelberg) Martin Lascoux (Uppsala) Richard Milne (Edinburgh) Christian Printzen (Senckenberg)

Peter Schönswetter (Vienna) Inger Skrede (Oslo) Chris Sydes (SNH Edinburgh) Andreas Tribsch (Salzburg) Bernhard von Hagen (Halle) Phil Wookey (Stirling)

Poster presentations are welcome. Please provide details when registering.

Sincerely, Richard Abbott (Symposium organizer)

– Professor Richard Abbott Mitchell Building, School of Biology University of St Andrews St Andrews, Fife KY16 9TH UK Tel. 01334 463350 Fax. 01334 463366 Email. rja@st-and.ac.uk Website: http://biology.st-and.ac.uk/staff/abbott.html BSS Symposium: History, Evolution & Future of Arctic and Alpine Flora, St Andrews, June 25-27 2007 http://biology.st-andrews.ac.uk/aafcon/ rja@st-andrews.ac.uk rja@st-andrews.ac.uk

StAndrews EvolOfArticFlora Jun25-27

Dear Colleagues

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Milne (Edinburgh) Christian Printzen (Senckenberg) Peter Schönswetter (Vienna) Inger Skrede (Oslo) Chris Sydes (SNH Edinburgh) Andreas Tribsch (Salzburg) Bernhard von Hagen (Halle) Phil Wookey (Stirling)

Poster presentations are welcome. Please provide details when registering.

Sincerely, Richard Abbott (Symposium organizer)

– Professor Richard Abbott Mitchell Building, School of Biology University of St Andrews St Andrews, Fife KY16 9TH UK Tel. 01334 463350 Fax. 01334 463366 Email. rja@st-and.ac.uk Website: http://biology.st-and.ac.uk/staff/abbott.html BSS Symposium: History, Evolution & Future of Arctic and Alpine Flora, St Andrews, June 25-27 2007 http://biology.st-andrews.ac.uk/aafcon/ rja@st-andrews.ac.uk rja@st-andrews.ac.uk

UCLosAngeles IntlSummitEvolChange Feb8-10 5

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 the fitness of native species.

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 go to:

http://www.ioe.ucla.edu/ctr/ioesymposium.html tb-smith@ucla.edu

UCaliforniaLosAngeles CompGenetics Feb

Computational Genetics: a perspective

Celebrating the scientific contributions of Kenneth Lange

Mathematical formalizations and computational algorithms have always been crucially involved in genetic advancements. Gene mapping, DNA sequencing, the study of population diversity and of evolution would have been impossible without relying on mathematical sciences. The recent advent of high-throughput technologies, which allow quantitative measurements of many biological processes, only strengthens the integral role of mathematics in genetics. This workshop will be devoted to the exploration of present day challenges for computational genetics, and to the discussion of what past history has to teach us.

Invited speakers: Neil Risch, Michael Boehnke, Daniel Weeks, Laura Lazzeroni, Eric Sobel, Ruzong Fan, David Hunter, Eric Schadt.

This workshop will be hosted by the Institute for Pure and Applied Mathematics (IPAM) and open to the public at no charge. For organizational purposes we ask you to please register by sending an e-mail to Nancy Hards (nhards@mednet.ucla.edu).

More information regarding the schedule will be available later at http://www.genetics.ucla.edu/langeperspective.html Janet@mednet.ucla.edu
Janet@mednet.ucla.edu

UGuelph AppliedEvolution May15-16

Announcing the 2007 Peter Yodzis Colloquium in Fundamental Ecology $\,$

"Applied Evolution: Understanding the Past, Predicting the Future"

May 15th and 16th 2007 University of Guelph, Guelph, Ontario, Canada

The colloquium will focus on the mechanistic basis of adaptation and the potential to predict adaptive evolution in pure and practical applications. There will be a series of keynote lectures and an open poster session, all at a pace conducive to conversation and interaction.

Confirmed keynote lecturers include:

Graham Bell (McGill University) Michael Lynch (Indiana University) Patricia Schulte (University of British Columbia) Ruth Shaw (University of Minnesota) John Willis (Duke University)

For information, go to

http://www.ecologycolloquia.uoguelph.ca/main.shtml or e-mail the organizers (Brian Husband and Chris Caruso) at pycolloq@uoguelph.ca

Christina (Chris) Caruso Assistant Professor Department of Integrative Biology University of Guelph Axelrod Building 50 Stone Road East Guelph, Ontario N1G 2W1 CANADA 519-824-4120 ext. 52030 carusoc@uoguelph.ca

UGuelph InvasiveSpecies Mar12-16

I've sent a description of the workshop (see below). Though the theme of the workshop emphasizes ecology, evolutionary biology is integral to much of the research that would be presented/discussed. Please let me know if the content is appropriate for EvolDir.

cheers

Developing effective strategies for understanding the impacts of the spatiotemporal spread of potentially harmful species in at-risk ecosystems:

The Integration of Theoretical and Empirical Research Approaches

March 12-16, 2007 University of Guelph Arboretum, Guelph, ON

As part of the Environmental Science Research Initiative funded by the Faculty of Environmental Science, a weeklong interdisciplinary workshop will present current progress in theoretical and empirical-based approaches aimed at determining, predicting, and managing the effects of the spatiotemporal spread of potentially harmful species in ecosystems that have become susceptible to invasion because of external stresses (hereafter, at-risk ecosystems). The appeal of the broad scope of this workshop's theme is evident by the

wide range of research that will be presented during the workshop. A group of esteemed scientists led by keynote speaker Dr. Mark Lewis, from the University of Alberta, Dr. Marie-Josée Fortin, from the University of Toronto, Dr. Frédéric Guichard, from McGill University, and Dr. Brian Maurer, from Michigan State University, will present research based within the framework of the workshop theme. In addition, a number of University of Guelph scientists from a wide-range of disciplines will attend and give seminars throughout the weeklong workshop, which will add insight into strengthening previous theoretical and empirical work aimed at managing at-risk ecosystems.

More details about the weeklong workshop can be found at the following link

http://www.envsci.uoguelph.ca/

Call for contributions:

For those of you who wish to contribute a talk during the workshop proceedings, please specify a date and time based on the tentative agenda outlined in the workshop advertisement (time slots contributed talks). Instructions for those interested in contributing a talk can be found on the pre-registration form.

Dr. Michael Golinski Postdoctoral Fellow Departments of Mathematics & Statistics and Environmental Biology 50 Stone Road East Room 437 MacNaughton Building University of Guelph Guelph ON Canada N1G 2W1 Tel: 519-824-4120 ext 53836 Fax: 519-837-0221 Email: golinski@uoguelph.ca

michael golinski <golinski@uoguelph.ca>

UOttawa MathematicsOfEvol May7-9

The Mathematics of Evolution: Adaptive Dynamics in Theory and Practice. A Fields Institute Workshop at the University of Ottawa, 7th-9th May 2007. Financial support is available for students and postdocs, and we particularly encourage women and minorities to apply for funding. More details and registration can be found at: http://www.science.uottawa.ca/fluts037/FIELDS/fieldsworkshop.html or by contacting Frithjof Lutscher (<mailto:flutsche@uottawa.ca/flutsche@uottawa.ca).

Tom Sherratt Department of Biology Carleton University 1125 Colonel By Drive Ottawa, ON K1S 5B6

February 1, 2007 **EvolDir**

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Canada

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UnivCentralFlorida SEEC Mar16-18

USheffield Speciation Mar28-30

**** Early-bird booking discount ends 8 Jan 2007 ****

British Ecological Society Annual Symposium

SPECIATION AND ECOLOGY

University of Sheffield, 28 - 30 March 2007

Organisers: Roger Butlin, Jon Bridle and Dolph Schluter

Biological diversity varies enormously in time and space. Ultimately, diversity is generated by speciation and lost by extinction. So, how much do we need to know about the mechanisms of speciation in order to understand patterns of diversity? Is speciation typically driven by ecological opportunity? Does this imply that adaptive radiation occurs in empty environments and the rate of speciation declines as diversity increases? Alternatively, if speciation is driven by fragmentation of populations or by sexual selection, how does this interact with extinction to explain current diversity? Does speciation generate ecologically equivalent units with equal probabilities of persistence?

This meeting aims to tackle these and similar questions in the light of recent advances in understanding of speciation mechanisms and the factors that influence speciation rates.

Invited speakers: Jody Hey, Tim Barraclough, Graham Bell, Tom Curtis, Trevor Price, Doug Schemske, Sergey Gavrilets, Patrik Nosil, Ole Seehausen, Jim Mallet, Dan Funk, Bob Ricklefs, Andrew Purvis, John Alroy and Kate Willis.

Booking for this meeting is now open, please click on the link below. The deadline for booking is 23 February 2007.

http://www.britishecologicalsociety.org/articles/-meetings/current/2007annual symposium/

Roger Butlin Professor of Evolutionary Biology Department of Animal and Plant Sciences The University of Sheffield Western Bank Sheffield S10 2TN

All graduate students, undergrads, and post-docs are cordially invited to the 4th annual Southeastern Ecology and Evolution Conference hosted by the University of Central Florida, Orlando (16-18 March 2007). Sessions include but are not limited to topics in community, ecosystem, population and behavioral ecology; evolution: phylogenetics and behavior; conservation: genetics, biodiversity and climate change. For more information and to register visit us at http://biology.ucf.edu/seec/. Early registration and abstract deadlines are February 16, 2007.

The cost of registration is \$30. All attendees will receive a conference t-shirt and green bag, as well as a full buffet dinner, continental breakfasts and snacks. We will also be giving out awards for the best posters and talks.

Please forward this message to all students who may be interested as well as graduate coordinators and department secretaries. The success of SEEC requires participation. We hope that those of you who have participated in the past will encourage your peers to join in this rare opportunity to learn, share and network with future colleagues while enjoying sunny Florida.

We thank you all very much for your assistance in making SEEC 2007 a success.

We look forward to seeing you in March!

Biology Graduate Student Association & The University of Central Florida Biology Department

BGSA Officer SEEC Co-Coordinator Email: seec 2007@mail.ucf.edu Website: biology.ucf.edu/seec

SEEC 2007 < seec 2007 @mail.ucf.edu>

Call for participation to a symposium ESEB XI Congress at Uppsala, Sweden, August 20-25 2007

"The demographic consequences of evolutionary change"

Until recently, the population consequences of evolutionary dynamics remained relatively unexplored. However, there has been a growing body of studies that allowed a better understanding of the demographic context of evolutionary dynamics. This trend includes new models, as well as statistical and empirical methods, designed to assess the role of evolutionary mediated changes in population demography. This symposium will bring together people using very different systems and methods in an attempt to enrich our understanding of the demographic consequences of evolutionary changes in life history, morphological and behavioural traits.

Invited speakers will be Pr. Maurice W. Sabelis Institute for Biodiversity and Ecosystem Dynamics Amsterdam, The Netherlands & Pr. Nelson Hairston, Jr Department of Ecology and Evolutionary Biology, Cornell University, USA

If you are interested in participating to the symposium, there are opportunities for talks and posters. Please do send your application through the web portal of the ESEB conference http://www-conference.slu.se/eseb2007/

Daniel Rankin Laboratory of Ecological and Evolutionary Dynamics Dept of Biological and Environmental Sciences, PO Box 65 (Viikinkaari 1) 00014 University of Helsinki, Finland E-mail: daniel.rankin at helsinki.fi

Jean-Franois Le Galliard CNRS - UMR 7625, Fonctionnement et évolution des systèmes écologiques University Pierre et Marie Curie, 7 Quai St Bernard, 75005 Paris, France E-mail: galliard at biologie.ens.fr

Jean-Franois Le Galliard <galliard@biologie.ens.fr>

Uppsala ESEB Aug20-27

Conference: Genetics of coloration @ ESEB

CALL FOR ABSTRACTS - Evolutionary Genetics of Coloration @ ESEB 2007

We wish to bring evoldirers' attention to the symposium on "Evolutionary genetics of coloration" at this year's meeting of the European Society for Evolutionary Biology (ESEB), to be held in Uppsala, Sweden,

Aug 20-27th (http://www-conference.slu.se/eseb2007/-index.html).

This symposium addresses research in a field where real progress is being made in integrating the analysis of the molecular and developmental basis of the phenotype with the evolution of adaptively significant variation.

This is an excellent opportunity to present your results and hear the latest progress in this rapidly moving area. There are three first rate invited speakers for this symposium - Nicolas Gompel (Marseille, France), Hopi Hoekstra (San Diego, CA, USA), and David Parichy (Seattle, WA, USA) - and two of the plenary lectures are by important figures in this field - Sean Carroll and Michael Majerus.

We would like the symposium on "Evolutionary genetics of coloration" to be as broad as possible, and encourage submissions on studies involving any type of organism or coloration, and from evo-devo to colour variation in the wild.

Please refer to the meeting's webpage (URL: http://www-conference.slu.se/eseb2007/index.html) for further information, including on registration, abstract submission, and the list of 30 symposia on different aspects of Evolutionary Biology (http://www-conference.slu.se/eseb2007/symposia.html) which hold much promise for making this year's ESEB a most exciting meeting.

We hope to see you there. Best wishes,

Nick Mundy (http://www.zoo.cam.ac.uk/-zoostaff/egg/nick2.htm) Patrícia Beldade (http://www.beldade.nl)

nim21@hermes.cam.ac.uk nim21@hermes.cam.ac.uk

VenturaBeachCA QuantGenetGenomics Feb18-23 2

Registration for the 2007 Gordon Research Conference on Quantitative Genetics and Genomics closes on January 28, so if you were thinking about attending this terrific meeting, you need to act now.

Conference website:

http://www.grc.org/programs.aspx?year=-2007&program=quantgen (Note the correct web site reads with the year = 2007).

Patrick Phillips <pphil@uoregon.edu>

February 1, 2007 EvolDir

GradStudentPositions

ETH-Eawag Switzerland HostParasite	UCollegeLondon AgeingDevelopment	1
LeibnizInst EvolGenetics	UCopenhagen ComparativeGenomics	19
MaxPlanckBerlin ComputBiol14	ULaval 2 PopGenetics	20
MississippiStateU PlantSystematics	ULouisiana Octocoral Phylogenetics	20
NorthernArizonaU EvolBiol15	UNewBrunswick ComplexityEvol	2
NorthernArizonaU MicrobialEvol15	UPuertoRico 2 InsectSyst	2
NorthwesternU PlantConservation	UStAndrews Bioinformatics CompBiol	2
QueensUBelfast HostParasiteCoevol	UStellenbosch MarinePhylogeography	2
TrinityCollege EvolGenetics	UToronto EvolGenet	2
UAmsterdam EvolEcol	UWalesBangor MolecularEvol	2
UAutonomousBarcelona EvolBiol	UppsalaU EvolBiol	2^{4}
UBarcelona EvolGenetics	VirginiaCommonwealthU 2 GeneFlow	2^{4}
UBristol AdaptationToClimate	YorkU PlantEvolGenomics	2
UBritishColumbiaOkanagan ConsGenet		

ETH-Eawag Switzerland HostParasite

A PhD position in evolutionary biology is available at ETH-Eawag in Switzerland in direct collaboration with Netherlands Institute of Ecology (NIOO). The study will investigate parasite (chytrid fungi) driven selection in diatom host populations as well as possible constraints on selection. Major constraints that could obscure selection patterns in host populations involve gene flow from extensive seedbanks on the lake sediment and Genotype x Environment interactions. These constraints will mainly be studied in microcosms in the lab. Field work - testing selection - is carried out in a lake in the Netherlands where frequent chytrid epidemics occur.

Field work is done at the Department of Foodweb Studies, Centre for Limnology, NIOO, head Prof Ellen Van Donk. Lab work is carried out at Eawag in Switzerland, Department of Aquatic Ecology, head Prof Jukka Jokela, where the candidate will be based for the ma-

jority of time (location Duebendorf and/or Kastanienbaum).

Candidates are asked to send their CV to Dr Bas Ibelings (who can also be contacted for further information): b.ibelings@nioo.knaw.nl / bas.ibelings@eawag.ch

Bas Ibelings, PhD Netherlands Institute of Ecology (NIOO-KNAW) Centre for Limnology - Department of Foodweb Studies Rijksstraatweg 6 3631 AC Nieuwersluis The Netherlands tel: +31 (0)294239349 fax: +31 (0)294232224 e-mail: b.ibelings@nioo.knaw.nl web: http://www.nioo.knaw.nl/ppages/bibelings

B.Ibelings@nioo.knaw.nl

LeibnizInst EvolGenetics

PhD-Position

The Leibniz-Institute for Zoo and Wildlife Research (IZW) is one of eight research institutes forming the Forschungsverbund Berlin e.V. and member of the

Leibniz-Gemeinschaft. They are jointly funded by the German federal and state governments.

The research group "Evolutionary Genetics" offers (beginning 01. Mach 2007) a PhD-Position on the 'Genetic variability and immune status of African carnivores'

Scientific goals are expression analyses of immune genes (MHC) as well as investigations of the effects of diverse extrinsic factors on the immune system of large African carnivores. The main part of the project consists of lab work, but occasionally field work with carnivores in Africa might also be required. The applicant will be part of an interdisciplinary team consisting of biologists, veterinarians, and technical assistants.

An applicant should have a Diploma or Masters degree in Biology. We expect candidates to have a strong background in immunogenetics, evolutionary biology and behavioural ecology. We seek a highly motivated and scientifically creative graduate student with a good literature overview in this field, ability to work independently, team work abilities, social and organisational skills, and good skills in English language (speaking and writing). Methods employed in the lab will include RNA-extraction, quantitative real-time PCR, expression analyses, cloning, sequencing) as well as techniques in immunology and cell biology.

The position is limited to two years. The IZW is an equal opportunity employer. Applications from women are strongly encouraged. Preference will be given to disabled applicants with the same qualifications.

For further information please contact

PD Dr. Simone Sommer

+ 49 30/5168-315 or sommer@izw-berlin.de

PD Dr. Volker Stefanski

Applicants should submit a letter explaining their interests in and particular skills for this position, a CV including candidate's photo, a summary of their Diploma or Master Thesis, two letters of recommendation and publication list (if available) preferentially before 01.02.2007. We will consider applications until the position is filled. Please cite reference 02/2007.

Application should be sent to:

Leibniz-Institut f?r Zoo- und Wildtierforschung im Forschungsverbund Berlin e. V. z. Hd. Frau Wagner Postfach 60 11 03

10252 Berlin

"Sommer, Simone" <SOMMER@izw-berlin.de>

MaxPlanckBerlin ComputBiol

Dear colleague,

the International Max Planck Research School for Computational Biology and Scientific Computing,

a joint graduate program of the Free University of Berlin and the Max Planck Institute for Molecular Genetics, Berlin, invites applications for a PhD program.

The PhD program is designed as a 3-year program starting in autumn 2007 and is open for international students.

The closing date for applications is February 28, 2007.

We would be grateful if you could communicate the announcement to interested students. A poster can be downloaded from

http://www.imprs-cbsc.mpg.de/download/-poster2007.pdf For further details and the application procedure, please visit

http://www.imprs-cbsc.mpg.de Thanks for your efforts.

the IMPRS-CBSC team

International Max Planck Research School for Computational Biology and Scientific Computing (IMPRS-CBSC) Contact: Hannes Luz Max Planck Institute for Molecular Genetics | Tel: +49 30 8413 - 1154 Computational Molecular Biology | Fax: +49 30 8413 - 1152 Ihnestrasse 73 | Email: luz@molgen.mpg.de D-14195 Berlin, Germany | www.imprs-cbsc.mpg.de luz@molgen.mpg.de luz@molgen.mpg.de

MississippiStateU PlantSystematics

Opportunities for Graduate Study Mississippi State University

Graduate student positions (M.S. or Ph.D.) in plant systematics, population genetics, or conservation biology are available in the lab of Dr. Lisa Wallace at Mississippi State University. Current projects include phylogenetic and population genetic studies in the orchid genus Platanthera, phylogenetic and phylogeographic patterns in the Hawaiian genus Schiedea, and conservation genetics of endemic plants from the California Channel Islands. Related expertise in the biological sciences department (http://www.msstate.edu/dept/biosciences/bio.html) includes plant ecology, evolutionary biology, landscape ecology, and community ecology. Additional expertise in GIS technology through the GeoResources Institute, computational biology through the Center for Computational Sciences, proteomic and genomic applications through the Life Science and Biotechnology Institute, and biological microscopy through the Electron Microscopy Center is available across campus. Students should have an interest in one of the focal research areas and prior experience in molecular methods and/or field biology, and must meet the minimum eligibility requirements for acceptance into the graduate program. Accepted students will be supported on assistantships. more information contact Dr. Lisa Wallace (LisaWallace@biology.msstate.edu).

LisaWallace@biology.msstate.edu

NorthernArizonaU EvolBiol

"Northern Arizona University (Flagstaff AZ) has been awarded eight Science Foundation Arizona Graduate Fellowships. These represent first year PhD fellowships with an annual stipend of \$25,000, plus \$5K toward research expenses, supplies, travel, etc. Additional year funding is assured given reasonable progress, through the amount and sources are still being identified. The Translational Genomics facility in Flagstaff (TGen North) focuses on infectious disease diagnostics, molecular epidemiology and public health. The Microbial Genetics and Genomics (MG2) Center is a leader in biodefense and bioforensic analysis, including disease ecology and pathogen evolution. The Environmental Genetics and Genomics (EnGGen) center supports the molecular genetic analysis of diverse natural populations including plants, animals and microbes. Contact Dr. Paul Keim (Paul.Keim@nau.edu) for more information concerning these fellowships and graduate studies at NAU."

Dr. Paul Keim (Paul.Keim@nau.edu) Dr. Paul Keim (Paul.Keim@nau.edu)

NorthernArizonaU MicrobialEvol

Microbial Pathogen Biofilm Research Fellowship

Northern Arizona University (Flagstaff AZ) has been awarded eight Science Foundation Arizona Graduate Fellowships. These represent first year PhD fellowships with an annual stipend of \$25,000, plus \$5K toward research expenses, supplies, travel, etc. Additional year funding is assured given reasonable progress, through the amount and sources are still being identified. The Translational Genomics facility in Flagstaff (TGen North) focuses on infectious disease diagnostics. molecular epidemiology and public health. The Microbial Genetics and Genomics (MG2) Center is a leader in biodefense and bioforensic analysis, including disease ecology and pathogen evolution. The Environmental Genetics and Genomics (EnGGen) center supports the molecular genetic analysis of diverse natural populations including plants, animals and microbes. As part of MGEN, Dr. Jeff Leid's laboratory is working on the genetic basis for the biofilm lifestyle in B. anthracis and B. pseudomallei and in the host response to medically important biofilms. Contact Dr. Jeff Leid (Jeff.Leid@nau.edu) for more information concerning fellowships and graduate studies at NAU specifically related to the study of biofilms.

 Jim

James Schupp <James.Schupp@NAU.EDU>

NorthwesternU PlantConservation

THE CHICAGO BOTANIC GARDEN PLANT BIOLOGY AND CONSERVATION SCHOLARSHIP

The Chicago Botanic Garden and Northwestern University jointly offer a Masters Program in Plant Biology and Conservation. We are pleased to announce a scholarship award for \$25,000, open to all applicants to the program with preference given to those planning on pursuing graduate research related to the effects of global climate change on plants and/or soil communities. Please visit our webpage (http://www.plantbiology.northwestern.edu/) to learn more

about this Masters Program and ongoing faculty research. We encourage you to directly contact potential advisors. Award of the scholarship is contingent upon acceptance into the graduate program. Application procedures for the Masters Program are outlined on the webpage listed above.

Any questions should be directed to:

Nyree Zerega Director of Graduate Program Plant Biology and Conservation http://www.plantbiology.northwestern.edu Northwestern University 2205 Tech Drive 2-144 Hogan Hall Evanston, IL 60208 E-mail: n-zerega@northwestern.edu Phone: 847-467-1266

nzerega@chicagobotanic.org

QueensUBelfast HostParasiteCoevol

PhD position in molecular evolution (host-parasite coevolution using pathogens of honey bees).

A full-time PhD position is available immediately to work on the molecular evolution of pathogens of honey bees (Apis mellifera) in the labs of Dr. Paxton/Dr Joachim de Miranda (www.qub.ac.uk/bb/people/paxton/paxton.html) and Prof. Ingemar Fries (www.entom.slu.se/eng/staff/Ingemar_Fries.htm). Arguably the major threats to honeybees and beekeeping worldwide are their debilitating pathogens, particularly viruses that are transmitted by parasitic Varroa mites. The doctoral research will form part of a larger European project on the genetics and evolution of disease resistance honey bees (acronym BeeShop, see www2.biologie.unihalle.de/zool/mol_ecol/research_f.html). Laboratory work for the advertised PhD position will be based with Dr. Paxton in Belfast (UK), where the student will be registered, and fieldwork will be with Prof. Fries in Uppsala (Sweden). Applicants should have a background in virology or evolution (theory/molecular genetic laboratory experience/experience in tissue culture) and be willing to work with honey bees, in addition to a good BSc and/or MSc in a relevant field of biology. Proficiency in English is a necessity. The position will be fully funded for 3 years (including fees and stipend). We particularly encourage applications from citizens of the new accession states to the European Union and from females. If interested, please send by 16 February 2007 (i) a cv with the names and contact details of two referees and (ii) a cover letter explaining your interests and motivation for the position to: joachimdemiranda@yahoo.com from whom further details can be obtained.

Robert Paxton <r.paxton@qub.ac.uk>

TrinityCollege EvolGenetics

Post-graduate PhD position: A post-graduate position is available in the Evolutionary Genetics and Bioinformatics Laboratory under the supervision of Dr. Mario A. Fares, Department of Genetics, Smurfit Institute of Genetics, University of Dublin, Trinity College. This position is funded by the Irish Research Council for Science Engineering and Technology and Microsoft. The position will be renewable to three years after a satisfactory one-year progress and stipend (16,000 per year) and fees will be provided. The title of the project is A computational approach to decipher the molecular immune response to pathogenic bacteria and the successful candidate will conduct computational work in the molecular evolution of pathogenic bacteria and molecules involved in the host defense of high eukaryotic organisms. The student should have a strong background in biology and some computational skills. Programming in Perl, C/C++ or R will be desirable but not essential. This position will start as soon as possible in 2007 and students with good marks in any of the genetics or biological areas related to the project are encouraged to apply. The student should have a degree in Molecular Biology, Bioinformatics or any other biological discipline.

Interested students please send your CV and contact Dr. Mario A. Fares at: Telephone number: 353 01 8963521, alternatively: 353 01 6083521 Email address: faresm@tcd.ie Mario Fares <faresm@tcd.ie>

UAmsterdam EvolEcol

PhD student in Evolutionary Ecology (f/m)

The department of Animal Ecology, Vrije Universiteit Amsterdam, The Netherlands has a PhD position available for the project: "Parasitism and the evolutionary loss of lipogenesis"

In contrast to other organisms parasitoid wasps lack the ability to store excess energy in the form of lipid reserves. This project studies if this remarkable lack of lipogenesis is associated with the parasitic lifestyle of these insects and how they can avoid detrimental effects of their strategy. The two most important questions are what are the physiological and genetic mechanisms underlying lack of lipogenesis and how common is lack of lipogenesis in other parasitoid taxa. Experimental work will include sequence and expression analysis of candidate genes involved in lipid metabolism, physiological manipulation and phylogenetic analysis. The project may start very shortly.

Tasks -Executing scientific research as detailed in the project description. -Publication of results of the research in scientific journals as well as in a thesis. - Assisting in undergraduate courses given within the Institute of Ecological Science. -Following the PhD educational programme as prescribed by the institute. Required skills and education -MSc degree in Biology, preferably with advanced courses in animal ecology, evolutionary biology, molecular biology, and animal physiology, or equivalent. -Proficiency in both written and spoken English. -Excellent social skills, ability to work independently and high motivation will be assets.

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

Information and applications Upon request, applicants can obtain the complete project description from Désirée Hoonhout (tel. +31 20 5987004; desiree.hoonhout@falw.vu.nl). Further information can be obtained from Prof. Dr. J. Ellers (tel. +31 20 5987076; jacintha.ellers@falw.vu.nl). Please, send your application with Vacancy number: 1.2007.00017, including your expression of interest (with a brief statement of your personal research aims and interests), a detailed resume, and two reference names before February 16th, 2007 addressed to Dr. J.M.R.M. Neutelings, managing director Faculty of Earth & Life Sciences, Vrije Universteit. You may also send your application by e-mail at: falw-vacatures@falw.vu.nl.

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

UAutonomousBarcelona EvolBiol

Graduate position: Autonomous University of Barcelona (Spain) PhD studentship announcement

3 year Graduate Student Position in Evolutionary Biology at the Autonomous University of Barcelona, Department of Genetics and Microbiology, Spain

A graduate PhD studentship position associated to grant CGL2006-13423-01/BOS (Ministerio de Educación y Ciencia, Spain) is available for research in either of the following areas: a) evolutionary significance of transposable elements in processes of colonization of invasive species by molecular and chromosomal studies of insertion copy distribution b) speciation studies on the genetic architecture of reproductive isolation by molecular detection of genetic factors of male hybrid sterility c) genetic basis of thermal adaptation by studying expression patterns of candidate genes that map around microsatellites that show clinal variation not explained by hitchhiking due to inversions

The work will be carried out in the Evolutionary Biology Group. Applicants must have completed their undergraduate studies in one of the following disciplines: Biology, Genetics, Biochemistry or Environmental Sciences after January 1, 2003.

Send grades of your undergraduate studies with a short CV by e-mail to antonio.fontdevila@uab.es immediately (decision must be taken by January 31, 2007) specifying in which area (a, b, c) are you interested.

For further information contact: Antonio Fontdevila (http://einstein.uab.es/afontdevila) Principal Investigator Grup de Biologia Evolutiva Department de Genetica I Microbiologia Universitat Autonoma de Barcelona 08193 Bellaterra (Barcelona) Spain Phone: 34-93-581108 Fax: 34-93-5812726 e-mail: antonio.fontdevila@uab.es

UBarcelona EvolGenetics

Pre-doctoral scholarship (FPI) available for the project CGL2006-13423-C02 "Evolutionary Genetics of colonizing processes and molecular analysis of biodiversity"

to carry out the study on "Latitudinal clines for chromosomal inversions and microsatellite loci: hitchhiking or coadaptation".

The applicants should have their BSc or MSc degree in Biology, Biochemistry or Environmental Sciences after 1/1/2003.

The research will be carried out in the Evolutionary Biology group of the University of Barcelona (http://www.ub.edu/genetica/evolucio/serra.htm).

For further information contact urgently the project manager. The forms have to be fulfilled within the next 15 days.

Dr. Lluis Serra Department of Genetics University of Barcelona lserra@ub.edu Tel: 93 4021499

Marta Pascual <martapascual@ub.edu>

UBristol AdaptationToClimate

NERC PhD Studentship available from Oct 2007

Supervisor: Dr Jon Bridle Department of Biological Sciences, University of Bristol, BS8 1UD, UK

Tests for adaptation at expanding and contracting species' margins

At least 10% of all species are predicted to become committed to extinction this century due to climate change. However, these estimates assume that the ecological tolerances of species' will not evolve to accommodate some of this environmental change. This is because we lack the empirical data to predict how quickly, and under what conditions, populations can adapt when faced with rapid ecological change.

In Europe, recent climate change has generated range expansions in the north of butterfly species' distributions, and corresponding range contractions in the south. However, the ranges of some species have either not contracted, or have involved shifts in habitat or behaviour associated with range expansion. These exceptions may reflect adaptation at the range edge, allowing populations to persist in previously unsuitable conditions.

This project will explore such cases in detail to test for recent evolution at range margins, and to provide insight into what conditions prevent or favour local adaptation in natural populations. It will also address the more general question of why all species are restricted in their distributions, given that adaptation at the range edge is possible in certain circumstances, even over short timescales. The studentship is likely to involve a combination of genetic and ecological analyses in the UK and/or southern Europe, and could focus on the Brown Argus butterfly Aricia agestis or the Comma, Polygonia p-album, for which extensive data are already available. Alternatively, a number of other butterfly species could also be feasible as model organisms.

Interested students should contact me (jon.bridle@ioz.ac.uk <mailto:jon.bridle@ioz.ac.uk>) in the first instance with a CV and details of two academic referees. They will then need to submit a formal application by March 15th 2007. Unfortunately, this studentship is only open to UK residents.

For detailed eligibility requirements see http://www.nerc.ac.uk/funding/available/postgrad/- eligibility.asp http://www.nerc.ac.uk/funding/available/postgrad/- eligibility.asp For further information on Biological Sciences at Bristol, see http://www.bio.bris.ac.uk/-admiss/pgrad/studentships.htm http://www.bio.bris.ac.uk/-admiss/pgrad/studentships.htm

Jon Bridle < Jon.Bridle@ioz.ac.uk>

UBritishColumbiaOkanagan ConsGenet

A graduate assistantship (M.Sc. or Ph.D.) is available in the laboratory of Dr. Michael Russello at the University of British Columbia Okanagan (UBCO) in the area of ecological and conservation genetics starting September 2007.

I am looking for a highly motivated graduate student to work with me on the study of fine-scale adaptive population divergence in a number of systems centering on vertebrate species of conservation concern. There are opportunities for both laboratory and field-based research, although all projects involve the use of high-throughout DNA-based methodologies. Please visit my website for further details: http://web.ubc.ca/okanagan/biophgeo/faculty/mrussello.html. Candidates should have a strong undergraduate background in biology, and prior research experience with molecular techniques is desirable but

not required. For more information contact Michael Russello at michael.russello@ubc.ca. The application deadline for Fall 2007 admission is January 31, 2007, although late applications may also be considered.

Some additional information about our Biology graduate program at UBCO:

The Biology Graduate Program at the University of British Columbia Okanagan offers research-based M.Sc. and Ph.D. degrees in a collegial, dynamic setting. Our vibrant faculty and students are engaged in a variety of research projects, many in collaboration with partners in government, non-profit agencies, or industry. Our mission is to train students to be leaders in identifying and addressing biological questions at multiple levels of investigation from the molecular to the ecosystem. We provide students with theoretical, practical, and analytical expertise, as well as experience in the application of scientific results to real-world problems.

Research interests of Biology faculty members include Cell and Developmental Biology, Molecular Genetics, Microbiology, Molecular Biology, Paleoecology and Climate Change, Biochemistry, Ecology, Conservation Biology, Population Genetics, Genomics, Evolutionary Biology, Plant-Microbe Interactions, and Physiology. Many Biology faculty are also affiliated with the Centre for Species at Risk and Habitat Studies (http://web.ubc.ca/okanagan/-ikbarberschool/research/sarahs.html).

The University of British Columbia Okanagan is located in Kelowna, B.C., an ideal geographic location for many types of biological endeavors, with state-of-the-art campus laboratories just minutes away from extensive montane, riparian and limnological habitats.

For more information on the program, please visit: http://web.ubc.ca/okanagan/gradstudies/advising/biology.html . Michael Russello Assistant Professor, Biology Unit of Biology and Physical Geography University of British Columbia Okanagan Kelowna, British Columbia Canada

michael.russello@ubc.ca

 $\begin{array}{c} UCollege London \\ Ageing Development \end{array}$

Ph.D. Studentship Ageing and Development in Caenorhabditis elegans University College London Applications are invited for a Ph.D. studentship available immediately in the Department of Biology, University College London. This position is funded as part of the European Union (Framework 6) Network of Excellence "LifeSpan" that integrates research into development and ageing. The overall aim of the network is to establish the relationship between early-life events, and late-life survival and health, and to identify the mechanisms (mechanistic, evolutionary) that underpin this relationship. The LifeSpan consortium includes many major European laboratories working on ageing and development in a number of countries including the Netherlands, France, Germany, Holland, Switzerland, Greece and the UK. The post will involve more than the usual amount of international travel.

The successful applicant will focus on the relationship between the biology of development and ageing in C. elegans in the laboratory of Dr David Gems (www.ucl.ac.uk/~ucbtdag/). You would join the interdisciplinary Centre for Research on Ageing, and work collaboratively with research groups in the UK and abroad. An ability to work in a busy and interactive environment is essential.

Please direct a letter of application, plus a CV naming three referees (please include email addresses), or enquiries about further details of the project to David Gems. Email: david.gems@ucl.ac.uk.

This position is open to applicants from the European Union, with the equivalent of an upper second class degree, or better, ideally in a biology-, biochemistry-or genetics-related subject. The studentship will cover university fees and stipend.

David Gems, Ph.D. Reader in the Biology of Ageing Department of Biology, University College London Gower Street, London WC1E 6BT, UK. Tel: +44 (0) 207 679 4381 Fax: +44 (0) 207 679 7096

david.gems@ucl.ac.uk david.gems@ucl.ac.uk

UCopenhagen ComparativeGenomics

University of Copenhagen

Ph.D studentships in Comparative Genomics

Five Ph.D. studentships are available at the University of Copenhagen in a newly established Center of Comparative Genomics. The applicants should have a Masters degree in biology, molecular biology, bioinformatics or a related field. The Ph.D. program at the Center is for three years and all students full benefits and a monthly scholarship of approx. 22,000 Danish kr. We seek students with an interest in experimental work on ancient DNA, bioinformatical analysis of Archaea genomic data, bioinformatical analyses of cell death and stress-response genes in plants, structural comparisons of RNA genes and development of statistical methods for comparative genome analyses. The application deadline is March 1st, 2007. Please send a CV, a statement of academic interests, and the names of three scientific referees in PDF file format to Trine Friis (TFToldsted@bi.ku.dk). Applicants who are not native Danish or English speakers should also send recent TOEFL scores. For more information, please see www.evolutionarygenomics.dk/comparativegenomics/

. Rasmus Nielsen <rasmus@binf.ku.dk>

ULaval 2 PopGenetics

Two PhD positions are available to work with an interdisciplinary team investigating the interplay between water circulation, population isolation, and secondary productivity of dominant pelagic and benthic invertebrates in the St. Lawrence estuary (Quebec, Canada). The team includes circulation and bio-physical modellers, a population geneticist, and marine ecologists.

The first PhD project will investigate the relationships between the complex two-layer water circulation in the lower St. Lawrence estuary and the seasonal population dynamics of a dominant copepod, Calanus finmarchicus. This project involves the genetic characterization of two putative seasonal population components with distinct phenology, estimation of secondary production, and analysis of cohort development using stage-specific abundance. Results will be used to quantify the contribution of each population component to the production and large-scale distribution pattern of this species in the area. The candidate must have strong interests in marine ecology, population dynamics and genetics, as well as skills in statistical analysis and/or training in population genetics. The project is co-supervised by Julie Turgeon (Université Laval), and Stéphane Plourde (Department of Fisheries and Oceans, Maurice-Lamontagne research Institute in Rimouski).

The second PhD project will assess the genetic struc-

ture of mussel species in the St. Lawrence estuary in relation to new annual and seasonal circulation pattern and larval transportation models, as well as population age-structure. This PhD project will be paralleled by a similar doctoral project focusing on demographic and metapopulation analyses using the same sampling design. Candidates should have training and interest in spatial and/or genetic analyses. The candidate will be based at Université Laval (Quebec City) and will be under the co-supervision of Julie Turgeon (Université Laval) and Frédéric Guichard (McGill University).

Interested parties should send a statement of interest, and a detailed CV including contact information for two references to Julie Turgeon (julie.turgeon@bio.ulaval.ca; 418-656-3135). The project is funded by NSERC and comes with a scholarship for 3 years. Candidate must be ready to undertake research activities no later than May 2007.

Julie Turgeon Professeur adjoint Département de biologie/Centre d'Études Nordiques Pavillon Vachon (3048 & 4053-lab) Université Laval Québec, Québec, Canada G1K 7P4 Tel: (418) 656-3135 (bureau/office) Tel: (418) 656-2131 x6756 (labo) Fax: (418) 656-2043 Email: julie.turgeon@bio.ulaval.ca

Julie Turgeon @bio.ulaval.ca>

ULouisiana Octocoral Phylogenetics

I have an NSF-funded position available for a student interested in studying biogeography and phylogenetics of deep-sea octocorals. Many deep-sea coral species have apparent broad distributions spanning all oceans, but little work has been done in defining intraspecific variation and limits to geographic ranges. Over the past several years we have accumulated a number of samples from hard substrates below 500 meters depth. In addition to planned future collections, these will form the core of a project to study genetic variability, biogeography and systematics. Octocorals have been shown to have very low rates of mutation in the mitochondrial genome, and this project will involve developing novel nuclear markers for use at different systematic levels, including intraspecific analyses. This project will also be integrated with the NSF-funded Cnidarian Tree of Life project (http://cnidarian.info/).

In addition to an available research assistantship in my lab, the University of Louisiana will be awarding University Doctoral Fellowships and Board of Regents Doctoral Fellowships to students entering the doctoral program in Environmental and Evolutionary Biology in fall 2007. Fellowships are funded for three to four years and carry stipends of \$14,000/9 months - \$24,000/per year with waivers of tuition and most fees. University Fellows are assigned limited teaching responsibilities; there is no teaching requirement for Board of Regents fellows. To be eligible for these fellowships applicants must be a US citizen or have a degree from a US institution.

For more information about the biology graduate program visit http://www.ucs.louisiana.edu/ pll6743/-biogradstudies.htm. The Department of Biology has approximately 25 faculty members and 65 graduate students (http://biology.louisiana.edu/). Areas of strength include ecology, conservation biology, evolution, and marine/coastal biology.

If you are interested in this opportunity, please contact me for additional information.

Scott France -

Scott C. France france@louisiana.edu Department of Biology University of Louisiana at Lafayette P.O. Box 42451 Lafayette, LA 70504

Office: (337) 482-6320 Lab: (337) 482-6494 FAX: (337) 482-5834 http://www.ucs.louisiana.edu/~scf4101/ "To learn and from time to time to apply what one has learned - isn't that a pleasure?" - Confucius, 500 B.C.

france@louisiana.edu france@louisiana.edu

UNewBrunswick ComplexityEvol

A graduate student position is available in the laboratory of Aurora Nedelcu, in the Department of Biology (http://www.unb.ca/fredericton/science/biology/-) at the University of New Brunswick (http://www.unb.ca/), Canada. Research in our laboratory is directed towards understanding general, fundamental issues in evolution such as the evolution of multicellularity, development, cell differentiation, sex, programmed cell death, altruism. Our research is rooted in the framework of transitions in individuality and evolution of complexity (at a conceptual level), and of cellular responses to stress (at a more mechanistic level) (http://www.unbf.ca/vip/amnedelcu/). The experimental model-system we are currently using is the green algal group, Volvocales (see our Volvocales Information Project: http://www.unbf.ca/vip). Highly motivated students with interests in either theoretical or experimental approaches, and previous research experience are encouraged to apply. Interested applicants should e-mail a CV, summary of research experience and interests, unofficial transcripts, and contact information for at least two referees to anedelcu@unb.ca. Applicants should meet the minimum requirements for acceptance in the Biology Department Graduate Program (see http://www.unb.ca/fredericton/science/biology/-Degree_Info/Graduate.html).

anedelcu@unb.ca

UPuertoRico 2 InsectSyst

Two graduate research assistantships available in weevil systematics (UPRM)

Starting August 2007, two M.Sc. research assistantships will be available to participate in a NSF-funded project on the systematics of Neotropical Exophthalmus weevils and related genera (Coleoptera: Curculionidae: Entiminae). Successful applicants will work on either morphological or molecular phylogenetics and conduct field work in Puerto Rico and other Caribbean islands. The project is located at the Biology Department of the University of Puerto Rico at Mayagüez (http://biology.uprm.edu/) an excellent setting for studying tropical biology.

Each assistantship will be granted for 24 months, and includes a monthly stipend, tuition costs, health insurance, and other miscellaneous fees. Applicants should send a statement of interest and curriculum vitae to franz@uprm.edu. Previous experience in morphological and/or molecular insect systematics is preferred, and some proficiency in Spanish or a willingness to learn is desirable.

Nico Franz Department of Biology, UPRM

Antes ahora y siempre COLEGIO University of Puerto Rico at Mayaguez http://www.uprm.edu Nico Mario Franz franz@uprm.edu

UStAndrews Bioinformatics CompBiol

Dear EvolDir Members,

I would be grateful if you would share the below PhD studentship advertisement with any interested parties.

Thank you, Anne Smith

A PhD student position is available in the laboratory of V Anne Smith at the University of St Andrews. Please visit http://biology.st-andrews.ac.uk/vannesmithlab/ for more information on the lab, and feel free to contact me at anne.smith@st-andrews.ac.uk with questions.

A pdf of the below PhD advertisement is down-loadable from: http://biology.st-andrews.ac.uk/-vannesmithlab/genenetsPhD.pdf PhD studentship in Bioinformatics and Computational Biology

Revealing gene regulatory networks

Existence of a gene in the genome is not the whole story-whether or not, how much, and when a gene is expressed (i.e., transcribed into mRNA which is then translated into protein) governs how that gene affects an organism. Recent advances in biological techniques, such as gene expression microarrays, has enabled the development of computational algorithms for revealing the networks controlling gene expression. Such systems level understanding of gene regulation impacts research in areas such as development, evolution, and medicine.

In this studentship, you will explore the development of algorithms for revealing gene regulatory networks from multiple sources of genomic data. You will build off previous research in the group on Bayesian network inference algorithms for revealing gene regulatory networks from gene expression data, developing algorithms capable of integrating other types of information, such as prior biological knowledge, sequence motifs, protein-protein interactions, etc., into this task. The opportunity exists for performing biological experiments to directly test your computational predictions, using our laboratory facilities, which maintain yeast (Saccharomyces cerevisiae) to perform genetic manipulation studies. Particulars of the project's ultimate direction will be modified to fit student interest. Potential directions include: creating a generic framework for integrating multiple sources of genomic information into Bayesian networks; combining Bayesian networks with other algorithms to increase recovery accuracy; combining text-mining for prior information with a Bayesian network; or further developing biological verification techniques.

The studentship will be based at the School of Biology at the University of St Andrews, supervised by Dr. V. Anne Smith. Applicants should have a background in Statistics, Mathematics or Computer Science; or in Biology with strong computational interests. For more details, please contact anne.smith@st-andrews.ac.uk and/ or visit: http://biology.st-andrews.ac.uk/vannesmithlab/ BB-SRC funded: Fees plus stipend (UK residents) or fees only (other EU)

– Dr V Anne Smith School of Biology Sir Harold Mitchell Building University of St Andrews St Andrews, Fife KY16 9TH United Kingdom +44 (0)1334-463368 anne.smith@st-andrews.ac.uk biology.st-andrews.ac.uk/vannesmithlab/

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

UStellenbosch MarinePhylogeography

One full-time PhD (3 years) and one full-time MSc (2 years) studentship are available for 2007 in the Evolutionary Genomics Group at the University of Stellenbosch, South Africa. We are seeking highly motivated students with either a marine biology or molecular biological background or preferably both. The students will use both laboratory and computational techniques to investigate the phylogeographical patterning of southern African intertidal marine organisms, by combining biological and oceanographical information with molecular data in order to better understand the processes driving population structuring, gene flow and speciation among southern African marine species. The students would register at the University of Stellenbosch, but would have the opportunity to spend some of their research time at the University of Berkeley in California. Projects would be jointly supervised by Prof C. Matthee and Dr S. von der Heyden (Stellenbosch) and Dr R. Bowie (Berkeley).

Research studentships are available to South African citizens only, although interested international students for the PhD position are strongly encouraged to apply. The closing date for applications is the 20th February 2007.

In the first instance please contact Prof Conrad Matthee, cam@sun.ac.za. Further information about our group is available on our website: http://academic.sun.ac.za/botzoo/egg/index.htm. svdh@sun.ac.za svdh@sun.ac.za

2007.

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

UToronto EvolGenet

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

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

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

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

UWalesBangor MolecularEvol

PhD Studentship Opportunities School of Biological Sciences University of Wales Bangor

There are currently opportunities for NERC-funded postgraduate studentship programs within the Molecular Ecology and Fisheries Genetics Laboratory (http://biology.bangor.ac.uk/research/mefgl/index.htm) in the School of Biological Sciences, University of Wales, Bangor in the following areas:

1) Genetic basis of life history evolution in Trinidadian guppies, Poecilia reticulata - Prof G R Carvalho and Dr M I Taylor (Ref: GRC/NS07) 2) Cryptic genetic differentiation, phylogenetics and molecular identification of European spiders - Dr S Creer and Dr M I Taylor (Ref: SC/MIT/NS07) 3) Speciation and coexistence in Corydoriadine catfishes - Dr M I Taylor and Dr S Creer (Ref: MIT/SC/NS07)

Eligibility - Eligibility is restricted to European Union (EU) nationals only. UK citizen candidates must have, or expect to receive a 2.1 degree or higher, or a 2.2 degree with a masters qualification. Non-UK EU nationals who have spent the previous three years in the UK undergoing education (undergraduate study or masters) are also eligible to apply. For further guidance, please consult the NERC website (http://www.nerc.ac.uk/funding/available/postgrad/eligibility.asp)

For further information and application forms please contact Debbie Henderson (see below).

Closing date: 2nd March 2007 Application forms and further information from: Ms Debbie Henderson, School of Biological Sciences, University of Wales, Bangor, Gwynedd LL57 2UW, UK. Tel: 01248 382295 Fax: 01248 370731 email: studentship.enquiries@sbs.bangor.ac.uk

Please quote project reference in all correspondence.

Dr Martin Taylor Brambell Building School of Biological Sciences University of Wales, Bangor Gwynedd LL57 2UW Tel: 01248 382344 email1: m.taylor@bangor.ac.uk email2: nitram8@hotmail.com Web page. http://biology.bangor.ac.uk/~bss214/nitram8@hotmail.com

UppsalaU EvolBiol

PhD position in Evolutionary Biology, Uppsala University, Sweden.

A 4-year PhD position in my lab is available on a project examining how sexual conflict influences gene expression in Drosophila melanogaster.

The project will examine several aspects of how gene expression in males and females is influenced by sexually antagonistic selection. For example, how does mating behaviour influence gene expression in females and how does sexual conflict relate to tissue specific patterns of gene expression? The project has a strong cross-disciplinary approach and will combine methods of experimental evolution in the laboratory with analysis of gene expression data generated from microarrays. The position will start 2nd April 2007.

The candidate should have a Masters' degree in evolutionary biology or bioinformatics. The project would be suitable for someone with an interest in sexual selection/sexual conflict and direct experience of bioinformatics and/or programming (such as R). Previous experience of working with insects would be advantageous but is not essential. Candidates should be able to work independently and have good organizational skills. Salary will follow the guidelines from Uppsala University (rising from approx. 15 000 to 22 000 SEK/month in 4 years).

Uppsala is a lively student town and the University has a long tradition of academic excellence. The Evolutionary Biology Centre provides a highly stimulating research environment, having one of the largest concentrations of evolutionary biologists in Europe. This provides great potential for inter-disciplinary research. See the EBC and Dept. Animal Ecology websites: http://www.iee.uu.se/index_eng.php http://www.iee.uu.se/zooekol/default.php?lang=en The working language of my lab and the department is English, knowledge of Swedish is not essential.

HOW TO APPLY: Please email a statement of interest and research goals (2 pages max), CV, publications list, and a transcript of academic courses taken (scanned copies are fine) to ted.morrow@ebc.uu.se Applicants should also arrange to have 2 referees send letters of recommendation to me by the closing date 15 February 2007.

Informal enquiries to ted.morrow@ebc.uu.se are welcome

Edward H. Morrow Department of Animal Ecology Evolutionary Biology Centre Uppsala University Norbyvägen 18-D SE-752 36 Uppsala SWEDEN

E-mail: ted.morrow@ebc.uu.se, Phone + 46 18 471 2676 Fax: +46 18 471 6484 Webpage: http://www.iee.uu.se/zooekol/default.php?type=-personalpage&id=119&lang=en

ted.morrow@ebc.uu.se ted.morrow@ebc.uu.se

VirginiaCommonwealthU 2 GeneFlow

Two Masters level graduate student positions are now available in the laboratories of Dr. Rodney Dyer an Dr. David Chan at Virginia Commonwealth University in Richmond Virginia. These positions will focus on examining insect mediated pollen movement in the understory tree Cornus florida (Flowering dogwood). One student will be housed in my laboratory (http://dyerlab.bio.vcu.edu) and will focus on pollination biology and spatial patterns of gene flow among C. florida individuals within an established population at the Rice Center for Environmental Life Sciences (http:/-/www.vcu.edu/rice/). This student that fills this position is expected to have a degree in biology and will be expected to conduct both field and laboratory work and have some familiarity with use of molecular markers. Additional information regarding the graduate program in the Biology Department can be found at http://www.has.vcu.edu/bio/graduate/ms_program.html . A second student will work under the advisement of Dr. David Chan in the Department of Mathematics (http:/-/www.math.vcu.edu/faculty/chan.html) and will focus on expanding our current models of gene movement. The student for this position should have a degree in mathematics or related field and should have some modeling experience. Additional information regarding the graduate program in Mathematics can be found at http://www.math.vcu.edu/info/masters.html . Despite being housed in alternate academic Departments, these students will join an established interdisciplinary group of researchers working on current issues in population genetics. Support for both of these positions include tuition remission and competitive stipend. Individuals interested in these positions should contact Dr. Rodney Dyer at rjdyer@vcu.edu or Dr. David Chan

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at dmchan@vcu.edu for further information. The Dyer laboratory has the capacity for high throughput DNA extraction and genotyping as well as its own computational cluster. Additional resources available at VCU include the Center for the Study of Biological Complexity (http://www.vcu.edu/csbc/), the Center for Environmental Studies (http://www.vcu.edu/cesweb/), and the Rice Center for Environmental Education (http://www.vcu.edu/rice/). VCU is a Category-1 research institution and an equal opportunity employer.

Rodney J. Dyer, PhD Department of Biology Virginia Commonwealth University http://dyerlab.bio.vcu.edu rjdyer@vcu.edu rjdyer@vcu.edu

YorkU PlantEvolGenomics

Several graduate student positions are available in the

laboratory of Stephen I. Wright at York University, Toronto, Ontario, Canada. We study various aspects of plant genome evolution, including transposable element evolution, the population genetics of local adaptation, evolution of base composition, and coevolution between nuclear and cytoplasmic genomes. More information about our research can be found at www.yorku.ca/stephenw. Applicants should have a strong background in evolutionary biology and/or molecular biology, and have interests in genomics and evolution. The biology department at York university has diverse strengths in Ecology, Evolution and Genomics, and the lab has state-of-the-art computational and molecular resources.

Applicants should submit a transcript and CV by e-mail to stephenw@yorku.ca. Informal enquiries are welcome.

Stephen I Wright, PhD Alfred P. Sloan Fellow Assistant Professor Department of Biology York University 4700 Keele St. Toronto, ON Canada M3J 1P3 Phone: (416) 736-2100 ext. 20213 (lab: ext. 44034) Fax: (416) 736-5698

 $stephenw@yorku.ca\\\ stephenw@yorku.ca\\$

Jobs

Albany NYStateMus ImagingTech26	MountainLake FieldManager 3-
Arlington Virginia DirectorSpeciesProgram26	ScrippsInstOcenaography MarineConservation3
AustriaIIASA EvolModels27	StKilda FieldAssist SoaySheep
Cameroon Tropical conservation	SwissOrnithologicalInst BirdMigration 30
ChicagoBotanicGardens SummerWork29	UAkron EvolBiol3
DenaliNP UndergradSummerJob AlaskanPlantChange	UAmsterdam PopulationBiol3
29	UArizona USGS Phenology
France FieldAssist	UCaliforniaMerced SystemsBiol38
INRA France CoccidiaVirulence30	UCaliforniaSanDiego EvolBiol40
INRA Rennes PopGenetics30	UCollegeLondon EvolOfInsects40
INRA Sophia Antipolis InvasionBiology31	UHelsinki TheoEvolutionaryEcology4
InstZoology London EnvironmentalChange31	UHull EvolBiol4
LundyIslandAssistant	UIdaho MicroscopeFacilityManager42
MRCHarwellUK MouseSystemsBiology32	UMaryland MarineMolEvol ResAssist
MRC HumanGenetics DatabaseManager	UMemphis Bioinformatics4
MichiganStateU StatGenetics	UMunich MolEvol4
MississippiStateU EvolBiol34	UNottingham HostParasite ResAssist 4
Montana FieldAssist EvolEcolBirds	UOslo FieldAssist GreatTitEvol4

UPuertoRico RestorationEcology45	UppsalaU V
USheffield ResAssist EvolSex45	
UToronto Bioinformatics	
UTuebingen EvolBiolOfPlantsFungi	

Albany NYStateMus ImagingTech

RESEARCH AND COLLECTIONS TECHNICAN, SG-14; Location: Albany, NY; Salary: \$35,428* (*Leads to a maximum salary of \$45,241. based on annual performance advances.)

The New York State Museum seeks applicants for a permanent Research and Collections Technician, Grade 14, in collections imaging. Under the supervision of the Assistant Director of Research and Collections for Collections, the technician's duties may include, but are not limited to: (1) Using various hardware and software packages, including the Auto-Montage Pro macroimaging system, to capture macro- and microscopic electronic images of collections objects; (2) Assisting Museum curators and collections managers with electronic imaging of collections objects and managing the electronic images database; (3) Working with staff to ensure that images are uploaded into the Museums collections management database; (4) Working with curators and Museum ITS staff to make images accessible through the Museum's website. MINIMUM QUALI-FICATIONS: Bachelor's degree and one year of experience in assisting in scientific or historical research in the field or in artifact/specimen care and maintenance in the laboratory or museum. CONDITIONS OF EM-PLOYMENT: This will be a provisional appointment pending a new Civil Service examination. APPLICA-TION DEADLINE: Qualified candidates should send a resume, a list of three references, and letter of interest by January 30, 2007 to: Dr. John P. Hart Director, Research & Collections Division New York State Museum 3140 Cultural Education Center Albany, NY 12230 Fax (518) 486-2034 E-mail: jhart@mail.nysed.gov An Affirmative Action/Equal Opportunity Employer

Jason Cryan <JCRYAN@MAIL.NYSED.GOV>

 $\begin{array}{c} \textbf{Arlington Virginia} \\ \textbf{DirectorSpeciesProgram} \end{array}$

UppsalaU VolunteerFieldAssist47

http://www.natureserve.org/job/jobNSspeciesprogram.jsp JOB TITLE: Director, Species Program EMPLOYER: NatureServe SU-PERVISOR: Vice President and Chief Scientist LOCATION: Arlington, Virginia DATE POSTED: November 2006 CLOSING DATE: Open until filled

INSTITUTIONAL BACKGROUND: NatureServe is a non-profit conservation organization that provides the scientific information and tools needed to help guide effective conservation action. NatureServe and its network of natural heritage programs are the leading source for information about rare and endangered species and threatened ecosystems. NatureServe represents an international network of biological inventoriesknown as natural heritage programs or conservation data centers-operating in all 50 U.S. states, Canada, Latin America and the Caribbean. Together we collect and manage detailed local information on plants, animals, and ecosystems, and develop information products, data management tools, and conservation services to help meet important conservation needs. The objective scientific information about species and ecosystems developed by NatureServe is used by all sectors of society, including conservation groups, government agencies, corporations, academia, and the public, to make informed decisions about managing our natural resources. NatureServe is headquartered in Arlington, Virginia, with regional offices in Boston, Minneapolis, Durham, Boulder, and Ottawa, Ontario. Nature-Serve offers a results-oriented and collaborative workplace where a common mission provides focus and excitement and where staff is empowered to take ownership of projects and mission success.

SUMMARY OF POSITION: The Director, Species Program provides leadership in the strategic growth of NatureServe's botanical and zoological databases and in the development of scientific methods, analyses, and information products designed to promote the lasting conservation of plant and animal species. This position will guide and support efforts to understand and document the status, distribution, and conservation requirements of plant and animal species, and will develop innovative approaches to meet the species-level information needs of conservation and natural resource managers. The Director, Species Program works to ensure the quality and consistency of NatureServe species data by fostering collaboration between NatureServe and bi-

ologists across the network of natural heritage programs and conservation data centers, and by providing leadership and guidance in the development, management, analysis, and sharing of species information.

This position works together with partners in government agencies, academic institutions, and other conservation organizations to develop and maintain high quality scientific data, and has responsibility for public and private fundraising in support of NatureServe's species databases and related work. The Director, Species Program supervises a department of approximately 10 scientific staff.

DUTIES: Provide leadership in the strategic development of NatureServe's zoological and botanical databases, as well as information products and conservation services based on these data. Carry out projects designed to maintain and advance the organization's species data holdings including taxonomy, conservation status, threats, distribution, population viability and mapping.

Working in collaboration with biologists across the NatureServe network and partner organizations, take a leadership role in advancing standards, methods, and analytical tools used to document and understand the condition and location of biodiversity, including approaches to mapping species populations and to modeling predicted distributions under current and future ecological and climate scenarios.

Represent NatureServe at selected conferences and meetings and serve as a liaison with key national and international organizations, federal agencies, professional societies, and academic institutions, such as the IUCN Red List Partnership, the Global Biodiversity Information Facility, and the Integrated Taxonomic Information System. Identify information needs of key partners and clients and develop and implement projects and initiatives designed to better meet those needs.

Provide scientific support and technical assistance in the development and implementation of conservation service-oriented and technology development initiatives and projects being carried out by NatureServe. Collaborate with NatureServe's ecological science staff to develop approaches for more effectively integrating species and ecological data in the design and implementation of biodiversity databases, habitat mapping efforts, and conservation assessment and planning projects.

Improve the quality and coverage of species data across the NatureServe network by identifying key data gaps and promoting work designed to fill 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

AustriaIIASA EvolModels

Summer Fellowships for Young Scientists at the International Institute for Applied Systems Analysis

Funding is available for PhD students interested in three months of collaborative research on

Evolutionary and Ecological Models

in population ecology, evolutionary ecology, community ecology, spatial ecology, and fishery ecology.

Young scientists from all countries are eligible for stipends, provided by IIASA's Evolution and Ecology Program, contributing to travel and accommodation costs. Students from Austria, China, Estonia, Finland, Germany, Japan, the Netherlands, Norway, Poland, Russia, Sweden, and the USA are eligible for fellowships providing travel, accommodation, and living expenses.

Summer research projects are invited in any of the following areas

Fisheries-induced Evolution Adaptive Speciation Adaptive Dynamics Food Web Evolution Evolution of Cooperation Evolutionary Conservation Biology Spatially Explicit Evolutionary Models Moment-based Spatial Models Artificial Evolution

Previous experience with implementing and studying evolutionary or ecological models will be an important asset. Informal inquiries about specific research interests and plans can be directed to Ulf Dieckmann (dieckmann@iiasa.ac.at).

Online applications need to be completed before January 15, 2007.

Since 1977, the annual Young Scientists Summer Program (YSSP) of the International Institute for Applied Systems Analysis (IIASA) in Laxenburg, Austria, has attracted more than 1300 students. The YSSP 2007 will take place from June 4 to August 31, 2007. IIASA is located in the former summer palace of Austria's royal family, ca. 15 km south of Vienna. IIASA's summer program offers exceptional opportunities for acquiring experience in an international and interdisciplinary research environment. Research training is based on personal interaction with advising senior scientists, and

typically leads to a publication in an international journal (as well as to a chapter in a candidate's PhD thesis). Some useful links:

- + http://www.iiasa.ac.at/Admin/YSP/reg-info/more_about_the_program.html Details about the summer program, and online application
- + www.iiasa.ac.at/Research/EEP Information about IIASA's Evolution and Ecology Program
- + www.iiasa.ac.at/Research/EEP/Students.html Examples of successful YSSP projects
- + www.iiasa.ac.at/docs/IIASA_Info.html General information about IIASA

Ulf Dieckmann Program Leader Evolution and Ecology Program International Institute for Applied Systems Analysis A-2361 Laxenburg Austria

Email dieckmann@iiasa.ac.at Phone +43 2236 807 386 Phone secretary +43 2236 807 231 Fax +43 2236 807 466 or +43 2236 71313 Web www.iiasa.ac.at/~Research/EEP Online reprints www.iiasa.ac.at/~dieckman European FishACE Network www.iiasa.ac.at/~Research/EEP/FishACE dieckman@iiasa.ac.at

Cameroon Tropical conservation

SCIENTIFIC SUPERVISOR PROJET GRANDS SINGES CAMEROON

The Centre of Research and Conservation (CRC) of the Royal Zoological Society of Antwerp (RZSA) is looking for a SCIENTIFIC SUPERVISOR for its PROJET GRANDS SINGES (PGS) field project based in Cameroon.

POSITION SUMMARY The scientific supervisor will be responsible for maintaining the high profile and quality of the scientific work of the Projet Grands Singes (PGS) run by the CRC/RZSA in Cameroon. This task includes the supervision of the Cameroonian staff of young researchers and PhD students; the supervision of the coherence and quality of research projects of foreign volunteers, MSc and PhD students that are integrated in the overall objectives of Projet Grands Singes, leadership in writing publications and pro-activeness in correspondence with current and potential partners and funding agencies. The scientific supervisor will be requested to take final responsibility in Cameroon with regard to logistics and accountability. Yet, he/she will

be assisted by an experienced Cameroonian team, Zoostaff and the founder of Projet Grands Singes.

PGS is an Integrated Conservation and Development Project (ICDP) that combines scientific research, the protection of great apes and other key species and sustainable hunting in the periphery of the Dja Faunal Reserve (DFR) in Cameroon. PGS uses scientific research in behavioural ecology and population ecology as a major tool to achieve long lasting conservation and development objectives in close collaboration with the local communities. Great ape research is now mainly focused on socio-ecology and the human-wildlife conflict. However other research projects, even outside the field of primatology are greatly welcomed. The scientific supervisor will be based in Yaoundé, but he/she will join the Cameroonian staff in the field on a regular basis. Hence, the supervisor should be able to work in a harsh physical environment that requests understanding of the local reality in order to face potential threats such as poaching and logging.

TASKS Be responsible for the quality of scientific activities and output of PGS. Write publications and provide guidance to PhD students for their research and writing of publications. Maintain close collaboration with staff responsible for accountancy and logistics and take end responsibility for accounts and logistical set up in Cameroon. Write grant proposals and maintain international contacts with partners and funding sources. Represent and report to the CRC of the RZSA.

PROFILE Post doc within a relevant scientific discipline; Preferably proven research skills in behavioural and evolutionary ecology and/or community based faunal resource management; Proficiency in use of GIS and related fields is a plus; A good publication record; Field experience, preferably in Central Africa; Good knowledge of French and English; Strong written and oral communications with the ability to address diverse parties (e.g. governmental authorities, representatives of the local people, international partners and funding sources; national research institutes and universities).

WORKING CONDITIONS The scientific supervisor will start on 1 May 2007 preferably, but the position is open until filled. The successful candidate will be based in Yaoundé in the PGS-office annex apartment. Lodging is provided but will be shared with visiting students/researchers/volunteers. The supervisor will visit the field at least every two months. The contract is a fixed term 1 year contract.

Review of applications will begin on February 15, 2007 and will continue until position is filled. Candidates should respond ASAP, preferably by e-mail to Dr. Zjef Pereboom (zjef.pereboom@zooantwerpen.be)

or by post/fax to: Dr. Zjef Pereboom, Head of Research, Centre for Research and Conservation, Royal Zoological Society of Antwerp, Koningin Astridplein 26, B-2018 Antwerp, Belgium, Tel. +3232024580, Fax: +3232024547

More information about the CRC's activities at http://webh01.ua.ac.be/crc/ Zjef Pereboom Zjef Pere

ChicagoBotanicGardens SummerWork

Summer Opportunity for Science Educators Paid field research experience & professional development

Conduct cutting-edge field research in ecology and evolution and help design a field research curriculum for high-school science students. Do it this summer!

-work with field biologists at a prairie research site – learn about the tallgrass prairie ecosystem –enjoy out-door recreational opportunities –housing and travel covered plus modest stipend

To learn more and to apply, visit the Echinacea project web page: http://echinacea.umn.edu/opportunities.htm#k12. Contact Stuart Wagenius [swagenius@chicagobotanic.org] with questions. Deadline for letter of interest: January 22nd.

SWagenius@chicagobotanic.org

$\begin{array}{c} \textbf{DenaliNP UndergradSummerJob} \\ \textbf{AlaskanPlantChange} \end{array}$

Hello all,

This message is for those of you who may know a student interested in working as a technician on a field-intensive vegetation project in interior Alaska's parklands. We are currently seeking applications for talented aspiring field botanists or ecologists with an interest in landscape change and vegetation-landscape relationships. This program involves establishing and measuring permanent vegetation plots across three large natural areas in Alaska's interior - Denali NP, Wrangell-St. Elias NP and Yukon-Charley Rivers NP. It provides

folks a great opportunity for learning the flora and vegetation of Alaska, and acquiring skills in performing field measurements and vegetation observations. I will be hiring four crews to work in these parks. In addition, there are opportunities for students to develop their own project as a part of this large on-going monitoring project - either for graduate degree, or as an independent study.

The jobs are advertised on the web - at USAjobs website: http://www.usajobs.opm.gov or by contacting me directly at this email or at the phone number below. This is a great opportunity for the right motivated person who loves working in the backcountry and has a good eye for plant taxonomy.

Please distribute this notice to anyone who might be interested!

cheers,

Carl

Carl Roland Plant Ecologist Denali National Park & Preserve (907) 455-0672

Matt Olson <matt.olson@uaf.edu>

France FieldAssist

Field assistants needed

We are looking for field assistants to participate in behavioural ecology and conservation projects between April and June 2007 at the Research Station Petite Camargue Alsacienne in France (www.camargue.unibas.ch).

Three positions are available in an international field project on communication and behavioural ecology in nightingales (Luscinia megarhynchos). Since 1997, we are investigating the functions of singing as well as patterns of territory settlement, pairing success and extrapair paternity in a study population of about 200 territorial males. The project is run by Dr. Valentin Amrhein (University of Basel, Switzerland), Dr. Marc Naguib and Rouven Schmidt (both at the University of Bielefeld, Germany).

To investigate vocal communication strategies of nightingales, we record songs (including nocturnal song) and conduct playback experiments. The field assistants will also participate in a radio telemetry study, systematically survey territory settlement and singing activity, and help capturing and banding the birds.

One additional position is available in a conservation project aiming to re-introduce European swamp turtles (Emys orbicularis) in the northern part of Alsace. The work will include caring for the about 80 swamp turtles living in the station's outdoor enclosures, observing breeding behaviour, and locating nests.

The field site is situated at the Petite Camargue Alsacienne in France, about 10 km north of Basel (Switzerland). We cannot cover travel expenses, but we offer free accommodation and use of the infrastructure at the research station. Field assistants will receive 400 Euros to cover living expenses.

Field assistants are expected to stay for the entire field season from the beginning of April to the end of May 2007 (for the swamp turtle project: mid May to end of June). Field work will be demanding and will be conducted during the day and at night. Field assistants are expected to work on their own at night and thus should love working in dark and lonesome places only accompanied by singing nightingales and egg-laying swamp turtles.

The language at the station will be English, but in the swamp turtle project some knowledge of French or German will be helpful. The positions will be filled as soon as possible. Please send applications in English (letter of motivation, two references and curriculum vitae) to the following address:

pca.recherche@orange.fr

INRA France CoccidiaVirulence

Dear Colleague

We have a permanent position on "Virulence of coccidia, a parasite protoza of chicken" at the National Institute for agronomic research-INRA. The young senior researcher (CR1)= PhD + two postdocs on a minimum) needs good experience on molecular biology and possibly cell biology. Additionnal knowledge on Apicomplexa protozoa (Coccidia, Toxoplasma etc..) would be an advantage. Deadline for inscription: end of February 2007. Contact: Jacques Cabaret: cabaret@tours.inra.fr. Information on the INRA website

It is a good post for an evolutionnary biologist because: i) two types of individuals are found: rapid cycle ones which are the ones that induces resistance to reinfection and "wild" strains that need double time for

completing life-cycle. This has been shown in several species (and more easily in rabbit species). . ii) Resistance to drugs is fairly common and thus may allow sohisticated experimental infections based on virulence and or resistance to drugs. Jacques

Best regards Jacques Cabaret

Jacques CABARET <Jacques.Cabaret@tours.inra.fr>

INRA Rennes PopGenetics

Permanent position in population genetics of clonal organisms, Rennes (France)

The French Agriculture Research Institute (INRA) seeks applicants for a permanent position of junior scientist ("Chargé de Recherche CR2?) on population genetics of clonal organisms in Rennes (France).

Clonal organisms among which many crop pests such as aphids display peculiar structure and evolution of their genes, genotypes and populations that are not fully taken into account in available population genetic models. The successful candidate is expected to perform theoretical population genetic analyses including computer simulations using recent advances in the fields of population genetics and phylogeny. Respective projects primarily aim to assess the impact of sex and recombination on genomes, populations and species. This will be facilitated by the near release of the first complete aphid genome sequence. The successful candidate should have a strong background in population genetics and evolutionary biology (PhD), have computer programming skills and be interested to work in an interdisciplinary environment. Interested scientists with a molecular genetics background being able to perform statistical analyses on population genetic data and with a good theoretical genetics background are also encouraged to apply. Work will be conducted in a research team of >20 persons including 9 scientists with complementary skills in insect ecology, population genetics and dynamics, functional and evolutionary genomics. Working place is located near Rennes, in Brittany (France).

For more information contact: Dr. Jean-Yves RASPLUS: rasplus@ensam.inra.fr. For application, visit: http://www.international.inra.fr/-join_us/positions/permanent_positions/-1st_and_2nd_class_junior_scientist_open_competitions

. - Dr Jean-Christophe SIMON UMR 1099 BiO3P,

INRA-Agrocampus Rennes BP 35327, 35653 Le Rheu Cedex France

phone: 33 (0)2 23 48 51 54 fax: 33 (0)2 23 48 51 50 jean-christophe.simon@rennes.inra.fr http://www.rennes.inra.fr/umrbio3p/ jean-christophe simon < jean-christophe.simon@rennes.inra.fr>

INRA Sophia Antipolis InvasionBiology

Permanent position of a junior scientist in invasion biology, Sophia Antipolis (French Riviera, France)

The INRA institute (National Agronomic Research Institute) is recruiting a tenured 2nd class Junior Scientist (CR2) through an open competition (appointments in 2007).

Although biological invasions represent a major threat to biodiversity, human health and agriculture, the critical demographic and genetic parameters responsible for their success are poorly known because of methodological and experimental limitations. The successful candidate will conduct research to estimate these parameters in different contexts of biological invasion, whether the introduction is accidental as for crop pests, or intentional as for biological control agents. In the latter case, controlled and designed experiments in natura are feasible to test theoretical hypotheses on invasion biology more thoroughly. The successful candidate will conduct experimental work in the lab (and/or in natura if beneficial insects are used as biological models) to test evolutionary hypotheses in the context of invasion biology. He will also conduct a posteriori descriptions of invasions using population genetics tools. The aim is to study the influence of the following factors on the success of the different steps of invasion:

- genetic modification versus phenotypic plasticity
- random (genetic drift) versus deterministic evolution (e.g. selection) of adaptive characters (e.g. insecticide resistance of pest species, virulence and sex-ratio of beneficial parasitoids)
- genetic versus demographic factors
- hybridization of introduced populations, successive introductions, and secondary contacts between invasive populations

The successful candidate will work in Sophia-Antipolis (near Monaco, Cannes and Nice) France, in a team

of 15 people (Team ?Biologie des Populations en Interaction?), a description of which can be found at http://bpi.sophia.inra.fr/ For details regarding application, calendar of the competition, conditions required to apply and description of the salary, please visit: http://www.international.inra.fr/-join_us/positions/permanent_positions/-lst_and_2nd_class_junior_scientist_open_competitions

– Flavie Vanlerberghe-Masutti UMR 1112 INRA-UNSA "R.O.S.E." 400, Route des Chappes BP 167 06 903 Sophia Antipolis CEDEX - FRANCE tel : (33) 4 92 38 65 53 fax : (33) 4 92 38 64 01 e-mail: fvl@sophia.inra.fr http://bpi.antibes.inra.fr/ http://www.antibes.inra.fr/reid Flavie Vanlerberghe-Masutti

<Flavie.Vanlerberghe@sophia.inra.fr>

InstZoology London EnvironmentalChange

Institute of Zoology Zoological Society of London

Postdoctoral Research Fellowship

>From GBP 27,290 (inc London Weighting)

Applications are invited for a postdoctoral research fellowship available from 1st April 2007. This position is for an outstanding early-career researcher and is part-funded for 5 years by Research Councils UK under the RCUK Academic Fellowship scheme (http://www.rcuk.ac.uk/acfellow/). It is expected that the successful candidate, subject to satisfactory performance, will join the permanent research staff at the conclusion of the fellowship.

The fellow will be expected to develop a research programme designed to understand the nature of evolutionary responses to environmental change, particularly how anthropogenic drivers of environmental change affect wild populations, species and communities. Applicants adopting a population genetics approach will be favoured. For further information please contact bill.jordan@ioz.ac.uk.

Candidates must have a PhD. and be able to demonstrate research excellence and the potential/ability to raise external grant funding. Candidates overall research interests should be compatible with the Institute of Zoology's research (http://www.zoo.cam.ac.uk/ioz). Candidates will be required to carry out some outreach to schools.

Applications should include a cover letter, an outline of proposed research of no longer than one page, a CV, and the names and full contact details of three referees.

Applications should be forwarded to HR Dept., ZSL, Regent's Park, London NW1 4RY (HR@ZSL.ORG)

CLOSING DATE: 23rd February 2007

Read about our work on http://www.zsl.org

REGISTERED CHARITY NO. 208728 Dr W C Jordan Institute of Zoology Zoological Society of London Regent's Park London NW1 4RY Tel.: 020 7449 6631 Fax.: 020 7586 2870 Email: bill.jordan@ioz.ac.uk or w.jordan@ucl.ac.uk Home page: http://www.zoo.cam.ac.uk/ioz/people/jordanb.htm w.jordan@ucl.ac.uk w.jordan@ucl.ac.uk

LundyIslandAssistant

Field Assistant position on Lundy Island, UK.

Fieldwork assistant required from early May through to early/mid July 2007 to aid in a PhD study on behavioural ecology of house sparrows on Lundy Island. Bristol Channel, UK. This is a paid position and a wonderful opportunity for those interested in studying wild animal populations to gain some hands-on experience. Previous field work and/or bird handling experience is beneficial but not essential. More importantly, I am looking for someone with a positive attitude, interpersonal skills (required to get along with other people on the island) and who does not mind getting up early! Daily routines involve checking nest boxes, nest box watch and setting up video cameras. Both physically and mentally challenging so be prepared! Travel within the UK, accommodation on the island and food will be covered (if from oversea, some of the airfare may be covered).

Lundy Island is a beautiful place, especially in the summer, and has a great array of wildlife, for more information on Lundy itself check these websites: http://www.english nature.org.uk/virtualtours/Lundy/Lundy_Home.htm. For more information on the project see this website: http://www.shef.ac.uk/misc/groups/molecol/lundyparttwo.html or contact me directly at bop06irc@sheffield.ac.uk with any questions.

Please send a letter of interest, resume, and names, telephone numbers, and E-mail addresses of 2 references to

IAN CLEASBY, AS SOON AS POSSIBLE, preferably by email (EM:bop06irc@Sheffield.ac.uk). Address: Ian Cleasby Dept. of Animal and Plant Sciences, Alfred Denny Building, University of Sheffield, Sheffield, UK, S10 2TN.

bop06irc@sheffield.ac.uk bop06irc@sheffield.ac.uk

$\frac{MRCHarwellUK}{MouseSystemsBiology}$

RESEARCH OPPORTUNITY - MRC MAMMALIAN GENETICS UNIT, OXFORDSHIRE, UK

Postdoctoral Researcher to work on systems biology in the mouse.

We are seeking a Research Assistant who will be responsible for developing systems biology approaches to the analysis of mouse models relevant to human disease. The project forms part of the EU-funded ENFIN project (http://www.enfin.org) which aims to develop systems biology infrastructure in Europe and will be highly collaborative, involving interactions both with experimental groups within the Unit and with other ENFIN partners. The person appointed will be based in the Bioinformatics Group at Harwell and will have a strong mathematics or mathematical biology background, an interest in biology and the application of mathematics to biological problems, and some computing/programming expertise. There may be opportunities to participate in experimental testing of in silico models in addition to computational analysis.

See the bioinformatics group website http://-informatics.har.mrc.ac.uk/ for more information on current research in the group and http://www.mgu.har.mrc.ac.uk/for more information on the Unit's research. Please contact John Hancock (j.hancock@har.mrc.ac.uk).

This post is funded by a grant from the EU with a fixed end point of 14 November 2008, with the possibility of extension for a further 1-2 years.

Dr John M. Hancock Head of Bioinformatics, MRC Mammalian Genetics Unit, Harwell, Oxfordshire OX11 0RD, U.K.

E-mail: J.Hancock@har.mrc.ac.uk Telephone: +44 (0)1235 84 1014 Fax: +44 (0) 1235 84 1210 WWW: http://informatics.har.mrc.ac.uk/ Personal Page: http://informatics.har.mrc.ac.uk/

jmhwww/johnhancock.html j.hancock@har.mrc.ac.uk j.hancock@har.mrc.ac.uk

MRC HumanGenetics DatabaseManager

Database Systems Manager

The MRC Human Genetics Unit is seeking to recruit a Database Systems Manager. The Unit is at the fore-front of research into human genetics and its role is to advance the molecular and cellular understanding of genetic factors implicated in human disease and normal and abnormal development. It is also one of the largest UK MRC research establishments supporting approximately 220 scientists.

The post holder will be expected to interact with members of the Bioinformatics and Computing staff, as well as the Unit scientific staff and would be expected to make independent decisions on database issues. We envisage duties including the design of user interfaces in cooperation with users, installation/maintenance of bioinformatics applications/databases and provision of advice/training to users. There will also be opportunities to participate in a broad range of Unit scientific projects in a bioinformatics support role. This post would suit a biologist with good programming skills or a computer scientist with strong interests in biology/bioinformatics.

Starting salary would be in the range £24,993 - £26,829. This is a permanent position with a 6 months probationary period. We also offer optional membership of the MRC pension scheme and 30 days paid annual leave.

Full details of the position can be found in the job description which is available at http://www.hgu.mrc.ac.uk/StaffInf/Jobs/. Informal enquiries can be made to Dr Colin Semple (email: Colin.Semple@hgu.mrc.ac.uk).

For an application form, please email scotland.recruitment@ssc.mrc.ac.uk or contact Jill King on 01793 301158, quoting reference number 2007-012/HGU.

Closing Date: 2nd February 2007.

The MRC is an Equal Opportunities Employer.

MRC Human Genetics Unit, Edinburgh EH4 2XU, UK. http://www.hgu.mrc.ac.uk/ – Dr Colin A.

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

MichiganStateU StatGenetics

Statistical/Quantitative Genetics and Genomics

The Departments of Animal Science and Fisheries and Wildlife at Michigan State University invite applications for an academic year, tenure-track position in Statistical/Quantitative Genetics and Genomics at the assistant professor level. The primary focus of this position is research yet exemplary performance is expected in the areas of teaching, outreach, and advising. The successful candidate will join a strong interdisciplinary campus-wide program in molecular, quantitative and evolutionary genetics and a well-established programmatic area in animal genomics.

QUALIFICATIONS: A Ph.D. in Genetics, Statistics, Mathematics, Animal Breeding or similar discipline and post-doctoral experience, with strong statistical and mathematical foundations. Strong quantitative, excellent communication and interpersonal skills are also essential. Preference will be given to candidates with research experience at the interface between genetics and genomics. In particular, we seek an individual devoted to the development and application of statistical methods that further bridge quantitative and molecular genetics research of complex traits for domestic and natural animal populations.

DESCRIPTION: Develop POSITION extramurally-supported research program at the interface among statistical, quantitative, and molecular genetics, focusing on applications to domestic and natural animal populations. We expect the successful candidate to develop and apply theory and methodology that account for the behavior of suites of genes in research areas including, but not restricted to, geneticenvironmental interactions, linkage disequilibrium, epistasis, analysis of quantitative trait loci (QTL) and polygenic traits, coalescence theory, genetical genomics, or marker-assisted selection. Extensive collaboration with empirical animal geneticists and biologists in faculties of both departments is expected. The successful candidate will teach courses in quantitative genetics and genomics each year, direct and advise students, serve on faculty committees, and provide outreach on statistical genetics and genomics to diverse state, national, international audiences interested in both domesticated and natural animal populations.

APPLICATION DEADLINE: January 31, 2007 or until a suitable candidate is found. Salary is competitive and commensurate with education, experience, and demonstration of ability. Interested persons should submit a cover letter, statements of research interests and teaching philosophy, a curriculum vitae, and examples of scientific writing. Candidates should arrange to have these materials and three letters of reference sent to:

Dr. Robert J. Tempelman, Chair, Search Committee c/o Kathy Tatro Department of Animal Science, 1290 Anthony Hall, Michigan State University, East Lansing, MI 48824-1225. Tel: (517) 355-8417

Application materials can also be emailed to tatro@msu.edu

Michigan State University is an equal opportunity/affirmative action employer.

tempelma@msu.edu tempelma@msu.edu

MississippiStateU EvolBiol

FACULTY POSITIONS IN BIOLOGICAL SCIENCES

The Department of Biological Sciences at Mississippi State University (www.msstate.edu/dept/biosciences) invites applications for Assistant Professor tenure-track positions that begin August 16, 2007. These faculty members will contribute to one of three focus areas: Cell Biology/Genetics, Ecology/Evolution or Microbiology/Immunology. The scientific infrastructure at Mississippi State University includes focus areas in proteomics, genomics and digital biology, along with these supporting facilities: the Life Sciences & Biotechnology Institute (www.mafes.msstate.edu/biotech), the Electron Microscope Center (www.msstate.edu/dept/emc) and the GeoResources Institute (www.gri.msstate.edu). Successful candidates will develop externally funded research programs in any of the above-mentioned areas, direct graduate students and contribute to the teaching mission of the department. Minimum requirements include a Ph.D. in a related biological sciences field, but all-but-dissertation candidates will be considered. To apply, send CV, reprints of three representative publications, a concise statement of current and future research interests (1 page), and identify the position/area you are applying for plus relevant areas of teaching competence. Applicants should also arrange for at least three letters of reference to be submitted on their behalf. Screening will begin January 15, 2007 and will continue until the positions are filled. Send applications (hard copy) to Dr. Nancy Reichert, Interim Head, Department of Biological Sciences, P.O. Box GY, Mississippi State University, Mississippi State, MS 39762. (FacultySearch@biology.msstate.edu)

Mississippi State University is An Affirmative Action/Equal Opportunity Employer

WDiehl@biology.msstate.edu WDiehl@biology.msstate.edu

Montana FieldAssist EvolEcolBirds

FIELD RESEARCH ASSISTANT: EVOLUTIONARY ECOLOGY OF BIRDS A field research assistant position is available from April 1st - July 31st 2007 on a long-term research project on the evolutionary ecology of western and mountain bluebirds in western Montana. Primary duties include nest monitoring, morphological measurements, blood sampling for DNA and hormone analyses, detailed behavioral observations, and territory mapping. The ideal applicant is highly reliable, can work independently, has a strong interest in avian ecology and evolution, is able to hike several miles a day in mountainous terrain with field equipment, and has a reliable personal vehicle for short commute to the study site. Stipend is \$1400-1800/mo depending on experience, housing not included. We can provide some reimbursement for travel to Montana. To apply, please email Dr Renee Duckworth (renee.duckworth@ed.ac.uk) a cover letter, resume, and list of three references. Application review will start on Feb 7th and will continue until position is filled. See www.duke.edu/~rad3 for more information about the projects.

rad3@duke.edu rad3@duke.edu

MountainLake FieldManager

POSITION OPEN - Please Post or Distribute

FIELD STATION MANAGER Mountain Lake Biological Station, University of Virginia Annual Salary Range: \$30,146 - \$61,872 Link to this announcement: http://mlbs.org/positions.html http://mlbs.org/positions.html The Mountain Lake Biological Station (http://- mlbs.org/>www.mlbs.org), Department of Biology, University of Virginia is accepting applications for a resident Station Manager to oversee daily operations. This position will support the research, educational and outreach activities at the Station and will work closely with the Associate Director, Director and other faculty members, staff, students and visiting researchers. MLBS is a 100-bed residential full-service biological field station on 642 forested acres of a 4,000ft mountaintop in the rural Appalachian Mountains of southwest Virginia - but just a half hour drive west of Blacksburg Virginia (home of Virginia Tech.). The Station Manager will provide a wide range of functions that include managing station housing and dining operations and the station office. Manager also provides technical, logistical, and administrative support to research and teaching programs, supervises summer staff, coordinates subcontracts and station projects, and supervises general activities of the grounds. Manager oversees use of laboratories, equipment, woodworking shop and vehicles. Candidate should have knowledge of various technical, mechanical, and administrative functions pertinent to supporting academic activities, including basic laboratory skills, record keeping, library skills, computer competency, skills and safety knowledge related to biological fieldwork, vehicle safety and maintenance, and woodworking shop skills. This position requires the ability to interact and communicate positively with a large number of faculty, researchers, students, and public associated with the station. The successful candidate will have exceptional organizational skills, enjoy working independently, be physically fit, willing to embrace physical labor, a demanding work environment, and occasional long hours outside in the field in all weather conditions. Manager must be able to take primary day-to-day responsibility for field station operations during much of the year when the Director and Associate Director are not in residence, including irregular hours and weekend days as needed. An understanding of field biology is desirable. A graduate degree in biology or a related field with knowledge of field-based research and teaching is desired. Experience at a field station or research facility, and experience with experiential education, supervision, managing or the hospitality industry will be useful. First aid, EMT, CPR, or other medical and/or emergency training/certification would be beneficial. Station Manager will report to the

Associate Director. On-site housing may be provided but residency on station grounds is not required.

Application review will begin February 9, 2007 but the position is open until filled. For more information or questions about the position please contact Butch Brodie (Director bbrodie@virginia.edu 434-243-1068) or Eric Nagy (Associate Director enagy@virginia.edu 434-982-5486). UVA official posting link: http://as400.hrs.virginia.edu/cgi-bin/db2www/jobs/ucdet06.mac/details?jva=-AS%20MLBS%20E09DA%20001

The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

To apply please complete steps #1 and #2: 1) Submit CV, statements of interest and experience, and two letters of recommendation (submitted separately by the reference) to: Director, University of Virginia, Mountain Lake Biological Station, P.O. Box 400327, Charlottesville, VA 22904-4327, or fax to 434-982-5626, or email attachment to bbrodie@virginia.edu .2) Submit a Virginia State Application http://www.hrs.virginia.edu/employment/howtoapply.html to: University Recruitment & Staffing, P.O. Box 400127, Charlottesville, VA 22904-4127, or fax to 434-924-6911. Please indicate position number C2204.

Eric S. Nagy, Ph.D.

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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

ScrippsInstOcenaography MarineConservation

JOB: Faculty Position in Marine Ecology/Conservation Biology Scripps Institution of Oceanography University of California, San Diego

The Scripps Institution of Oceanography (SIO) http://sio.ucsd.edu/ at the University of California, San Diego (UCSD) invites applications for an Assistant Profes-

sor (tenure track) in the broadly defined area of marine ecology and conservation biology. We are particularly interested in applicants able to cross disciplinary boundaries and work with a diverse array of colleagues including physical and social scientists. Applicants must hold a Ph.D. degree or equivalent and postdoctoral experience is preferred. The successful applicant will be expected to conduct and fund an active research program, advise graduate students, and teach at both the undergraduate and graduate level. Applicants are expected to show evidence of their potential by a publication record appropriate for their experience. The salary will depend on the experience of the successful applicant and will be based on the University of California pay scale. Review of applications will begin on February 15, 2007 and will continue until position is filled. Applicants should submit their CV, a letter including descriptions of research interests and teaching interests/experience, a list of publications, immigration status, and the names of three people with their contact information, complete institution address, email address, phone and fax nos., who are familiar with the applicants research to: Chair, SIO Graduate Department, 0208, Scripps Institution of Oceanography, University of California at San Diego, La Jolla, CA 92093-0208, USA. Please clearly label applications "Marine Ecology/Conservation Biology Search". Applicants are welcome to include in their cover letters a personal statement summarizing their contributions to diversity.

UCSD is an Equal Opportunity Employer with a strong institutional commitment to excellence through diversity.

Cristina Whitehead < cwhitehead@ucsd.edu>

StKilda FieldAssist SoaySheep

SOAY SHEEP RESEARCH - ST KILDA SPRING 2007

FIELDWORK ASSISTANT

We are currently looking for volunteers for this year's Soay sheep Spring expedition to St. Kilda, a group of islands 180 km of the coast of north-west Scotland. The expedition runs from mid March till the beginning of May.

Activities: - Censusing sheep with telescopes and handheld computers - Mortality searches - Recording the births of and catching of lambs

Requirements: . Must be available for the full period stated . Must be fit, St Kilda has a very demanding terrain, ability to run essential . A background in Biological Sciences

Travel to the island will be by helicopter from Benbecula (Outer Hebrides) and the team will stay in cottages built by the original inhabitants of St. Kilda (since restored by the National Trust for Scotland). Expenses incurred whilst travelling will be reimbursed from Scotland and food/accommodation on island are provided. This is an ideal opportunity to gain field experience in large mammal research and to visit St. Kilda, the remotest of British islands.

If you wish to apply for this work then please send a CV with covering letter, contact phone number and details of two referees than can be contacted immediately by email.

 $\begin{array}{lll} {\rm CONTACT:} & {\rm Jill} & {\rm Pilkington} & {\rm EMAIL:} \\ {\rm j.pilkington@ed.ac.uk} \end{array}$

j.pilkington@zoom.co.uk

${\bf SwissOrnithological Inst}\\ {\bf BirdMigration}$

SCHWEIZERISCHE VOGELWARTE SEMPACH

The Swiss Ornithological Institute is an independent private foundation for research and conservation of birds, covering fundamental research, applied research and application (see www.vogelwarte.ch). Bird migration is one of the traditional research fields at the Vogelwarte.

We are offering a position as a research associate (80-100%) in the field of bird migration.

Qualifications:

- a master or a Ph.D. in biology, - experience with independent research, - excellence in planning and performing innovative research, - excellent skills in ornithology, - good technical and statistical skills, - readiness to do field work abroad, - English skills fluent written and spoken, - good record of published research.

Language skills in German and French and experience in fund-rising are desirable. We offer a creative and dynamic work environment with contemporary working condition and exemplary social benefits. Start of work will be 1.08.2007 or by appointment.

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

Send your application until 31 March 2007 to: Schweizerische Vogelwarte, Betriebsleitung, 6204 Sempach, christian.marti@vogelwarte.ch.

Lukas.Keller@zoolmus.unizh.ch Lukas.Keller@zoolmus.unizh.ch

UAkron EvolBiol

The University of Akron Assistant Professor in Biology

The Biology Department invites applications for a tenure-track position at the rank of Assistant Professor to begin August 27, 2007. Applicants must have a Ph.D. in Biology and demonstrated interest in undergraduate education. The successful candidate will redesign, direct, and help teach a large general education non-majors Natural Science Biology course. The applicant is expected to develop an externally supported research program. Substantial start-up funds are available. Preference will be given to individuals with refereed publications in science pedagogy who have taught life sciences using active, inquiry-oriented instructional approaches. Experience in developing distance learning and program assessment is an asset. For further information visit the department website at http://www.uakron.edu/biology/. Review of applications will begin January 2, 2007. Applicants should submit a CV, a teaching portfolio, a research statement, copies of recent publications, and three letters of recommendation to: Dr. Amy Milsted, Chair, Biology Educator Committee, Department of Biology, The University of Akron, Akron, OH 44325-3908. Paper applications are preferred. If paper applications can not be sent, materials may be submitted on-line to the following email address: biology4131@uakron.edu. The University of Akron is committed to a policy of Equal Employment Opportunity and to the principles of Affirmative Action in accordance with state and federal laws. http://www.uakron.edu/colleges/artsci/depts/biology/facultyposition.php Please note that the search is active and we are soliciting applications from biologists with a strong interest, or experience in pedagogic research. Please submit materials ASAP.

-Paco Moore

Dr. Francisco B.-G. Moore <> Program in Integrative Biology Department of Biology University of Akron Akron, OH 44325-3908 moore@uakron.edu (330)972-2572

UAmsterdam PopulationBiol

The deadline for application of the job below (and posted earlier) has been extended to Jan 10 (given the holiday period). It is a position for a young to mid-career scientist, with excellent future prospects. If you are interested or know a colleague that you would like to suggest do not hesitate to contact me. Also if you have a question on the terms of the appointment please let me know.

As announced in Nature and in NatureJobs online:

The Institute for Biodiversity and Ecosytem Dynamics (IBED) of the University of Amsterdam invites applications for a full-time position as

Research leader / Senior scientist in Population Biology Full time vacancy number 06-1075 For both internal and external candidates

IBED is seeking an outstanding scientist who will provide leadership in research and teaching in the field of population biology. The research group he or she will lead consists of tenured scientists, PhD students and post-docs. The groups aims are (1) to develop a theoretical basis for understanding how population structure be it genetic, physiological, social, spatial or trophic influences the persistence and extinction of populations and communities, and (2) to test the hypotheses emerging from these models in biotic systems amenable to experimental manipulation.

Tasks The appointee will be expected to develop an independent research programme on the interactions between plants, herbivores and their natural enemies, and to obtain additional funding. Potential research topics include gene-environment interactions, co-evolutionary arms races, maintenance of polymorphisms, frequency-dependent selection, and feedback mechanisms between natural selection and population dynamics. The appointee will be expected to use modern tools developed in molecular biology and genetics for testing population biological hypotheses; a thorough background in population and molecular biology is therefore required. Furthermore, the appointee will be expected to interact with plant physiologists, ecologists, evolutionary biolo-

gists and mathematical biologists. In addition to contributing to the existing educational programme of the Bachelors and Masters curriculum in biology, he or she will play an important role in initiating new courses and in the supervision of PhD projects. Finally, the appointee will be expected to contribute to the management processes in our institute and faculty.

Requirements We welcome applications from researchers with a PhD in biology (with ecology, evolutionary biology and molecular biology as the main ingredients of the training) and a proven track record in research, as evidenced by, for example, publications in high-ranking international journals. The successful applicant will be an inspiring teacher and scientist, with proven didactic skills and the capacity to provide leadership in the development of the discipline, from both research and educational perspectives. He or she will also have a record in the supervision of graduate and/or PhD students and have a proven ability to acquire research funds from external parties.

More information Further information can be obtained from Prof. P. H. van Tienderen, email tienderen@science.uva.nl. Information about IBED can be found at www.science.uva.nl/ibed. Appointment The position will initially be a temporary one; a permanent contract will be offered after the candidate has proven him- or herself qualified for the position. The gross monthly salary will be in accordance with the university regulations for academic personnel, and will range from 4,192 up to a maximum of 5,603 (scale 13/14), depending on previous experience and education.

Job application Applications should include a detailed curriculum vitae and a cover letter, be marked strictly confidential and bear the vacancy number in the upper left-hand corner of the envelope. They should be sent before 2 January 2007 to: Universiteit van Amsterdam, Faculty of Science Dept. PZ, attn: Mrs A. Crajé, Kruislaan 404, 1098 SM Amsterdam, The Netherlands. Applications may also be emailed to application@science.uva.nl. They too should bear the vacancy number.

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Prof. Dr. Peter H. van Tienderen Institute for Biodiversity and Ecosystem Dynamics (IBED) University of Amsterdam Postal address: P.O. Box 94062, 1090 GB Amsterdam, The Netherlands Visiting address: Kruislaan 318 (building I, room B06), 1098 SM Amsterdam.

tienderen@science.uva.nl tienderen@science.uva.nl

UArizona USGS Phenology

Executive Director, National Phenology Network. The U.S. Geological Survey invites applications for an Ecologist to serve as Executive Director for the USA-National Phenology Network (NPN). The NPN is an emerging and exciting partnership between academic communities, federal agencies, and the general public to monitor and understand the influence of seasonal cycles on the Nation's resources. The NPN will provide phenological information at local to continental scales that can be used to (1) understand the role of the timing of life cycle events in the biosphere and (2) guide a wide range of practical decisions made routinely by individual citizens, industry, government, and the Nation as a whole. USGS and the University of Arizona have agreed to provide base stable support for the NPN in the form of a National Coordinating Office based at the University of Arizona. The Executive Director will be located in Tucson with an opportunity for adjunct faculty status at the University of Arizona to facilitate access to academic and technical capabilities required for the position. The Executive Director will also interact closely with the NPN Board of Directors, which includes scientists from different agencies and universities representing related disciplines and participating networks. Through the leadership of the Executive Director, the USA-NPN will respond to the needs of the USGS and other agencies within the Department of the Interior and the US Government, while serving as a nucleus for research and applications in the broader scientific and user communities. Critical duties include securing funding for network implementation, extending phenological observations across existing environmental networks through negotiation and interagency agreements, directing data management, and coordinating integration of spatial, analytical and climate data to achieve the wall-to-wall objectives of this continental network.

Requirements include U.S. citizenship, a PhD. in the Natural or Earth Sciences or equivalent experience; professional experience in management and/or scientific leadership of regional to national monitoring and research projects; demonstrable experience in multiagency coordination and public outreach; proven record of grantsmanship and peer-reviewed publications; desired technical knowledge and experience in spatial analysis, including remote sensing, data management

and network development, and forecasting models based on ecological/environmental observations; and experience in managing research personnel.

The position will be a GS-14 or 15 (salary range \$87,533 - \$133,850) depending on qualifications. USGS is an Equal Opportunity Employer. To apply, please visit www.usajobs.opm.gov (Announcement Number: WR-2007-0160). Applications will be accepted through February 9. For information about the application process, please contact Cathy Shahan 650 329 4109, cshahan@usgs.gov. For information about the job, please contact Robert Szaro, Chief Scientist for Biology, USGS, at 703 648 4060 or rszaro@usgs.gov. For specific questions about the NPN and the National Coordinating Office, please contact Julio Betancourt, Senior Scientist, USGS at 520 670 6821 ext. 107, jlbetanc@usgs.gov.

Dr. Susan J. Mazer Professor of Ecology and Evolution Department of Ecology, Evolution and Marine Biol-

ogy University of California Santa Barbara, California 93106

Telephone: 805-893-8011 FAX: 309-210-9631 (FAXes come to my computer; hence the strange area code) e-mail: mazer@lifesci.ucsb.edu Home Page: http://www.lifesci.ucsb.edu/eemb/faculty/mazer/index.html mazer@lifesci.ucsb.edu mazer@lifesci.ucsb.edu

UCaliforniaMerced SystemsBiol

Although the specific examples given in this advertisement are relatively narrow, this position is open to evolutionary biologists with relevant expertise and broad interests.

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Assistant Professor Life Sciences - Systems Biology 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 Sci-

ences/Humanities/Arts.

Schools of Natural Science and Engineering are seeking an assistant professor (tenure track) in the areas of experimental or computational systems biology. Systems biology is used here to mean a research approach that uses comprehensive datasets and multiple types of analysis to relate the overall function of an organism, organelle, or regulatory pathway to the underlying biochemical or biophysical processes, with an ultimate goal of a predictive understanding of the system?s behavior. Applications of special relevance to research emphases at UC Merced include the mechanisms of cell fate decisions, complex diseases such as diabetes or inflammation, and microbial systems relevant to human disease.

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. Qualifications: Applicants should have a Ph.D. in the biological sciences or related field, a record of research, publication and teaching commensurate with a faculty appointment at the University of California, and should have demonstrated the potential to develop a strong research program in systems biology. Applicants should have the ability to interact with colleagues from a broad range of disciplines, and a strong interest in developing interdisciplinary and multidisciplinary undergraduate and graduate curricula and research programs. We require a commitment to excellence and innovation in undergraduate and graduate education and training, and a commitment to education and outreach for students of diverse backgrounds, particularly disadvantaged or underrepresented students. Salary: Negotiable, based on University of California salary scales Closing Date: 02/15/2007 To Apply: Interested applicants are required to submit 1) a cover letter 2) curriculum vitae 3) statement of research 4) statement of teaching 5) a list of five references with contact information including mailing address, phone number and e-mail address and 6) three representative publications.

Please do not submit individual letters of recommendation.

Applications must be submitted via this website. http://jobs.ucmerced.edu/n/academic/-position.jsf?positionId=732

For more information: Please contact Professor David Ojcius (dojcius@ucmerced.edu) or Professor Marcos Garcia-Ojeda (mgarcia-ojeda@ucmerced.edu), search committee co-chairs.

Michael N Dawson <mdawson@ucmerced.edu>

University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093-0116 (858) 822-0559; FAX: (858) 534-7108 http://www.biology.ucsd.edu/labs/roy/kroy@biomail.ucsd.edu kroy@biomail.ucsd.edu

UCaliforniaSanDiego EvolBiol

UNIVERSITY OF CALIFORNIA SAN DIEGO SENIOR PROFESSOR SECTION OF ECOLOGY, BEHAVIOR & EVOLUTION

The Section of Ecology, Behavior, and Evolution, in the Division of Biological Sciences, invites applications for a senior ecologist and/or evolutionary biologist at the rank of tenured full Professor. In addition to Professorial duties it is expected that the successful candidate will be able to assume a term as Section Chair.

The area of scholarship is open, but we seek candidates with proven outstanding records of research, teaching, service, and extramural support who have the leadership qualities to develop further the Section's existing strengths in evolution and ecology. The Section currently consists of a group of a dozen active members and is slated for several upcoming faculty hires. The successful candidate will be expected to have excellent communication and collaboration skills and to be able to work with the current faculty to create a vision and plan for the growth and development of the Section. Level of appointment will be commensurate with qualifications and experience.

Review of applications will begin February 1, 2007 and will continue until position is filled. We will only accept electronic submissions in the form of a single pdf file. Complete applications should contain copies of CV, list of three referees, statements of research and teaching interests, and synopsis of applicant's goals or vision as a Chair. The complete application should be sent as a single PDF file attachment by email to ebesearchh@ucsd.edu with EBE Chair Search as the subject line.

Applicants are welcome to include in their cover letters a personal statement summarizing leadership efforts and/or contributions to diversity. UCSD is an Equal Opportunity-Affirmative Action Employer with a strong institutional commitment to the achievement of diversity among its faculty and staff. Qualified minority and women are especially encouraged to apply.

Kaustuv Roy Professor Section of Ecology, Behavior and Evolution, Division of Biological Sciences

UCollegeLondon EvolOfInsects

3 year PhD studentship available.

Supervisor Dr Max Telford, Dept Biology, University College London

Title: The evolution of the insects from a crustacean ancestor.

One focus of research in our lab is on the evolution of the insects from within the crustaceans. Insects differ from their closest relatives, the crustaceans in many ways. One particularly striking difference is that where crustaceans have a second antenna, the homologous appendage in insects is absent and the segment itself (called the intercalary segment) is greatly reduced in size.

Using comparative genomics of Drosophila and the beetle Tribolium we are identifying genes implicated in patterning the insect intercalary segment. This project will extend this study to the Branchiopod crustacean Daphnia pulex (the water flea which, like Drosophila and Tribolium has a completely sequenced genome). The aim will be to identify, clone and study Daphnia homologs of genes with a conserved role in insect intercalary patterning. In the first instance we will look for conservation and divergence in expression. Subsequently, following reports of successful RNAi gene knockdown in Daphnia we will attempt functional studies of these genes. This will enable us to complement functional studies of these genes in flies and beetles with similar work in Daphnia with the ultimate aim of identifying the genetics behind the evolution of this insect novelty.

UK residents only should apply.

Please contact me informally first with a c.v.. – Dr Max Telford Reader in Zoology Department of Biology, University College London, Darwin Building, Gower Street, London WC1E 6BT, UK. Tel: +44 (0)20 7679 2554 Fax: +44 (0)20 7679 7096 http://www.ucl.ac.uk/biology/academic-staff/telford/telford.html Zoonet: Marie Curie Research Training Network http://www.zoonet.eu.com ROYAL SOCIETY MEETING / LINNEAN SOCIETY MEETING : 18-19 JUNE 2007

February 1, 2007 EvolDir

The Evolution of the Animals - a Linnean Tercentenary Celebration

http://www.royalsoc.ac.uk/event.asp?idA63&month=6,2006 m.telford@ucl.ac.uk m.telford@ucl.ac.uk

UHull EvolBiol

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UHelsinki TheoEvolutionaryEcology

The Major Subject Division of Ecology and Evolutionary Biology at the Department of Biological and Environmental Sciences of the University of Helsinki invites applications for a fixed-term University Lectureship in Theoretical Ecology

The term of appointment for this replacement position is from 1 September 2007 to 31 July 2011.

The salary for the post will be based on a job-specific demands level to be confirmed, as well as on personal work performance.

The duties of the appointee will include participation in the teaching theoretical ecology within the major subjects of ecology and evolutionary biology, student guidance, the supervision of theses, and conducting theory-oriented research in ecology and/or evolutionary biology. The emphasis of the duties of the post is on research, but the appointee is also expected to assume some responsibility for the development of teaching in the field of theoretical ecology. The field of teaching of the post includes, in particular, theoretical thinking, approaches and methods, as well as the development of teaching in ecology and evolutionary biology.

For required qualifications, instruction for applications and other information, see http://www.helsinki.fi/bio/hallinto/ilmoitus_ekologialehtori_eng.pdf Written applications, together with the required enclosures, should be addressed to the Faculty of Biosciences and sent to the Registrar of the University of Helsinki, P.O. Box 33 (Yliopistonkatu 4), 00014 University of Helsinki, to arrive no later than Wednesday 21 February 2007, by 3.45 p.m. Further information is available from Professor Veijo.Kaitala@Helsinki.fi or tel. + 358 9 191 57723.

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Many thanks! Hanna Kokko -

Hanna Kokko, Department of Biological and Environmental Science PO Box 65 (Viikinkaari 1), 00014 University of Helsinki, Finland Tel. +358-9-1915 7702, fax +358-9-1915 7694 www.helsinki.fi/ hmkokko/hmkokko@mappi.helsinki.fi

Professor and Reader in Biological Sciences The University of Hull, UK

The University of Hull is seeking to strengthen its core of senior staff in the Department of Biological Sciences by inviting applications for the posts of Professor and Reader of Biological Science.

Applications are particularly welcome from all areas of evolutionary biology, including candidates with interests in the use of molecular, genetic or chemical methods to investigate environmental and organismal sciences (including animal behaviour, genomics etc).

Hull already has a large and active community of collaborating evolutionary biologists in the Molecular Ecology and Evolution group with excellent molecular laboratories, DNA sequencing and Bioinformatics labs, and are well provisioned with aquaria, growth rooms and culture facilities.

Applicants will have a strong record of publications in leading journals, experience in leading a dynamic research group and a record of grant awards from competitive sources.

Salary will be on the relevant University scale, as appropriate.

Informal enquiries should be directed to the Head of Department, Dr Joerg Hardege: tel.+44(0) 1482 465187 (j.d.hardege@hull.ac.uk) or the Director of Research, Professor George Turner: (g.f.turner@hull.ac.uk)

For an application pack, tel: (01482) 465557 fax: (01482) 466660, or email: science-recruitment@hull.ac.uk (quoting ref. FS06).

* Closing date: 31 January 2007 *

For online information see www.hull.ac.uk Dr David Lunt, Department of Biological Sciences, University of Hull, Hull HU6 7RX UK

Phone: +44 (0)1482 465514 Fax: +44 (0)1482 465458 Email: d.h.lunt@hull.ac.uk WWW: http://www.hull.ac.uk/biosci d.h.lunt@hull.ac.uk d.h.lunt@hull.ac.uk

UIdaho MicroscopeFacilityManager

A part-time Research Associate position is available at the University of Idaho as a Confocal Microscope Facility Manager. The Research Associate is responsible for managing common use microscopy and related instrumentation and supplies. Some examples of types of work include, but are not limited to, processing, researching and analyzing scientific samples on fluorescent and/or confocal or other common use microscopes. The Incumbent is active in interpretation, publication and presentations of research results; maintains equipment and trains other facility users on microscopes and digital imaging.

Responsibilities: Manage confocal imaging facility, and accessory instrumentation by: (80%) Managing technical projects including developing the scope of work; providing technical support for grant preparation; supervising research assistants as needed; scheduling and reporting to principal investigators; directing, assisting and training microscope facility clients and lab personnel; training facility clients in microscopy, image collection, and image analysis; serving on department interdisciplinary team to work on complex scientific problems or issues; billing and follow up for outside facility clients.

Maintain lab and microscope facility by: (10 %) Providing routine maintenance on equipment, computers, and specialized software; determining need and seeking professional maintenance services as required; budgeting and purchasing supplies and equipment for the lab; overseeing proper safety and lab techniques of lab personnel and facility clients.

Maintain professional competency by: (5%) Attending workshops and short courses. Remaining current in microscopy field.

Other duties as requested (5%)

MINIMUM QUALIFICATIONS: Requires a M.S. appropriate to the research discipline or closely related field. Must possess good interpersonal skills, demonstrated skills with computers, and effective communications skills. Some positions may be required to work with toxic, volatile, and corrosive chemicals or carcinogenic substances; and/or be required to work in adverse environmental conditions; and/or carry or lift heavy materials.

ADDITIONAL DESIRABLE QUALIFICATIONS: M.S. degree in biology field; digital imaging computer skills; strong technical writing skills; good knowledge of MS PowerPoint, Adobe Photoshop or other imaging processing software.

3 or more years of experience working on fluorescent and confocal microscopes.

Application Procedures: To be considered, complete the online application including a resume, letter of application and a list of professional references at https://www.sites.uidaho.edu/AppTrack/Agency/Applicant/ViewAnnouncement.asp? announcement_no500007837. Questions may be addressed to Eva Top, Search Committee Chair at evatop@uidaho.edu.

Dr. Eva Top Associate Professor Department of Biological Sciences University of Idaho 347 Life Sciences South Moscow ID 83844-3051 Phone: 1-208-885-5015 Fax: 1-208-885-7905 E-mail: evatop@uidaho.edu http://www.sci.uidaho.edu/biosci/labs/top/evatop@uidaho.edu evatop@uidaho.edu

UMaryland MarineMolEvol ResAssist

A full-time Research Assistant position is available to work on an NSF-funded project investigating larval dispersal and postsettlement selection in Florida oysters. The project integrates measures of postsettlement selection, larval dispersal and fertilization success to analyze the mechanisms shaping population heterogeneity along an ecotone in eastern Florida.

Laboratory genetic analyses will be based at the University of Maryland, College Park MD, during part of 2007 and at Cornell University, Ithaca NY thereafter in the laboratory of Matt Hare. Summer field work in Florida is required. For more information on the Hare Lab and the study system see the link below.

The exact position, level of expectation and responsibility will depend upon previous education and experience. Laboratory work will include DNA extractions, AFLP genotyping, cloning, DNA sequencing, and SNP genotyping. Additional responsibilities may include laboratory management, student training, data analysis and/or programming.

The position is available immediately and applications will be reviewed until the position is filled. Required qualifications include a B.S. or B.A. degree in biology or

related field and some experience with basic laboratory techniques. Additional desirable qualifications include experience AFLP genotyping with ABI GeneMapper software, programming or computational skills, and/or experience supervising others. Salary negotiable based on experience. Continuation is contingent on performance and availability of funds.

To apply, please ONLY send an email of intent (no attachments) that indicates your relevant experience and interest to Dr. Matthew Hare, matthare@umd.edu. The University of Maryland and Cornell University are Equal Opportunity/Affirmative Action employers.

About University of Maryland and the DC area: The University of Maryland, the State's flagship campus, is a comprehensive research university with a record of excellence in academics, arts, and athletics. The campus is nine miles from Washington DC and on the extensive Metro rail line. Washington, D.C. is a metropolitan city with historic attractions, museums, monuments, hotels, restaurants, free annual events and visitor services unrivaled by any other American city. The D.C. area also benefits from a strong biotechnology sector and government labs at the NIH, USDA, NASA and the Smithsonian.

About Cornell and Ithaca: Cornell is a top-ranked research university with particular strengths in the life sciences. It is located in Ithaca, NY, the cultural center of the scenic Finger Lakes region of central New York, which is known for its spectacular gorges and waterfalls, lake-side wineries, and rolling farmland. Ithaca has been called the "best emerging city" in the US (Cities Ranked and Rated, 2004). It is about a 4-hour drive from New York City.

Dr. Matthew Hare Assistant Professor Department of Biology, bldg 144 University of Maryland College Park, MD 20770 301-405-7264 matthare@umd.edu http://www.life.umd.edu/biology/faculty/hare/index.html matthare@umd.edu matthare@umd.edu

UMemphis Bioinformatics

The University of Memphis is seeking to fill a ninemonth tenure track faculty position beginning August 2007 to expand the existing program in Bioinformatics. The appointment may be in one of four departments (Mathematical Sciences, Computer Science, Biology, or Chemistry) depending on the candidate's primary discipline. Candidates must have a Ph.D. and a strong

research track-record in Bioinformatics. The successful candidate will be expected to engage in collaborative research with clinical and basic scientists in the Memphis area and teach courses at the undergraduate and graduate levels. Applicants should submit a letter of application, a vita, statement of research and teaching interests, three letters of reference, and copies of representative publications to the Bioinformatics Search Committee, University of Memphis, 107 Scates Hall, Memphis, TN 38152, or electronically to bioinformatics@memphis.edu khttp://aaas.sciencecareers.org/texis/apply?idEae83004a0f0&lookidas

&to=bioinformatics@memphis.edu> Review of applications will begin March 1, 2007 and may continue until the position is filled. For more information on this position or the UM Bioinformatics Program please visit: http://cas.memphis.edu/binf http://cas.memphis.edu/binf

Gary Voelker Assistant Professor Department of Biology University of Memphis 3700 Walker Avenue Memphis, TN 38152 (901) 678-1386 gvoelker@memphis.edu

Website: https://umdrive.memphis.edu/gvoelker/public/Voelker_website.html

gvoelker@memphis.edu

UMunich MolEvol

UNIVERSITY of MUNICH, Department Biology, Evolutionary Ecology RESEARCH ASSOCIATE (Akademischer Rat auf Zeit) For Molecular Evolutionary Ecology

The Department of Biology at the LMU Munich invites applications for a research associate (Akademischer Rat auf Zeit) to establish a vigorous, independent research group in molecular evolutionary ecology. We are particularly interested in candidates who want to work with Daphnia. We expect an excellent background in evolutionary ecology and sufficient experience in molecular techniques to run the molecular lab of the evolutionary ecology group. Successful candidates will develop externally funded research programs, direct graduate students, contribute to the teaching mission of the department, and will have the opportunity to get the "Habilitation" (a German qualification supportive in applications for professorships).

Applicants should submit electronically a complete CV, reprints (pdf-files) of three representative papers and a

concise description of current and future research concepts. Applicants should also arrange for at least three letters of reference to be submitted on their behalf to the address below.

The position is available starting May 2007 for up to six years. Initial appointment is for three years. Review of applications will begin January 19, 2007 and continue until the position is filled. For more information contact

Wilfried Gabriel Professor of Ecology Department of Biology University of Munich (LMU) Grosshaderner Str. 2 D-82152 Martinsried Germany Tel: ++49 89 2180 74 202 Email: wilfried.gabriel@lmu.de <mailto:wilfried.gabriel@lmu.de>

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

UNottingham HostParasite ResAssist

Research Assistant, host-parasite coevolution (Fixed-term, part-time, 7 months)

Applications are invited for a graduate to work in the area of fish host-parasite coevolution. Ideal for prospective PhD students.

The successful candidate will be required to assist with studies of host- parasite interactions in natural populations of three-spined sticklebacks. Duties will include: (1) Surveying the parasites of sticklebacks in lochs in Scotland, and waterbodies in the English Midlands. (2) Assisting with the execution and monitoring of experiments designed to examine the extent of local adaptation between sticklebacks and their parasites. (3) Assaying parasites in samples of collected material. (4) Entering data into computer databases and performing summary analyses. (4) Assisting with care of aquaria when necessary and developing new research areas as time allows.

Candidates must have a degree in ecology, zoology, parasitology or a related subject and an interest in host-parasite interactions. They should be flexible and willing to carry out fieldwork in remote locations. They should hold a full driving licence and have their own vehicle.

Salary will be £21,467 to £23,457 pro rata for this part

time post working 80% of a full time post, working pattern to be agreed. Offered on a fixed-term contract for a period of 7 months.

The work is likely to involve long periods (6 to 12 weeks) of fieldwork in isolated parts of Scotland in the spring/summer, and extensive microscope work at other times to assay and identify parasites.

Informal enquiries may be addressed to Dr Andrew MacColl, tel: 0115 9513410, Email: Andrew.Maccoll@Nottingham.ac.uk.

Candidates should send a detailed CV, together with the names and addresses of two referees, to Dr Andrew MacColl, School of Biology, University Park, The University of Nottingham, NG7 2RD. Email: Andrew.MacColl@nottingham.ac.uk. Closing date: 9 February 2007.

 Andrew MacColl School of Biology University of Nottingham University Park Nottingham NG7 2RD
 Tel: 0115 951 3410 Fax: 0115 951 3251 andrew.maccoll@nottingham.ac.uk

UOslo FieldAssist GreatTitEvol

Field assistant in Oslo, Norway

Field assistant needed

Section for Animal Ecology, Department of Biology, University of Oslo, Norway

We are looking for a field assistant to help in a master project on the effects of winter feeding on territorial behaviour of great tits (Parus major) during March and April 2007. The project is supervised by Dr. Valentin Amrhein (University of Basel) and Prof. Dr. Tore Slagsvold (University of Oslo).

The field work will be done in a study site near Oslo (http://folk.uio.no/larsejo/tits/field.php), and the work will include mapping of territories, observing the colour-banded birds and recording songs during the early morning hours.

Field work will be demanding, temperatures will be very low and there will still be snow at the study site. Some experience with observing birds will be helpful, since identifying colour-codes of the plastic rings using (preferably your own) binoculars requires some practice.

Applicants are expected to stay for the entire field sea-

son (March and April). As a contribution towards travel & living expenses we can pay up to 1000 Euros. The position will be filled as soon as possible. Please send applications in English (letter of motivation, two references and curriculum vitae) to the following address:

koslo@gmx.ch??? contact also for further questions??? Katja Saggese <koslo@gmx.ch>

UPuertoRico RestorationEcology

The Department of Biology, University of Puerto Rico, Mayagüez (UPRM, www.biology.uprm.edu) invites applications for a Tenure-track Position as Assistant Professor in Restoration Ecology, to begin July 1st, 2007. A Ph.D. degree is required. Preferred qualifications include a strong background in terrestrial ecosystems and botany. Candidates must demonstrate teaching skills for undergraduate courses in Botany and graduate courses in Restoration Ecology with a focus on terrestrial ecosystems, as well as the ability to design and develop courses in area of specialization. The successful candidate will be expected to develop an active research program and to undertake specific projects of restoration in the tropics. Collaboration with other faculty as well as both undergraduate and graduate students is desirable. Release time will be available during the first semester for writing grant proposals and for laboratory and research setup. External funds, if obtained, will allow continued eligibility for release time and additional compensation during the academic year and/or summer. UPRM is a Land-Grant, Sea-Grant, and Space-Grant institution. Interaction with faculty and researchers in these fields and Biotechnology is encouraged. Puerto Rico represents an exceptional setting to develop research in tropical systems, and UPRM has full access to biological stations and a formal collaboration agreement with a renowned community organization dedicated to forest management and conservation. Benefits include health insurance, relocation costs (if applicable), and tuition waivers in the UPR system for immediate family members. Knowledge of English and Spanish or a willingness to learn is desirable. Please send Curriculum Vitae, statement of research and teaching interests, and three letters of reference before March 1st, 2007 to: Dr. Lucy Bunkley-Williams, Director, Department of Biology, University of Puerto Rico, Mayagüez Campus, P.O. Box 9012, Mayagüez,

Puerto Rico 00681-9012. The application can be submitted electronically to lwilliams@uprm.edu with hard copy following. The University of Puerto Rico is an Equal Opportunity Employer. M/F/V/H

Nico M. Franz Department of Biology University of Puerto Rico PO Box 9012 Mayagüez, PR 00681

Phone: (787) 832-4040, ext. 3005; Fax: (787) 834-3673; E-mail: franz@uprm.edu Website: http://academic.uprm.edu/franz/ franz@uprm.edu franz@uprm.edu

USheffield ResAssist EvolSex

Marie Curie Early Stage Training Fellow (Fixed-term)

Department of Animal and Plant Sciences, University of Sheffield, UK

Salary: Ukpound 21,625 per annum plus additional allowances as per Marie Curie Early Stage fellowships

The postholder will work with Professor Roger Butlin to investigate the evolutionary balance between sexual and asexual reproduction in the ostracod Eucypris virens using molecular genetic approaches. The post will be based in Sheffield but the appointee will also work in Zurich, with Professor Jukka Jokela, for up to six months. Applicants must have a good grounding in evolutionary biology and experience of laboratory methods in molecular ecology. This post is available from March 2007 for a period of 18 months.

This is a component project of a Marie Curie Research Training Network (see http://www.naturalsciences.be/EVIRENS/).

For details and to make an application visit www.sheffield.ac.uk/jobs and look for post reference PR2715

Closing Date: 09/02/07

In accordance with Marie Curie mobility regulations, this fellowship is not available to UK nationals or to other nationals who will have resided/worked in the UK for more than 12 months in the 3 years prior to starting the fellowship. Applicants who already have a PhD are not eligible. Further details can be found in the Marie Curie Early Stage training handbook (see sections 5.4 - 5.8) and FAQs available at http://ec.europa.eu/research/fp6/mariecurie-actions/action/stage-en.html. Roger Butlin Professor of Evolutionary Biology

Department of Animal and Plant Sciences The University of Sheffield Western Bank Sheffield S10 2TN

r.k.butlin@sheffield.ac.uk

Tel. +44 (0)114 2220097 FAX +44 (0)114 2220002

UToronto Bioinformatics

Bioinformatics Support Position Centre for the Analysis of Genome Evolution & Function University of Toronto

The University of Toronto Centre for the Analysis of Genome Evolution and Function (CAGEF) is looking for an experienced and skilled bioinformatician to assist with a wide range of exciting comparative and functional genomic projects. The person will specifically be responsible for setting up an analysis pipeline to analyze data generated from a Solexa 1G Genetic Analyzer (www.solexa.com). The individual must have a solid background in bioinformatics, genome analysis, sequence assembly, and bioinformatics programming, including scripting and databases. This is an exciting opportunity to work with cutting-edge genomics technology that permits DNA sequencing and expression profiling from any organism at a throughput of up to 1 gigabase of sequence per run. The successful applicant will be responsible for maintaining an analysis computer cluster, developing analysis tools, networking with other genome centers using similar technologies, and most importantly, directly assisting in the analysis of data obtained using the Solexa system. There will be significant opportunity for independent research and collaboration with research programs in both the Department of Cell & Systems Biology (www.csb.utoronto.ca) and the Department of Ecology and Evolutionary Biology (www.eeb.utoronto.ca) at the University of Toronto.

CAGEF is a new established genome centre dedicated to promoting interdisciplinary research, training and education in the broadly defined field of genome biology (including but not limited to comparative and functional genomics, proteomics, metabolomics, chemical genomics and bioinformatics). CAGEF is supported by the University of Toronto and the Canada Foundation for Innovation. It currently supports five technical staff and administrative staff, and will continue to expand over the next few years. CAGEF takes an active role in providing genomics resources and training to the biological community in the University of Toronto Fac-

ulty of Arts and Sciences, and is developing a range of training initiatives to enhance both undergraduate and graduate education and research.

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

David Guttman Associate Professor Director (Interim), Centre for the Analysis of Genome Evolution & Function University of Toronto 25 Willcocks St. Toronto, Ontario M5S3B2 Canada david.guttman@utoronto.ca

UTuebingen EvolBiolOfPlantsFungi

FULL PROFESSOR ORGANISMAL BOTANY-MYCOLOGY TUEBINGEN

The Faculty of Biology of the Eberhard-Karls-University Tuebingen invites applications for the post of

Full professor (W3) in "Organismal botany and mycology" (Successor Prof. Dr. F. Oberwinkler)

available from 1st April 2008. The successful applicant will pursue an internationally high-ranking research agenda in the field of evolutionary biology of plants, fungi or their interaction. Teaching obligations cover all aspects of organismal botany and mycology. Close collaborations within the interfacultary teaching and research platform "Evolution and Ecology Forum" EvE are expected. EvE integrates organismal biology in Tuebingen and offers cooperation with the faculties of Biology and Geosciences and the Max-Planck-Institute for Developmental Biology. The post includes management of the botanical garden and the "Herbarium Tubingense".

A formal requirement for appointment is a "Habilitation" or equivalent level of scientific and academic teaching qualifications.

The University of Tuebingen is committed to strengthen the proportion of women in research and teaching and strongly encourages applications of qualified female scientists.

If this is a candidate's first professorship, the appointment is limited to three years initially, with tenure beFebruary 1, 2007 EvolDir

ing granted after positive evaluation. Exceptions can be made for foreign applicants or candidates from the private industry. Tenure does not require another appointment procedure.

Disabled applicants with equal qualification will be considered with higher preference.

Please send your application letter including c.v., certificates, list of publications and a summary of teaching experience by 15 March 2007 to Dekanat fuer Biologie der Universitaet Tuebingen, Auf der Morgenstelle 28, 72076 Tuebingen, Germany

Nico K. Michiels (Prof.) Animal Evolutionary Ecology Zoological Institute, Faculty of Biology U niversity Tuebingen Auf der Morgenstelle 28 E 72076 Tuebingen Germany

Tel. +49 7071 29 74649 Mobile +49 170 4758003 Fax +49 7071 29 5634

nico.michiels@uni-tuebingen.de http://www.uni-tuebingen.de/evoeco http://eve.uni-tuebingen.de

Nico Michiels <nico.michiels@uni-tuebingen.de>

 ${\bf Uppsala U\ Volunteer Field Assist}$

Field assistants needed

4-5 volunteer field assistants wanted:

Speciation and Evolution in a Hybrid zone

Department of Animal Ecology, Institution of Ecology and Evolution, Uppsala University, Sweden

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Dates: 25 April - 31 June, 2007

Project We are looking for persons that are interested in animal behavior, population studies and field work. We are a research group working on sexual selection, hybridization and population dynamics on natural populations of Ficedula flycatchers. You will take part in major population inventories and behavioral studies of Collared (F.albicollis) and Pied flycatchers (F. hypoleuca) in woodlot areas of different sizes. You will be working on the Baltic island Öland off the east coast of Sweden.

Please contact us before the 15th of March 2007, with information about interests and field work experience.

For further information please contact:

Nina Svedin, Ph.D.

Department of Animal Ecology, EBC, Uppsala University Norbyvägen 18D, SE-752 36 Uppsala, Sweden

E-mail: Nina.Svedin@ebc.uu.se

Nina Svedin Dept. of Animal Ecology Evolutionary Biology Center, Uppsala University Norbyv. 18 D, S-752 36 Uppsala Phone: +46 18 471 2662 Fax: +46 18 471 6484 E-mail: Nina.Svedin@ebc.uu.se

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Animal Sample Collection

BAC-library construction

Hello,

I am the only population geneticist at my university and have been approached by colleagues to assist in two studies of genetic variation in animals. My own background is mainly in theoretical and plant population genetics, so I am hoping someone out there can help me find some good methods for collecting and storing animal tissues (e.g., which tissues and how much? tissue storage until DNA extraction?) for the following species:

- 1. Red-eared Slider (a type of turtle) Trachemys scripta elegans
- 2. Hard Clam Mercenaria mercenaria

We plan to use microsatellites as the markers in both studies. Please note that the turtles will be captured and returned immediately to their pond after a sample is taken. Any info you can provide on the best methods for tissue sampling and storage would be greatly appreciated!

Sincerely,

Deb Overath

R. Deborah Overath, Ph.D. Assistant Professor of Biology Department of Life Sciences (ST 312) 6300 Ocean Drive, Unit 5800 Texas A&M - Corpus Christi Corpus Christi, TX 78412

Phone: (361) 825-2467 Fax: (361) 825-2742

Deborah.Overath@tamucc.edu rah.Overath@tamucc.edu

Debo-

Hi,

I am looking for a company and/or university (preferably European-based) that construct BAC-libraries from genomic DNA. I would be grateful to hear any suggestions on companies that people have used in the past for this and also roughly what they ended up paying for the service.

Sincerely,

-Pelle

– Pär K. Ingvarsson Senior Researcher, Swedish Research Council Associate Professor Umeå Plant Science Centre Department of Ecology and Environmental Science Umeå University, SE-901 87 Umeå tel. +46-(0)90-786-7414, fax. +46-(0)90-786-6705 web: http://mendel.eg.umu.se par.ingvarsson@emg.umu.se

Best Ethanol Percentage

Hi all,

I am collecting frog tissue to be analysed and used on PCR later on - 6 to 12 months after collection, and I was wondering which % is better to preserve it.

Thanks, Catarina

catarolina@gmail.com

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CNRS FrenchPyrenees Volunteers EvolOfDispersal

Volunteer Opportunity

We are looking for volunteers on a new project looking at the evolution of dispersal and sociality. The themes of this work are centered on the evolution of sociality and meta-population dynamics. This project seeks to experimentally manipulate parameters in dispersal behavior and social aggregations to understand trade-offs and key determinants of the evolution of these behaviors. The project is lab based in nature using Tetrahymena thermophila, a unicellular ciliated protist, as a model organism. Volunteers are expected to participate in maintenance of cultures, experimental manipulations, and the best candidates will also be capable of helping to plan experiments and process data.

This project is run in Dr. Jean Clobert's lab and students will work with both Dr. Clobert and Dr. Alexis Chaine. The lab is situated in the foothills of the French Pyrenees Mountains at a CNRS field station (Moulis / Saint Girons). Students will be provided with housing but will be expected to cover their other expenses. Work is ongoing and volunteers can begin at a negotiated date. Duration of work is flexible, and while volunteers are expected to commit to a minimum of 4 weeks, priority will be given to those who can commit to longer periods.

For more information, please contact Alexis Chaine (alexis.chaine@lsm.cnrs.fr)

Alexis Chaine <alexis.chaine@lsm.cnrs.fr>

Callosobruchus maculatus specimen

Hello, we are chasing some black Callosobruchus maculatus. If anyone has some we'd greatly appreciate some. Origin not an issue. Any help or advice appreciated (reply to D.J.Hosken@ex.ac.uk) Thanks a lot. David Hosken, Tom Tregenza & Laurene Gay

Dr DJ Hosken Centre for Ecology & Conservation School of Biosciences University of Exeter, Cornwall Campus Tremough, Penryn, Cornwall TR10 9EZ UK Tel: +44 (0) 1326 371843 D.J.Hosken@exeter.ac.uk http://www.uec.ac.uk/biology/research/staff-researchinterests/david- hosken.shtml

D.J.Hosken@exeter.ac.uk

Caribbean Anolis fieldvolunteers

FIELD VOLUNTEER(S) NEEDED 1-2 Volunteer field assistants needed:

Evolution of quantitative genetic constraint in Anolis cristatellus. Department of Organismic and Evol. Biology, Harvard University.

I am seeking 1-2 field volunteers on very short notice for an upcoming field trip to Puerto Rico.

The trip is the second in a mark-recapture natural selection experiment on the Puerto Rican crested anole, Anolis cristatellus, that is part of my dissertation research.

The approximate date of departure is Jan. 28, 2007, and the approximate duration is 4-5 weeks. Field volunteers interested in working only a portion of that time should contact me if it is 3 weeks or more.

I can't offer pay, but all expenses (airfare from wherever you are, food, lodging, and any incidentals) will be fully covered.

For more information about my research, see:

http://anolis.oeb.harvard.edu/~liam/ For more information about the Losos lab, see:

http://www.oeb.harvard.edu/faculty/losos/ Liam Revell Department of Organismic and Evolutionary Biology Harvard University web: http://anolis.oeb.harvard.edu/ ~ liam/ email: lrevell@fas.harvard.edu

lrevell@fas.harvard.edu lrevell@fas.harvard.edu

Chelonian Turtle osteology Collaboration

CNAH RESEARCH REQUEST Number 110 The Center for North American Herpetology Lawrence, Kansas http://www.cnah.org 15 January 2007

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CHELONIAN COLLABORATION

I am seeking an expert in turtle osteology who would be willing to attempt identification of shell fragments from archaeological digs from Palmetto Bluff, Bluffton, South Carolina. Participation would ideally lead to collaborative publication. Please contact

Mary Socci Crescent Resources Bluffton, South Carolina mcsocci@crescent-resources.com (843) 706-6030

"Joseph T. Collins" <jcollins@cnah.org>

Chiroptera taxonomic status

Hello all!

I want to work in the Taxonomic Status of Eptesicus and Histiotus (Chiroptera: Vespertilionidae) in Colombia. Someone can tell me what is the best metodology to follow, or which ones are the best characters to analise?

If someone have information about this topic, please let me know.

Thanks a lot and all apologies but my english is not really good yet.

Héctor Universidad del Cauca Colombia

MENSAJE ENVIADO CON WMAIL 1.01 UNIVERSIDAD DEL CAUCA

anasallenave@yahoo.com.ar

Chloroplast mRNA caps

We're wondering if anybody knows whether or not chloroplast rRNAs and mRNAs have 5' caps. Specifically, I want to know whether I can use an exonuclease that is dependent upon a 5'-phosphate (and the absence of a cap or triphosphate) to degrade chloroplast RNAs (most importantly rRNAs) in brown algae. But I'm interested to hear anybody's insights into this for any chloroplast.

Naomi Phillips, email: phillipsn@arcadia.edu

Ed Braun email: ebraun@zoo.ufl.edu

PhillipsN@arcadia.edu

Cloning Artefacts

Dear evoldir members,

I study MHC and therefore perform cloning reactions. I found some puzzling results, and was wondering if anyone came accross the same problem/observation:

I use vector primers (T7; M13) for the sequencing reaction, so that the whole PCR product should be readable. And it is, but sometimes the PCR primer sequences are not reproduced correctly in the sequence. It seems that in 20-30% of the sequences the primers have 1 to 2 incorrect nucleotides. There is no overlap or visible contamination, a nicely readable sequence.

I use a proof reading polymerase (Hifidelity, Qiagen) and the TOPO TA Cloning Kit for Sequencing.

So, my questions are: Did anyone ever encounter this problem? How can this happen?

Thank you very much for your comments,

Vyonne

— Yvonne Meyer-Lucht

Evoltionary Genetics Leibniz institute for Zoo- and Wildlife research (IZW) Alfred-Kowalke-Str. 17 D-10315 Berlin Tel (+49) 030 / 5168-711 Fax (+49) 030 / 5126-104

Gleich testen! http://www.pc-sicherheit.web.de/-freescan/?mc2222 Yvonne Meyer-Lucht <ymeyerlucht@web.de>

Estimating Divergence Times

I need help estimating divergence times.

I have a phylogeny that has several well supported lineages, but no relationships between these lineages have been recovered. I want to estimate the approximate time of divergence of these lineages from one another. A Likelihood ratio test has rejected clocklike evolution in this data set.

Given the lack of resolution of relationships between lineages I think it may be inappropriate to calculate pair-wise distance measures (even if they are model corrected) and use these to estimate divergence times. Also given the multitude of methods and programs available (Bayesian, Coalescent approaches, distance methods) I am having trouble deciding what is most appropriate for my data set and am seeking advice from anyone who has found themselves in a similar situation

At this stage I am just calculating maximum, minimum and mean divergence (based on model corrected distances) for all pair-wise comparisons of lineages and then averaging this over all lineages. This will essentially give me a very rough estimate of timing of divergence.

I am using only a single mtDNA fragment from the CO1 gene.

I do not have any fossil or other calibration dates to work with so I am using the rate of 1.4% per million years for CO1 identified by Knowlton and Weight (1998).

Some lineages are very widespread while others are geographically restricted

Any comments or advice would be greatly appreciated Cheers

Claire McClusky Postgraduate Research School of Life and Environmental Sciences Deakin University Warrnambool, Victoria AUSTRALIA clairefi@deakin.edu.au

clairefi@deakin.edu.au

Extra sequencing kits

I have two sequencing kits for manual or automated, gel electrophoresis that were ordered erroneously and I am trying to see if they can be of use to anyone else in the community. Since the supplier will not take the kits back I thought Evoldir would be a good alternative to try and sell the Kits to someone who may find them useful.

The reference of the Kits: Cycle reader Auto Sequencing Kits for 100 reactions (FERMENTAS) - Price: ? 296,45 per kit.

The Kits are sealed in their original package, have never been opened and have been stored according to manufacturer instructions since they were delivered to us.

Thank you.

Kind regards,

Joana Morais.

_

Joana Morais

Faculdade de Ciências da Universidade de Lisboa Departamento de Biologia Animal/CBA Edifício C2 - Piso 3 Campo Grande 1749-016 Lisboa Portugal

Tel.: 00 351 21 750 00 00 ext.: 22312 Fax: 00 351 21 750 00 28 E-mail: joanamorais@fc.ul.pt

Joana Morais <joanamorais@fc.ul.pt>

First use of SurvivalOfTheFittest

Calling Darwin scholars

I am trying to clarify Darwin's first use of 'survival of the fittest', and have found conflicting statements.

Christianen and Prout, Chapter 8, "Evolutionary Genetics From Molecules to Morphology", eds Singh and Krimbas (2000), Cambridge Univ. Press provide a quote from "Origin of Species" 6th Ed, 1872, and state that the remark including 'survival of the fittest' was added by Darwin in the 6th edition after suggestion and encouragement by Thomas Huxley.

Dawkins "The Extended Phenotype" (1982), Oxford Univ. Press - p. 179 states that the term was adopted by Darwin (1866) at the urging of Wallace (1866) - with both referenced to letters from Wallace to Darwin, and Darwin to Wallace.

Both may well be correct, but my question is - if the term was adopted by Darwin in the letter to Wallace in 1866, did it appear in either the 4th or 5th editions? I do not have access to these 2 editions!

Stuart Barker

J.S.F. (Stuart) Barker FTSE Emeritus Professor School of Rural Science and Agriculture University of New England Armidale, NSW 2351 Australia

Honorary Professor School of Integrative Biology University of Queensland Brisbane

HOME: 114 Cooke Road Witta, Maleny Qld 4552

Ph. HOME ++ 61 7 5435 8365 email -sbarker@une.edu.au

sbarker@une.edu.au

Gel doc camera

Hi Everyone,

Our laboratory has adopted an old gel documentation unit but the camera does not work with it. I know there has been enquiries and practical replies posted during this year in regards to cameras and gel doc unit set-ups, but I have tried numerous different filters and cameras and still no luck. There is one that I know works and is hard to find. Does anybody have an old and functionally reliable, UVP camera-CCD 4722-2000/0000 that they want to sell or donate to our lab?

My contact details are: Address: Monash University Wellington Road, Clayton 3800 Victoria. Australia. Telephone: +613 9902 0101 Email: Nga.Dang@sci.monash.edu.au

Thank you.

Nga. Nga.Dang-Lien@sci.monash.edu.au Nga.Dang-Lien@sci.monash.edu.au

GeneExpression Analysis Software

Hi,

Currently, I am analysing data from Drosophila affymetrix arrays. I was using GeneSpring in the lab of a collaborating group. I was very impressed by the GeneSpring package and am considering buying a licence for our own lab. However, the price is rather hefty.

Therefore, I would like to ask whether any of you has experience with similar packages (commercial or otherwise) that you would recommend? All comments are welcome.

Many thanks, and best wishes for 2007,

Bas

Bas Zwaan Evolutionary Biology Group Institute of Biology Leiden Leiden University

B.J.Zwaan@biology.leidenuniv.nl

Genotypic diversity programs

Does anyone know of a program that will return Genotypic richness/diversity measures per population that are standardised for population size?

Thanks, Christina. csch9@student.monash.edu.au Christina Schmuki < Christina.Schmuki@sci.monash.edu.au>

Genotyping 1000s

Hi,

I'm designing an experiment that will produce a DNA population consisting of many mutagenized versions of a 30bp sequence, all flanked by the same non-mutagenized sequences that could be of any length. The population will have been enriched for those molecules able to carry out a particular function (being taken up by naturally competent bacteria), and then amplified by PCR.

We will want to analyze the sequence diversity of this population, expecting that many (most) members will have one or more mutations in this segment. I'm hoping for advice on appropriate DNA sequencing or genotyping technology.

One possibility would be some sort of chip or array that could analyze the whole pool of variants, determining the proportion of each base at each position in the 30bp we've mutagenized.

Because this wouldn't tell us anything about the correlations between variation at different positions, we'd also want to sequence/genotype some (say 1000?) of the mutagenized segments.

I'd appreciate suggestions of efficient ways to collect this information.

Thanks,

Rosie -

Dr. Rosemary J. Redfield @interchange.ubc.ca Associate Professor Department of Zoology Office: (604) 822-3744 Univ. of British Columbia Lab: (604) 822-6323 Vancouver, B.C. V6T 1Z4 Fax: (604) 822-2416 Canada

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

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

Grand Canyon Age

Dear Brian,

If the scientific community is not already aware of the Bush administration's mandated Grand Canyon National Park policy, I would appreciate your informing it. Here is an excerpt from the "Public Employees for Environmental Responsibility" website (http://www.peer.org/news/news_id.php?row_id1).

"Grand Canyon National Park is not permitted to give an official estimate of the geologic age of its principal feature, due to pressure from Bush administration appointees. Despite promising a prompt review of its approval for a book claiming the Grand Canyon was created by Noah's flood rather than by geologic forces, more than three years later no review has ever been done and the book remains on sale at the park, according to documents released today by Public Employees for Environmental Responsibility (PEER)." (from December 28, 2006 release)

Some scientists might like to write their congressional representatives about this.

Regards, Elizabeth

Elizabeth P. Lacey Professor of Biology Department of Biology 312 Eberhart Bldg. University of North Carolina P.O. Box 26170 Greensboro, NC 27402 USA phone: 336-334-4955 fax: 336-334-5839 email: eplacey@uncg.edu

Elizabeth Lacey EPLACEY <eplacey@uncg.edu>

Evoldir:

Has anyone run into a rebuttal or other response to the article abstracted below?

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

Proc Biol Sci. 2004 May 7;271(1542):893-901. Related Articles, Links

The herring gull complex is not a ring species.

Liebers D, de Knijff P, Helbig AJ.

Institute of Zoology, University of Greifswald, Vogelwarte Hiddensee, 18565 Kloster, Germany.

Under what circumstances speciation in sexually reproducing animals can occur without geographical disjunction is still controversial. According to the ring-species model, a reproductive barrier may arise through 'isolation by distance' when peripheral populations of a species meet after expanding around some uninhabitable barrier. The classical example of this kind of speciation is the herring gull (Larus argentatus) complex, with a circumpolar distribution in the Northern Hemisphere. Based on mitochondrial DNA variation among 21 gull taxa, we show that members of this complex differentiated largely in allopatry following multiple vicariance and long-distance-colonization events, not primarily through isolation by distance. Reproductive isolation evolved more rapidly between some lineages than between others, irrespective of their genetic distance. Extant taxa are the result of divergent as well as reticulate evolution between two ancestral lineages originally separated in a North Atlantic refugium and a continental Eurasian refugium, respectively. Continental birds expanded along the entire north Eurasian coast and via Beringia into North America. Contrary to the ringspecies model, we find no genetic evidence for a closure of the circumpolar ring through colonization of Europe by North American herring gulls. However, closure of the ring in the opposite direction may be imminent, with lesser black-backed gulls about to colonize North America.

The Hazards <eehazard@paulbunyan.net>

Is Ploidy Ecological

I am struggling with a general conceptual question about polyploidy, and I would like to hear some expert opinions.

What do you think about the following argument:

(1) Ploidy is an ecological trait (because it has got to do with genetic variability, adaptability, etc) (2) Therefore, different ploidy levels (across species) represent different ecological functions/niches (3) Therefore, if the ploidy levels in a flora become more similar due to biological invasions, then this flora is becoming more ecologically/functionally similar

In other words: can I use the absolute numbers 2, 3, 4, 6, 8 of ploidy levels as if I was analyzing different growth form strategies or pollination types?

I would be grateful for any comments.

Thanks in advance,

Oliver

– Dr. Oliver Bossdorf Department of Community Ecology Helmholtz Centre for Environmental Research UFZD-06120 Halle, oliver.bossdorf@ufz.de http://-Germany www.ufz.de/index.php?en5 oliver.bossdorf@ufz.de oliver.bossdorf@ufz.de

Is Ploidy Ecological Answers

Dear all.

since several people have asked me to do so, I have put together all responses that I got about my ?Is ploidy an ecological trait?? question. Half of them are comments that I received from EvolDir readers. I have also directly written to a few people who I regard as polyploidy experts, and to the Pigliucci lab, where I have been a postdoc until recently. I?ve added their responses, too. For the sake of simplicity, I have cut off Greetings and regards but left the scientific answers unchanged.

For those who have no time, a quick subjective summary of the answers:

* ploidy is a genomic trait, not an ecological one * in many cases, ploidy DOES affect important ecological traits. Sometimes, however, it doesn?t * studying the relationship between ploidy levels and ecological traits is most interesting and meaningful if comparisons are made within the same species or within a group of

closely related species * However, even in this case, the relationship between ploidy and traits is sometimes unpredictable * ?Different ploidy levels = different ecological niches? is too simple and too optimistic. Across species, it is almost certainly wrong * Because of their frequent reproductive isolation, different ploidy levels within the same species might sometimes act like different species. Therefore one cannot draw a strict line ?within-species comparisons yes, across-species no?

Thanks again for your interest and your comments. This was a great help to me.

Regards, Oliver

******* QUESTION *******

Dear EvolDir members,

I am struggling with a general conceptual question about polyploidy, and I would like to hear some expert opinions.

What do you think about the following argument:

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In other words: can I use the absolute numbers 2, 3, 4, 6, 8 of ploidy levels as if I was analyzing different growth form strategies or pollination types?

I would be grateful for any comments.

Thanks in advance,

Oliver

****** ANSWERS FROM EVOLDIR ******

Rafael Rubio de Casas Departamento de Biologia Vegetal 1 Universidad Complutense de Madrid rrubioca@bio.ucm.es

I don't know if I understood your argument correctly, but I'll try to give you an opinion, as this is something I'm currently working on right now. I have encountered ploidy "problems" in two of the models I wok with: the olive tree and Dactylis glomerata. In the case of the olive tree poliploidization led to the formation of different subspecies, but there not seems to be any kind of ecollogical differentiation, to the best of my knowledge it seems to be the outcome of a very long and complex history of genetic isolation and reticulation.

For Dactylis there it appears that polyploidization could have, to some extent, ecological relevance. Polyploid individuals do seem to outperform diploids in the colonization of "harsh" environmets, such as roadsides. They are bigger, grow faster, have longer vegetative periods and produce more seeds, which might imply a higher fitness. However, diplois are still there, they are never displaced by the polyploids so... I really don't know what to think. In any case, I think that considering ploidy levels as straightforward ecolgical trait is very, very risky.

Matthias Stoeck Dept. Ecology & Evolution University of Lausanne Matthias.Stoeck@unil.ch

> (1) Ploidy is an ecological trait (because it has got to do with genetic > variability, adaptability, etc)

By definition, ploidy is, of course, a genetic trait [even if, as many genetic traits, it may be selected for by ecological conditions]. As you probably know, very often, allopolyploidy includes hybridization!

> (2) Therefore, different ploidy levels (across species) represent > different ecological functions/niches

The big question here is the species concept. Usually, different ploidy levels imply some amount of genetic change (Pikaard, 1999) in the whole genome and therefore some amount of reproductive isolation (see also Ramsey & Schemske 2002). Thus, there is usually no panmixia as in populations of individuals with the same ploidy. Rather, it is what Rieseberg may call "porous gene pools" of collectively evolving species, i.e. some amount of exchange although the different incipient species do not merge anymore, but may even diverge further.

> (3) Therefore, if the ploidy levels in a flora become more similar

?? I am not sure what you mean by that?? E.g. everyone is 4n??

> due to biological invasions

Which is surprising enough....How? Through hybridization or selection??

___ / ___

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

Isopod primers

I am still looking for a set of primers for isopods. any ideas?

Stefanos Martimianakis PhD Student University of Patras Sect. of Biology Dep. Genetics e-mail: stmartim@upatras.gr

Miocene climate

Dear Evoldir members,

I'm looking for information about the climate at the late middle Miocene - early late Miocene transition (Mi5 and Mi6 events). More particularly, I'm searching for the impact of these events in Africa. Does anyone know if there where any biotic changes in Africa associated with the Caribbean Carbonate Crash or other major events of the period? I will very much appreciate any guidance and references will be most welcome! (not to mention pdf copies of any interesting papers)

Thank you all in advance:

Dr. Rafael Rubio de Casas c/ Jose Antonio Novais 2 Departamento de Biologia Vegetal 1 Universidad Complutense de Madrid 28040 Madrid

rrubioca@bio.ucm.es

Problem RFLP software

Dear EvolDir members,

I've been using the computer program REAP (McElroy) to analyse RFLP data for my PhD thesis and have encountered a problem - the DA and MONTE sub-program options wont open (either on their own or as part of the intergrated program. The rest of the sub-options are working fine so I don't think I have an installation problem. There is no error message, they just open. I was wondering if anyone had encountered a similar problem and could offer any advice.

Many thanks in anticipation.

Katie Sumner

University of Exerter Hatherly Laboratories Prince of Wales Road Exeter EX4 4PS

K.Sumner@exeter.ac.uk

RoyalSociety Biodiversity

Here is the link that you need for this issue www.pubs.royalsoc.ac.uk/biodiversity-hotspots .

NEW from the Royal Society Biodiversity hotspots through time: using the past to manage the future Compiled and edited by Katherine J Willis, Lindsey Gillson and Sandra Knapp Published February 2007 Special offer price: £47/US\$90 (usual price: £60/US\$110)

International targets set for reducing the rate of biodiversity loss the 2010 target and ensuring environmental stability (Millennium Development Goals) have helped to focus the efforts of the scientific community on providing the data necessary for their implementation. The urgency of these goals, coupled with the increased rate of habitat alteration worldwide, has meant that actions have largely not taken into account the increasing body of data about biodiversity change in the past.

We know a lot about how our planet has been altered and recovered in the past, both in deep time and through prehistory. Linking this knowledge to conservation action has not been widely practiced, by either the palaeo-ecology or the conservation communities. Long-term data, however, have much to offer current conservation practice, and in the papers for this volume, we have tried to bring together a variety of different perspectives as to how this might happen in the most effective way. We also identify areas for productive collaboration and some key synergies for work in the near future to enable our knowledge of the past to be used for conservation action in the here and now. Lateral thinking, across knowledge systems and with open-mindness about bridging data gaps, will be necessary for our accumulating knowledge about out planets past to be brought to bear on our attempts to conserve it in the future.

Subscribers to Philosophical Transactions of the Royal Society B: Biological Sciences can access the full content online at www.pubs.royalsoc.ac.uk/biodiversity-hotspots Non-subscribers can purchase the print issue at the specially reduced price shown above. To place an order at the discounted price, please send payment by cheque (made payable to Portland Customer Services) or by Visa or MasterCard (quoting reference TB 1478) to: Portland Customer Services, Commerce Way,

Colchester CO2 8HP, UK Tel: +44 (0)1206 796351 Email: sales@portland-services.com

For further information on related organismal, environmental and evolutionary biology issues please visit www.pubs.royalsoc.ac.uk/philtransb/environmentevolution Philosophical Transactions of the Royal Society has been published since 1665. For subscription details please contact sales@royalsoc.ac.uk or visit www.pubs.royalsoc.ac.uk/philtransb Biodiversity hotspots through time: an introduction KJ Willis, L Gillson and S Knapp How can a knowledge of the past help conserve the future? Biodiversity conservation and the relevance of longterm ecological studies KJ Willis, MB Araújo, KD Bennett, B Figeroa-Rangel, CA Froyd and N Myers Prehistorically modified soils of central Amazonia: a model for sustainable agriculture in the 21st century B Glaser The legacy of cultural landscapes in the Brazilian Amazon: implications for biodiversity MJ Heckenberger, JC Russell, JR Toney and MJ Schmidt Holocene fires and occupation in Amazonia: records from two lake districts MB Bush, MR Silman, MB de Toledo, C Listopad, WD Gosling, C Williams, PE de Oliveira and C Krisel The impact of prehistoric people on the tropical rainforest of Papua New Guinea S Haberle Culture or climate? The relative influences of past processes on the present day composition of the lowland Congo rain forest TM Brncic, KJ Willis, DJ Harris and R Washington Late Quaternary vegetation, biodiversity and fire dynamics on the southern Brazilian highland and their implication for conservation and management of modern Araucaria forest and grassland ecosystems H Behling and VD-P Pillar Response of pollen diversity to the climate-driven altitudinal shift of vegetation belts in the Colombian Andes C Weng, H Hoogstriema and JF Duivenvoorden Tree-line changes along the Andes: implications of spatial patterns and dynamics K Young and B León Rates of change in tree communities in secondary tropical forests following major disturbances RL Chazdon, SG Letcher, M van Breugel, M Martínez-Ramos, F Bongers and B Finegan Long-term forest-savanna dynamics in the Bolivian Amazon: implications for conservation FE Mayle, RP Langstroth, R Fisher and P Meir Thresholds of potential concern as benchmarks in the management of African savannas L Gillson and KI Duffin Biocomplexity and conservation of biodiversity hotspots: three case studies from the Americas

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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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Russian Scopes Trial

There is a kind of Russian Scopes Trial going on in St. Petersburg. There has been very little material in english about the trial, except a few short news pieces and a letter in Nature. Apparently it has been widely covered in the Russian media.

Today there is a long story in the Baltimore Sun that gives more details:

In Russia, a test of God vs. Darwin By Erika Niedowski Sun Foreign Reporter Originally published January 3, 2007 http://www.baltimoresun.com/news/health/bal-te.darwin03jan03,0,6505374.story?colll-health-headlines The group bringing the lawsuit has set up this website: (antidarvin = anti-Darwin) http://antidarvin.com/ NCSE has had no contact with anyone involved in the lawsuit (or anyone in Russia) – but we would like to help if possible, especially since it is almost certain that the Russian creationists are importing their arguments from the U.S. creationism/ID movements.

I know this is an interational list. So, if anyone knows anyone, please have them contact NCSE!

Thanks, Nick Matzke

Nicholas J. Matzke Public Information Project Director National Center for Science Education, Inc. 420 40th Street, Suite 2 Oakland, CA 94609-2509 Phone: (510) 601-7203 x307 Fax: (510) 601-7204 Tollfree: 1-800-290-6006 matzke@ncseweb.org bio: http://www.ncseweb.org/ourstaff.asp#matzke National Center for Science Education http://www.ncseweb.org New book: Not in Our Classrooms: Why Intelligent Design Is Wrong for Our Schools http://www.ncseweb.org/nioc NCSE's work is supported by its members. Join today! http://www.ncseweb.org/membership.asp matzke@ncseweb.org

SSE Dobzhansky Prize Announcement The Theodosius Dobzhansky Prize is awarded annually by the Society for the Study of Evolution to recognize the accomplishments and future promise of an outstanding young evolutionary biologist. The prize was established in memory of Professor Dobzhansky by his friends and colleagues, and reflects his lifelong commitment to fostering the research careers of young scientists.

Eligibility The candidate must have a Ph.D. (or equivalent) awarded no earlier than June 2004 and no later than 1st February 2007, and must be actively involved in research in the field of evolutionary bi-There are no other restrictions. Applicants do not have to be members of the Society for the Study of Evolution, but such membership is encouraged. Nomination/Application.- Candidates may apply directly or may be nominated. Established researchers are encouraged to nominate outstanding young scientists who may be unaware of the existence and prestige of this prize. Each candidacy must be supported by the following materials detailing the candidates career to date: (1) a curriculum vitae, (2) a summary of research accomplishments, (3) a statement of research plans for the next 5 years, (4) pdf copies of three recent publications, (5) names and addresses of the three referees (including the nominating scientist where applicable) who have sent supporting letters. N.B.: THE THREE LET-TERS OF REFERENCE ARE SENT SEPARATELY, but no application will be considered without these letters. All application/nomination materials and letters of reference must be sent as PDF e-mail attachments. No file type other than PDF will be accepted. The deadline for receipt of all materials, including letters of reference, is 15 February 2007. All materials should be sent to the secretary of SSE (Dale H. Clayton) at the following email:

careymadsen@bioscience.utah.edu

Award.- The Dobzhansky Prize is accompanied by a check for U.S. \$5000, and will be awarded at the annual meeting of the Society for the Study of Evolution, 16-21 June 2007, in Christchurch, New Zealand. The recipient is expected to be present to receive the award and to give an oral presentation about his/her research. To facilitate attendance, the SSE provides funds to cover the costs of conference registration, accommodation during the conference, and expenses for travel to and from the conference. The recipient will be notified of the award by late March 2007.

For Dr. Dale Clayton clayton@biology.utah.edu Secretary, Society for the Study of Evolution

Carey Madsen careymadsen@bioscience.utah.edu

Department of Biology University of Utah 257 So. 1400 E. Room 308 ASB Salt Lake City, UT 84112-0840

Tel 801-585-1791 Fax 801-581-2174

Carey Madsen <careymadsen@bioscience.utah.edu>

Sequencing strategy advice

Dear evoldir members.

We are about sequence a set of genes from two non-model species (brown algae of the genus Fucus) with the aim of testing them for selective neutrality. Since I'm new to this kind of analysis, I'd like to solicit advice and hopefully avoid any pitfalls.

Specifically, we are thinking of directly sequencing PCR products to maximise the number of genes we can cover. Because the organism is diploid, this means we won't have access to the underlying haplotypes when we encounter heterozygotes. My impression is that this won't be a problem for analyses based on McDonald-Kreitman style tables. However, if anyone out there can see a flaw in this plan, I'd appreciate hearing from you so I can fix it.

Thanks in advance,

Nick Miller

MAREE-Marine Ecology and Evolution, CCMAR - Centre of Marine Sciences, Universidade do Algarve, Portugal

nmiller@ualg.pt

SexualDimorphism Genetics

I am looking for information on the genetics of sexually dimorphic traits in animals, in particular whether mutations that lead to such dimorphisms are male limited from the outset or are expressed in both sexes and then repressed in females. I would be extremely grateful to know about any data or experiments on this topic.

Thanks. Jerry Coyne j-coyne@uchicago.edu Jerry Coyne <j-coyne@uchicago.edu>

Software FastCoalescentSimulation

We would like to inform you that the "FastCoal" software package is available for download at http://chp220mac.hsc.usc.edu/Marjoram/Software.html This software enables extremely rapid coalescent simulation of data for long chromosomal regions. It implements the algorithms of Mc Vean and Cardin (2005) and Marjoram & Wall (2006). Full ref. details can be found by following the above link.

Paul Marjoram Dept. of Preventive Medicine Keck School of Medicine University of Southern California 1540 Alcazar Street, CHP 220 Los Angeles, CA 90089-9011 USA.

Ph= 323-442-0111 FAX= 323-442-2349

Software MrMTgui 1 01

Hello everyone

I recently released an small upgrade to MrMTgui, an interface program for ModelTest and MrModelTest. The new version 1.01, addresses two minor bugs:

- AIC and BIC calculations can be done at the same time and the resulting PAUP block can be selected by the user before parsing it in the Nexus file
- there is no need to restart the program to run files consecutively
- the PAUP block insertion option now inserts the results without checking for the existence of blocks in the file. This is to prevent some errors that were occurring. I am working on a better solution to insert PAUP blocks in the NEXUS files.

I also fixed some minor bugs and decreased the total executable size. Also if you already have MrMTgui installed its un-installation is not required to install the new version.

This new version as usual is available at

http://www.genedrift.org/mtgui.php If you are interested in the source code, let me know. It is also available at a SVN/trac repository and if you need help get-

ting it, just send me an email. The repository source version is meant to be compiled on Linux systems with wxWidgets (www.wxwidgets.org) installed. If you need help installing/configuring wxWidgets and or MrMTgui, drop me a note. Windows project/source code is available upon request.

Future versions will be ported to Mac OSX too. If you have any suggestion, comment, opinion, request just send me an email. T hanks to everyone that reported problems and bugs and helped along the way

Regards

Paulo Nuin

pnuin@uhnres.utoronto.ca pnuin@uhnres.utoronto.ca

SouthAfrica VolunteerFieldAssist

Volunteers needed as field assistants for the project:

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

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

What kind of people are needed? Biology/zoology/veterinary students with BSC/ Vordiplom or equivalent are preferred as dates. Applicants must have an interest in working in the field and with animals. Whereas the research is mainly non-invasive, this is no job for extreme animal right persons (we take tissue and blood samples). Hard working conditions will await applicants, as the study species gets up with sunrise (between 5 and 6 o' clock), and stops its activity with dusk (19 o' clock). Work during nights might also be necessary. Work in the field will be done for 5-6 days a week. Applicants must be able to manage extreme temperatures (below 0 at night, sometimes over 40C during days). Applicants must both be prepared to live for long periods in the loneliness of the field and to be part of a small group.

Work of field assistants: Trapping and marking of mice and rats; radio-tracking to determine home ranges and nest sites; direct behavioral observations in the field; experiments and observations with captive specimen under natural weather conditions; maintenance and cleaning of the research station. Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 500 (around 70 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 1500 or 200 Euro/month). Including extras, you should expect to pay about 300 Euros per month.

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

When and how long: Staring middle of May/ beginning of June 2007 for a minimum of 2 months and up to six months or longer.

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

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

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

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

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

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

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

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

visit http://www.stripedmouse.com Carsten Schradin carsten.schradin@zool.unizh.ch

Sponge Barcoding Database launched

[apologies for cross-posting]

Dear colleagues, the Sponge Barcoding Database (SBD) has been launched and can be accessed via the 'Data' button at the Sponge Barcoding Project's website (www.spongebarcoding.org).

Sponges are among the most ancestral metazoans and are notoriously difficult to identify, even by taxonomic experts due to their depauperate suite of complex morphologial characters. However, as a group they are highly diverse, ecologically important and of significant commercial importance to the pharmaceutical and biomaterials industry. Therefore, means of unambiguous identifications are urgently needed. Sponge DNA signature sequences (DNA barcodes) will provide a set of indispensable tools to aid taxonomists and ecologists in the identification of sponge species, and will enhance the discovery of drug-producing species.

The Sponge Barcoding Database (SBD) has been developed with the aim to function as the primary access point for DNA signature sequences together with providing information on conventional morphological taxonomic characters to aid species discovery, description and characterization. The unique combination of sponge-specific conventional taxonomic information and DNA signature sequences is the distinguishing feature, in which the SBD differs from other database systems, such as Genbank or the Barcode of Life While records of the SBD will be Data Systems. linked with both databases in the future, both do not provide the desired flexibility and have the desired options available, e.g. they do not provide fields to store more detailed (morphological) taxonomic descriptions. An additional backbone for nomenclatorial and taxonomical entries is the cross-linking to the World Porifera Database (WPD, http://www.vliz.be/vmdcdata/porifera/index.php) which will provide the ultimate taxonomic authority with regards to accepted species names.

Currently, the SBD provides two categories of records:

REFERENCE: records from described species with a full taxonomic description, DNA signature sequence(s), and verification of voucher material by a recognized taxonomic expert. SUBMITTED: records from described species that either lack full taxonomic description or verification by a taxonomic expert, or DNA signature sequences from as yet undescribed and unverified species. We strongly suggest using those records only for comparative purposes and NOT for species identification.

The SBD does not contain many entries yet, but will be populated soon, e.g. with numerous records from the Caribbean coral reefs which have generously been provided by Sandra Duran.

To check out the functionality of the SBD, search for "Astrosclera" as genus name on the search page or click on 'Specimen list'. Then click on the record number on the results page to view the record. The page of the record is a condensed view, click on 'show/hide' to see expanded views of the 'Morphological description', 'Reference', or 'Associated DNA Sequences'. A click on the latitude/longitude data opens up Google Maps where the exact sample location is displayed on a map and/or satellite image. DNA signature sequences can be downloaded in FASTA format.

We sincerely hope to provide a useful service for the scientific community with the Sponge Barcoding Project and its Database, however, its success critically depends on the data YOU submit!

To submit records to the SBD you should follow the guidelines and use the Excel spreadsheet template we provide on the 'Data' page (to be found below the 'Go' button). Each record should contain a morphological description and species identification, which will be verified by an acknowledged taxonomic expert for the group before its status is set to REFERENCE.

I would like to acknowledge Christian Menke contribution of programming of the SBD, several members of the SBP steering group for help and advice in implementing the structure of the SBD, especially Dirk Erpenbeck, Bob Thacker and Joe Lopez and of course Sandra Duran for providing her database.

Best regards, and happy new year!

Gert Wörheide

Gert Wörheide Junior Professor for Geobiology Geoscience Centre Göttingen Dept. of Geobiology Goldschmidtstr.3 37077 Göttingen, Germany

Centre for Biodiversity and Ecology University of Göttingen

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gert.woerheide@geo.uni-goettingen.de

www.geobiology.eu www.spongebarcoding.org www.geobiologie.uni-goettingen.de www.biodiversitaet.gwdg.de Associate Editor Porifera

___/___

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

February 1, 2007 EvolDir

Storing Fish DNA

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Standardized genetic differentiation

Dear EvolDir Members,

We have received many questions about the standardized measure of genetic differentiation (Hedrick, 2005. Evolution 59:1633-1638). We would like to thank all the people that have contacted us and hope that our responses have been useful. Most questions focused on how to calculate the maximum genetic differentiation for actual data using this measure. We therefore thought it would be appreciated if we also explain this in a message to the EvolDir list.

To calculate the maximum genetic differentiation for any set of data (using GST or other genetic differentiation measures), it suffices to recode the data and make every allele category in each population unique and then calculate the genetic differentiation. To obtain the standardized measure of genetic differentiation, one should then divide the original value by the value obtained from the maximum value as calculated from the recoded dataset.

Recently, the standardization approach was extended to AMOVA (Meirmans, 2006. Evolution 60:1399-1402). In addition to the Mac-only software to perform a standardized AMOVA, as mentioned in this article, there is now a program (called RecodeData) to recode Fstat-input files to make every allele unique in each population. Using RecodeData, you can use Fstat or, after conversion, any other program to calculate the maximum value of FST and thus the standardized coefficient. RecodeData is available for both Mac and Windows and the source-code is available for users of other operating systems. You can find the software and a short manual online on: http://www.bentleydrummer.nl/software/index.html Phil Hedrick (philip.hedrick@asu.edu) Patrick Meirmans (pmeirmans@rncan.gc.ca)

School of Life Sciences Arizona State University Tempe, AZ 85287-4501

Phone: 480-965-0799 Fax: 480-965-2519

For pdf files of reprints go to: http://lsweb.la.asu.edu/-phedrick/ philip.hedrick@asu.edu

Dear EVOLDIR-members,

In view of a future research campaign aiming at catching and analyzing marine fish eggs and larvae (besides other plankton species), I would like to know which is the best storage liquid/buffer to use to enable multiple analyses, such as gene expression, DNA sequencing and fragment analysis, but also morphological analyses for taxonomy and egg developmental stage.

As for gene expression, no real other choice is available than RNAlator (selected species will thus be rapidly sorted and preserved), for the other samples there are several options: pure ethanol (morphology excluded), DMSO (no morphology, but unstable at high temperatures), freezing at -20 C and sorting everything later, or using buffered formaldehyde (4 %). The latter has been shown to yield good amplification success, enabling parallel morphological analyses. Another possibility is to directly split the samples in 2-3 batches to be preserved separately (ethanol + buffered formaldehyde for instance)

I would thus be very interested and happy to hear some opinions or better receive some advice/new results/papers on this issue.

I thank you a lot in advance and hope to receive more info soon

sincerely,

Gregory Maes (Gregory.Maes@bio.kuleuven.be)

Post-doctoral Researcher Laboratory For Aquatic Ecology Catholic University Leuven CH. Deberiotstraat 32 3000 Leuven Belgium email:gregory.maes@bio.kuleuven.be

TissueStorage DNAextraction

Dear Colleagues,

I would like to ask for any advice on long term storage and DNA extraction of/from mammalian tissue (rodent heart, lung, liver, spleen, muscle, etc.) samples. We have the experience that storing our samples at 4degrees in 70% ethanol results in a high amount of DNA degradation after even one year. Is it recommended to extract all the DNA from the tissues while they are fresh and keep it all in solution at -80 and do away with tissue storage all together or are there any preferred methods of tissue storage (with respect to DNA preservation). Does anyone simply freeze their tissue?

Any advice is appreciated.

Thank you,

Rick Scavetta

– Rick J Scavetta Abteilung fuer Evolutionsgenetik Institut fuer Genetik Universitaet zu Koeln Zuelpicherstrasse 47 50674 Koeln - Germany Tel: ++49 221 470 3402 Fax: ++49 221 470 5975 rscavett@uni-koeln.de

TissueStorage DNAextraction answers

Dear Colleagues:

A couple weeks ago I asked for advice concerning tissue storage and DNA preservation. Below I include the original posting and the responses I received (unless otherwise explicitly noted not to).

I was really amazed at the response from the group on this topic and also the variety of answers. I leave it up to you to decide what to make of the recommendations.

Thanks to everyone who sent in comments!

Rick

Original post:

I would like to ask for any advice on long term storage and DNA extraction of/from mammalian tissue (rodent heart, lung, liver, spleen, muscle, etc.) samples. We have the experience that storing our samples at 4degrees in 70% ethanol results in a high amount of DNA degradation after even one year. Is it recommended to extract all the DNA from the tissues while they are fresh and keep it all in solution at -80 and do away with tissue storage all together or are there any preferred methods of tissue storage (with respect to DNA preservation). Does anyone simply freeze their tissue?

oshua P. Wharlay At the Burke M

Joshua R. Whorley At the Burke Museum we simply freeze our tissues at -80. We have good success extracting high quality DNA years after collection.

Mark Schultz Yes, I just freeze my tissues. 70% EtOH works well too, but an acid water content may hydrolyse the DNA. Apparently, 95% EtOH is better but 100% is not optimal as it contains Benzine to strip the final 5% water content from the Ethanol. Once the DNA is extracted, TE buffer is good for long term storage, as is water at neutral pH and freezing (we do it at -18 degC). Repeated freeze-thawing also causes DNA fragmentation. Some citations that might be useful, although they do refer to invertebrates:

VINK, C. J., THOMAS, S. M., PAQUIN, P., HAYASHI, C. Y. & HEDIN, M. (2005) The effects of preservatives and temperatures on arachnid DNA. Invertebrate Systematics, 19, 99-104.

DEAN, M. D. & BALLARD, J. W. O. (2001) Factors affecting mitochondrial DNA quality from museum preserved Drosophila simulans. Entomologia Experimentalis Et Applicata, 98, 279-283.

J. Albert Vallunen We've had similar problems in our lab with fish tissues. 5 to 10 year old ethanol-stored samples have degraded virtually all of their DNA. It seems that ethanol concentration has also a role in this: 70% ethanol seems to be too diluted to preserve the tissue, especially if the piece is big and moist to begin with. On the other hand, using 100 proof EtOH fixes the tissue too much pretty soon. Therefore using ethanol which is 90-96% might yield better results (but we'll have to wait for 5 years to see if it actually works).

As a solution to all this we are also thinking about extracting all of the DNA in one go and then storing it in -80. But because extracting DNA from all of our thousands of samples is a huge task I'd be interested in hearing any (hopefully different) solutions you receive.

Gregory Maes we never keep tissue on 70 % ethanol for DNA analysis. It indeed simply degrades very fast (only used for morphological sample preservation)! It should be around 95 % not less! This gives very good preservation conditions, even more when put in the fridge of -20 °C.

However, it can still degrade and the best is indeed to purify at least once the tissue and store high quality DNA in -80 °C (in TE buffer or ddH2O) or you could try to store it on the Whatman FTA papers used in forensics. They seem to have a good yield afterwards, but you should test this first.

Francois Pompanon for frog tissue samples we saw that preservation in silica gel was better than in ethanol. As in your case ethanol-preserved samples showed degradation that did not allowed AFLP fingerprinting. How-

ever I think that the best solution is to extract the DNA as soon as possible after sampling.

B. L. Cohen I doubt if you will find any widely applicable consensus.

I have some brachiopod and phoronid DNAs that have been stored as ethanol pellets under 70% at 4C for almost 20 years and when redissolved and cleaned up give amplifiable 1kb+ products. Similarly some, but not all, brachiopod tissues at 4C have been usable after ~20 yrs. But being scared I keep most at -20, also under ethanol. I ran an enquiry recently about buffering the ethanol (perhaps important for me because of calcite shells) and learned from one or two replies, especially from Blair Hedges (tetrapods mainly), that some people do buffer 70% for long-term tissue storage, e.g. dilute the ethanol with 1 x TE. That seems like a sound practice. There is one literature reference suggesting that isopropanol is NOT a good idea. My experience with it is mixed, perhaps because industrial grade, which I had to use in New Zealand, is contaminated with metals.

Joel Anderson I would recommend freezing two tissue samples per specimen, in cryotubes at -80, without any solution or ethanol (i.e. freeze only the tissue). In the past, I have kept two samples; one sample is a

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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

UGroningen EcolEvol

Dear colleagues: Please distribute this information to potential students.

International Master's Programme in Ecology and Evolution

The Centre for Ecological and Evolutionary Studies at the University of Groningen (Netherlands) organizes a highly successful master's programme on the interface between ecology and evolution. This two-year "top master" programme is designed to provide an optimal preparation for a subsequent PhD programme and eventually for a scientific career in academic research. Through intensive student-teacher interaction during courses, seminars, practicals and individual research projects, students get an intense training in modern research paradigms and techniques. Much emphasis will

be placed on the development of critical thinking and the training in "soft skills" like efficient communication or writing grant proposals. The programme is highly selective and aimed at the brightest and most ambitious students from all over the world. A fellowship, covering tuition and subsistence costs, may be made available to qualified candidates. The deadline for application is 1 February 2007. Fo r more information visit www.rug.nl/biol/evobio or contact

Franz J. Weissing Professor of Theoretical Biology Centre for Ecological and Evolutionary Studies University of Groningen Kerklaan 30 9751 NN Haren The Netherlands tel: +31-50-363-2131 fax: +31-50-363-3400 email: f.j.weissing@rug.nl URL: www.rug.nl/biol/theobio URL: www.rug.nl/biol/theobio

cloning artefacts Answers

Dear evoldir members,

A week ago I posted a question regarding incorrect reproduced PCR primer sequences after cloning and sequencing. I received many informative and interesting answers and comments, so that I could solve my problem! Thanks to everyone helping me! I collected the comments and would like to share them with you:

My query was:

"I study MHC and therefore perform cloning reactions. I found some puzzling results, and was wondering if anyone came accross the same problem/observation: I use vector primers (T7; M13) for the sequencing reaction, so that the whole PCR product should be readable. And it is, but sometimes the PCR primer sequences are not reproduced correctly in the sequence. It seems that in 20-30% of the sequences the primers have 1 to 2 incorrect nucleotides. There is no overlap or visible contamination, a nicely readable sequence. I use a proof reading polymerase (Hifidelity, Qiagen) and the Topo TA Cloning Kit for Sequencing. So, my questions are: Did anyone ever encounter this problem? How can this happen?" And I should add the question: How can I trust the sequence between the primers, when I see I cannot trust the primer sequences?

I categorized the answers to 3 main points:

1. primer synthesis: The primers I used were only "desalted", not purified by HPLC or PAGE. Primers are produced by a chemical reaction in which the bases are coupled stepwise with each other. As with every re-

action, you never get a 100% yield of the product you want to get. That means even if coupling works with an efficieny of 99 % in every step, only 82 % of your final product will have the correct sequence (assuming a primer length of 20 bp). Puritiy could be improved by ordering HPLC or PAGE- purified primers.

2. polymerase error rate/ bacteria error rate: Every enzyme has an error rate and the misincorporated nucleotides in the primer sequences could be due to that. For my problem, there were far to many "misincorporations" to be only explained by this, but still I this it is an important point.

3. others

Here are the comments:

- 1. Primer synthesis:
- "I would guess the errors are coming from the primer synthesis, rather than from the PCR or cloning reactions. During primer synthesis, the reaction that adds each new base is not 100% efficient, so many of the resulting primers do not contain what you think they contain. I believe this usually results in a deletion, not a wrong base, so I am not sure if it really answers your question. Anyway, here is a link to a brief note on the lack of incorporation of nucleotides during synthesis: http://www.idtdna.com/-InstantKB/article.aspx?id199"
- "We had the same problems, but within the whole PCR fragment cloned- there are some one-nucleotide changes now and then that can not be explained by alleles or duplicated regions-there is more "haploytpes" than just two or four. it is true that we used an ordinary Taq and that this could be the cause, but nobody reported that problem, although I doubt that they all used proofreading Taq for PCR. For your problem it might be that your primers are not synthesized prop-

erly and that they contain a mixture of more primers differing only in one nucleotide?"

- "If only the primer sequences show this sequence deviation, you observe a quite common phenomenon, I guess. Primers are produced by a chemical reaction in which the bases are coupled stepwise with each other. As with every reaction, you never get a 100% yield of the product you want to get. If, for example, coupling works with an efficieny of 99 % in every step, only 82 % of your final product will have the correct sequence (assuming a primer length of 20 bp; 0,99^20 = 0,818). You could improve primer "purity" by ordering HPLC or PAGE-purified primers. However, in most cases such highly pure primers are not needed. I would suggest you just to contact the company were you got your primers from and ask about how many % of primers would have the correct sequence at a given primer length."
- "What you noticed can be also an effect of the primer synthesis and purification. for example I normally use desalting purification, which is the standard method that primer-synthesis companies use. That method gives you about 90% of purity or something like that, which means 10% or so of the primers in the mix will not have the exact sequence. Normally the other 90% of them swamp the 'unpure' ones and you get the exact sequence, but after cloning it could be different because if one strand was copied with the wrong primer, it will stay like that until the end of the cycle. And since the vector only gets one copy at a time it will keep the bad copy and you will still notice it in the sequence. Apparently that is more evident when your primers

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PostDocs

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Aberdeen ArcticCharrMHC

UNIVERSITY OF ABERDEEN SCHOOL OF BIOLOGICAL SCIENCES POSTDOCTORAL RESEARCH FELLOW

Applications are invited for a Postdoctoral Research Fellow to work on a multidisciplinary project to investigate the evolutionary dynamics of major histocompatibility genes in Arctic charr.

You will have a PhD in population genetics or a relevant discipline and it is essential that you have experience in molecular biology and molecular genotyping.

The research will involve major histocompatibility gene characterization and molecular genotyping, morphometrics and parasite scoring of Arctic charr sampled from different locations in Scotland. The research will be performed in collaboration with the Institute of Zoology, London (Dr W.C. Jordan).

The NERC-funded position is available for 3 years.

The salary will be paid in the range of GBP 26,915 per annum.

Informal enquiries may be made to Professor Rene J.M. Stet (r.stet@abdn.ac.uk).

Online application forms and further particulars are available from www.abdn.ac.uk/jobs. Alternatively telephone (01224) 272727 (24-hour answering service) quoting reference number YZY179R for an application pack.

The closing date for the receipt of applications is Friday 16th February 2007. Interviews will be held on 16th March 2007.

Promoting Diversity and Equal Opportunities throughout the University

w.jordan@ucl.ac.uk

Belgium EvolMosquitos

Post-doc Position: Mosquito vectors of disease: spatial biodiversity, drivers of change, and risk.

Ongoing eco-climatic changes create suitable conditions for the (re)emergence of vector-borne diseases in Europe. Of these, mosquito-borne diseases are prime candidates (e.g. recent West Nile Fever events, records of introduction/spread of exotic Aedes albopictus in Europe, outbreaks of Chikungunya and Dengue in Europe overseas territories). Knowledge of the taxonomic and functional biodiversity of both endemic and invading vector mosquito species, as well as the factors driving change, is missing in Belgium. Acquiring this knowledge is an essential step towards understanding current risk and preparing for future threats. Therefore the objectives of the project are (1) to make an inventory of endemic and invading mosquito species in Belgium considering environmental and taxonomic elements of biodiversity, (2) to assess the population dynamics of endemic and invasive mosquito species and their interrelationship (3) to model mosquito biodiversity distribution at a 1-km resolution in the Benelux, and (4) to disseminate project outputs to the scientific community, end users, and the general public. The candidate will be integrated in a team composed of members of different Belgian laboratories working on the same project.

Requirement: The candidate should have a PhD or equivalent with expertise in population sampling and field work (if possible on mosquitos) and knowledge of insect physiology related to temperature and population genetics. Aptitude for team work and autonomy are necessary.

Vacancy is for 42 months, appointment will initially take place for shorter period to evaluate the the suitability of the candidate. The position is available immediately.

Please send a CV + a cover letter to

Prof. Thierry Hance Unité d'écologie et de biogéographie Centre de recherche sur la Biodiversité Place Croix du Sud,4- 5 1348, Louvain-la-Neuve, Belgique Tél.: 32 10 47 34 93 Fax: 32 10 47 34 90 hance@ecol.ucl.ac.be http://www.ecol.ucl.ac.be hance@ecol.ucl.ac.be

DanishInstFishRes FishMolecularGenetics

Postdoc in fish molecular genetics

A postdoc position is currently available in the population genetics group of the Danish Institute for Fisheries Research (which has recently become a part of the Danish Technical University). The postdoc will be involved in two projects: 1) molecular analysis of eel eggs and larvae that will be collected during an expedition to the Sargasso Sea in early spring 2007 (the major part of the position) and 2) identification and development of SNPs in brown trout (a minor part of the position, and part of an ongoing project on analysing spatio-temporal genetic structure in brown trout).

The work on eels is part of a multidisciplinary project aimed at obtaining information on the population genetic structure and spawning biology of European and American eel (the project is a part of the Danish Galathea 3 expedition, www.galathea3.dk). Both species spawn in the Sargasso Sea, but major aspects of their biology are virtually unknown. The work of the postdoc will focus on the issue of panmixia vs. popula-

tion subdivision in both eel species, and hybridisation between the two species. This subproject will be based on development and analysis of SNPs (and possibly microsatellites) in eel larvae sampled in the Sargasso Sea. Moreover, molecular species identification of eel larvae and possible eel eggs will be conducted. Furthermore, the candidate will contribute to the statistical analysis of data and writing of scientific papers in collaboration with other project participants. The project involves close collaboration with two other groups in evolutionary genetics and genomics, i.e. Prof. Louis Bernatchez' group (Université Laval, Quebec, Canada) and Dr. Greg Maes (Prof. Filip Volckaert's group at the Katholieke Universiteit Leuven, Laboratory of Aquatic Ecology, Belgium).

The work place is at the Danish Institute for Fisheries Research, Department of Inland Fisheries, in Silkeborg, Denmark (www.dfu.min.dk/ffi). The department has a staff of approximately 25. The population genetics group currently consists of one profesor, two senior scientists, one postdoc, three technicians and five Ph.D. and M.Sc. students.

The candidate should have good hands-on skills in molecular biology, including DNA sequencing, primer design and development of new markers. Knowledge and experience in bioinformatics will also be an important qualification. A good background in evolutionary biology and population genetics is also important, though we put strongest emphasis on the qualifications in molecular biology.

The position is available for 14 months, and starting date is 1 May 2007. The salary depends on qualifications, but will be in the range of 36,000 DKK (6300 USD or 4800 EURO) to 39,000 DKK (approx. 6,800 USD or 5200 EURO) per month. This sum includes pension (approx. 15%). Danish tax is approximately 45% (which also covers health insurance, school for children and many other social benefits).

Applications, including CV and publication list, along with names and contact details of three persons who can supply letters of recommendations should be sent electronically to Prof. Michael M. Hansen (mmh@difres.dk) before 1 February 2007.

Michael M. Hansen Danish technical University Danish Institute for Fisheries Research Dept. of Inland Fisheries Population Genetics Lab Vejlsoevej 39 DK-8600 Silkeborg Denmark Tel. +45 89 213145 Fax +45 89 213150 Mobile +45 22 120804 e-mail: mmh@difres.dk web page: www.difres.dk/ffi/-uk/staff/employee.asp?init=mmh Michael MHansen <mmh@difres.dk>

February 1, 2007 EvolDir 67

Gainesville EvolGenetics

Postdoctoral Position Available in Evolutionary Genetics

DESCRIPTION: A postdoctoral research associate is available in the laboratory of DeWayne Shoemaker at the USDA-ARS Imported Fire Ant and Household Insects Research Unit in Gainesville, Florida. The postdoctoral researcher will collaborate on research projects focusing on the population and evolutionary genetics of fire ants and their natural enemies. One specific objective of the research will be to generate molecular genetic data and subsequently analyze these extensive data to identify the native source population(s) of the fire ant Solenopsis invicta introduced into the U.S.A. and other regions of the world. The researcher also will have the opportunity to pursue additional molecular evolutionary genetic studies of fire ants.

QUALIFICATION REQUIREMENTS: Recent Ph.D. in Genetics, Entomology, Biological Sciences, or related disciplines appropriate to the position. Professional knowledge in the fields of population and evolutionary genetics are preferred and skills in standard molecular genetic techniques (PCR, fluorescent-based genotyping and DNA sequencing, gene expression, high-throughput genotyping, bioinformatics) are desired.

Funding is available for up to three years, with a starting date as early as March 2007. For more specific information about this position, additional enquiries, or to submit an application, please contact DeWayne Shoemaker at: dshoemak@gainesville.usda.ufl.edu

Additional information about ongoing research in the laboratory can be found at: http://ars.usda.gov/-pandp/people/people.htm?personid9379 DeWayne Shoemaker USDA-ARS Center for Medical, Agricultural, and Veterinary Entomology 1600/1700 SW 23rd Drive Gainesville, FL 32608

email: dshoemak@gainesville.usda.ufl.edu phone: 352-374-5942 FAX: 352-374-5818

dshoemak@gainesville.usda.ufl.edu

Theoretical Viral Ecology

A postdoctoral scientist position (2 years) is available at Georgia Tech in the theoretical biology group of Dr. Joshua Weitz (School of Biology). The postdoc will lead efforts to develop analytical and computational models of the dynamics and diversity of bacterial viruses. Opportunities exist for collaboration with researchers at Emory University, Georgia Tech, Princeton University, and University of California-Davis, as well as for the initiation of independent projects in theoretical ecology, integrative biology, and metagenomics. Requirements include: (1) PhD in biology, ecology, mathematics, physics, or related area; (2) Strong quantitative & computational skills; (3) Excellent communication skills. Start date is negotiable, competitive salary and benefits, screening of applicants will begin February 15, 2007, however all applicants will be considered until position is filled. Please send cover letter explaining your interest in the position, CV, and contact information for 3 references to jsweitz (at) gatech.edu. More information is available at http://www.biology.gatech.edu/ecotheory/. Joshua S. Weitz Assistant Professor School of Biology Georgia Institute of Technology 310 Ferst Dr. Atlanta, GA 30332

GeorgiaTech TheoBiol

web: http://www.biology.gatech.edu/faculty/joshuaweitz/ email: jsweitz@gatech.edu

"Joshua S. Weitz" <jsweitz@gatech.edu>

HatfieldMarineOR FishGenetics

The Coastal Oregon Marine Experiment Station at the Hatfield Marine Science Center in Newport, OR invites applications for a Research Associate (Post Doctoral) for the Marine Fisheries Genetics Laboratory (http://marineresearch.oregonstate.edu/genetics/index.html). This is a full-time, 12-month, fixed-term position with reappointments at the discretion of the supervisor.

The post doctorate researcher described here will be part of a larger research team working on a project funded by Oregon Watershed Enhancement Board under the title "OSU Component for Nonpareil Dam Adult Trap and Coho Genetic Pedigree". Primary responsibilities of the post are as follows: 1. Research microsatellites information content as well as technological means for efficient provision of statistical power to resolve pedigree relationships for hatchery/wild and STEP program comparisons. 2. Apply the best bank of these markers to resolve origin, relationships, relative fitness, etc. among samples. Primary expectations are four-fold: 1) effective research planning, 2) innovative research and data gathering, 3) analysis including development of novel methods, 4) effective synthesis of findings through preparation and publication in strong peer review journals. General support towards academic, research and scholarly advancement in the Marine Fisheries Genetics Program and in association with the Oregon Hatchery Research Center are also required.

OSU is one of only two American universities to hold the Land-, Sea-, Sun- and Space Grant designations and is the only Oregon institution recognized for its " very high research activity" (RU/VH) by the Carnegie Foundation for the Advancement of Teaching. OSU is comprised of 11 academic colleges with strengths in natural resources, earth dynamics and sustainability, life sciences, and the arts and sciences. OSU has facilities and/or programs in every county in the state, including 12 regional experiment stations, 41 county extension offices, a branch campus in Bend, a major marine science center in Newport, and a range of programs and facilities in Portland. OSU is Oregon's largest public research university, conducting more than 60 percent of the research funded throughout the state's university system.

OSU is located in Corvallis, a community of 53,000 people situated in the Willamette Valley between Portland and Eugene. Ocean beaches, lakes, rivers, forests, high desert, and the rugged Cascade and Coast Ranges, and the urban amenities of the Portland metropolitan area are will within a 100- mile drive of Corvallis. Approximately 15,700 undergraduate and 3,400 graduate students are enrolled at OSU, including 2,600 U.S. students of color and 950 international students.

The university has an institution-wide commitment to diversity, multiculturalism and community. We actively engage in recruiting and retaining a diverse workforce and student body that include members of historically underrepresented groups. We strive to build and sustain a welcoming and supportive campus environment. OSU provides outstanding leadership opportunities for people interested in promoting and enhancing diversity, nurturing creativity and building community.

The Coastal Oregon Marine Experiment Station is located at the Hatfield Marine Science Center in Newport, which is 55 miles west of Corvallis. Approximately 15,600 undergraduate and 3,400 graduate students are enrolled at OSU, including 2,600 U.S. students of color and 1,100 international students. The university has an institution-wide commitment to diversity and multiculturalism, and provides a welcoming atmosphere with unique professional opportunities for leaders who are women and people of color. All are encouraged to apply.

Salary: \$40,000-\$45,000 annually, commensurate with qualifications and experience.

Required qualifications: 1) a PhD in genetics, ecology, evolution or related field with emphasis in statistics, 2) molecular genetics experience in polymerase chain reaction, microsatellite characterization, 3) population genetics analysis, 4) bioinformatics, 5) demonstrated publication record in peer review journals, 6) demonstrated effective research in a multi-user molecular genetics lab and 7) effective presentation with professional demeanor. Preferred qualifications include a demonstrable commitment to promoting and enhancing diversity.

To review posting and apply, go to http://oregonstate.edu/jobs and refer to posting number 0000252.

Closing date: February 15, 2007.

Oregon State University is an AA/EOE and has a policy of being responsive to the needs of dual-career couples.

Michael A. Banks Director of the Cooperative Institute for Marine Resource Studies Assistant Professor, Marine Fisheries Genetics

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${\bf Hopkins Marine Station} \\ {\bf Whale MolGenet}$

Molecular genetics of whales: POSITION AS DOCTORAL RESEARCH FELLOW in biology (molecular ecology) is available in Steve Palumbi's lab at Stanford

University's Hopkins Marine Station.

The position is affiliated with a Pew Charitable Trustsfunded project exploring historical and molecular estimates of historical population size in baleen whales. The candidate should have a Ph.D. in biology, molecular biology or related fields. Experience in molecular genetics and/or population dynamic modeling is required. Applications should include a statement summarizing the applicant's scientific work and interest, curriculum vitae and three letters of recommendation. The position is available as of Feb 1, 2007, and applications will be accepted until the position is filled.

Contact Tim Knight at trknight@stanford.edu.

For more information on the program, see http://palumbi.stanford.edu/historical.htm trknight@stanford.edu

INRA ClermontFerrand TreePopGenet

Postdoc in molecular biology and population genetics of tropical forest trees

A postdoc position to work on the isolation and characterisation of mechano-perception genes in tropical forest trees is available, starting February 2007, at INRA (National Institute for Agricultural Research), France. The programme as activities will take place at the PIAF Research Unit in Clermont-Ferrand and at the EcoFoG Research Unit in Kourou, French Guiana. The grant is part of a collaborative project, WOODIVERSITY, the goal of which is to ecologically, mechanically and genetically characterise the diversity of responses of tropical woody species to mechanical stimuli, in particular their ability to adjust their support structures according to local light supply and stem density. The appointee will be in charge of isolating homologs of poplar stressand mechano-responsive genes in tropical tree species by heterologous/degenerated PCR; cloning and characterising the gene fragments thus obtained; producing sequence-specific genetic markers; and analysing diversity in natural populations at the selected genes. The comparison of the amounts and distribution of diversity at different taxonomical levels (individual, population, species, genus, family), and on taxa with contrasting growth habits, will be used to infer selection levels and evolutionary pathways at these genes.

The candidates must have a sound background in

molecular biology and in sequencing and/or genotyping, and experience in population genetics and basic statistics. Fluency in written and spoken English is necessary, while good written and spoken French constitutes an asset. Secondary requirements are a background in bioinformatics, plant physiology, gene expression analysis, evolutionary biology.

Duration of the contract: 20 months (first half to be spent in Clermont-Ferrand, second half to be spent in Kourou)

Salary: Approximately 1700 \hat{a} -netsalary, plusfullsocialbenefits, and possibility of on-campus, discount - rentlodging when in Kourou.

Contacts: Ivan SCOTTI (ivan.scotti@cirad.fr) Patricia DREVET (Patricia.DREVET@univ-bpclermont.fr) Bruno MOULIA (Bruno.Moulia@clermont.inra.fr)

Ivan Scotti INRA - UMR 0745 ECOFOG Campus agronomique, Avenue de France BP 709 - 97387 Kourou CEDEX FRANCE Phone +594 (0)59432-9274, -9285, -9278 Fax +594 (0)59432-4302 e-mail: ivan.scotti@kourou.cirad.fr, web: http://kourou.cirad.fr/umr/ "Società Italiana di Biologia Evoluzionistica / Italian Society for Evolutionary Biology" http://www.sibe-iseb.it/ ivan.scotti@cirad.fr

MichiganStateU BacterialGenomics

Bioinformatics and Bacterial Genomics Postdoctoral Research Position

A postdoctoral position is available immediately in the Microbial Evolution Laboratory at the National Food Safety & Toxicology Center at Michigan State University. The research involves the analysis of genome level data derived from related NIH projects studying the population genetics and molecular epidemiology of infectious disease agents. The postdoctoral researcher can (1) analyze genomic and multilocus sequence data of several bacterial pathogens, including pathogenic E. coli and Shigella and group B Streptococcus; (2) enhance existing in-house sequence databases, analysis tools, and websites; and (3) provide assistance and support in data mining, sequence comparisons, standalone BLAST, and analysis of microarray data for ongoing projects. Michigan State University has exceptional strength in microbiology, molecular genetics, and microbial ecology, and the National Food Safety & Toxicology Center provides an outstanding facility and interdisciplinary research environment.

The Applicant should have a Ph.D. in bioinformatics, molecular evolution or related field and have a working knowledge of scripting and databases. Please contact Dr. Thomas S. Whittam (whittam@msu.edu) for more information.

Michigan State University is an Affirmative Action/Equal Opportunity Employer

Thomas S. Whittam, Ph.D. National Food Safety & Toxicology Center 165 Food Safety & Toxicology Building Michigan State University East Lansing, MI 48824-1314 Phone: 517-432-3100 ext 178 Fax: 517-432-2310 Website: http://www.foodsafe.msu.edu/whittam/

"Thomas S. Whittam" <whittam@msu.edu>

Muenster EvolEcolImmunity

Postdoc: Muenster (Germany) - Evolutionary Ecology of Immunity and Host-Parasite Coevolution

A postdoctoral research associate position is available in the group of Animal Evolutionary Ecology at the newly founded Institute for Evolution and Biodiversity, University of Muenster, Germany (www.uni-muenster.de/Evolution) from April 2007.

Research projects will be in the areas of Evolutionary Ecology of Immune Defence, Host-Parasite Coevolution or Evolution of Immune Systems. Current projects of the group focus on the evolution of specific memory and phenotypic plasticity in immune responses, adaptations of parasites to host immune defences and the adaptation of hosts to their natural parasite fauna. We use diverse immunological, genetical and parasitological methods. Our current model species include flour beetle and stickleback fish.

Requirement for the position is a PhD degree and research experience in a biological field (which should be detailed in the application). Experience in one or several of the fields of evolutionary biology, ecology, immunology, parasitology or genetics will be an advantage

Positions are paid according to TVOED, level TV-L 13 (approximately 35.000-45.000 Euro p.a., cf. http://paul.schubbi.org/bat/). The position will include some teaching and administrative duties, however these are generally relatively low. Working and teaching language is English.

Muenster hosts many excellent scientific institutions and is a dynamic city with a world-famous heritage centre. It is very lively, last not least because of the high number of students (around 20% of the residents) and the rich choice of social, cultural and sporting facilities (see www.muenster.de for further details).

Interested candidates should, from now on, send applications (preferentially as E-mail attachment) containing a CV, a list of publications, a research statement and the addresses of 3 potential referees to:

Prof. Joachim Kurtz Institute for Evolution and Biodiversity University of Muenster Huefferstr. 1 D-48149 Münster joachim.kurtz@uni-muenster.de

Tel. +49 (0)30 89001266

Closing date is the February 28th 2007.

****** Prof. Dr. Joachim Kurtz

University of Muenster Institute for Evolution and Biodiversity, Animal Evolutionary Ecology Group Huefferstr. 1, D-48149 Muenster, Germany Phone: + 49 251 83 21 027 (Secretary, Ms. Doberenz) Fax: + 49 251 83 24 668 http://www.uni-muenster.de/Evolution/ PLEASE NOTE: From Oct 2006 - March 2007 I will be located at:

Wissenschaftskolleg Berlin (Institute for **Z11** Advanced Study) Wallotstrasse 19, D-14193 Germany Phone: + 49 30 89 001 266 Berlin, Fax: 49 30 89 001 300 http://www.wikoberlin.de E-mail: joachim.kurtz@wiko-berlin.de joachim.kurtz@env.ethz.ch

Muenster Germany MolecularEvolBioinformatics

OPEN POSITIONS (Postdoctoral) IN MOLECULAR EVOLUTION AND EVOLUTIONARY BIOINFORMATICS

Several positions as postdoctoral (1.0 FTE) and post-graduate (PhD student, 0.5 FTE) research associates in the group of Molecular Evolution and Evolutionary Bioinformatics at the newly founded Institute of Evolution and Biodiversity , University of Muenster, (www.uni-muenster.de/Evolution) will be tenable from mid 2007. (Mind the official announcements (in German): http://www.uni-muenster.de/Rektorat/-Stellen/st_index.htm. Interested candidates should, from now on, send applications to doberenz[at]uni-

muenster.de (pdf attachment, max 4 pages) or to:

Prof. Dr. Erich Bornberg-Bauer (c/o Ms Martina Doberenz) AG Evolutionary Bioinformatics, Institut for Evolution and Biodiversity, FB Biologie, Westfaelische Wilhelms Universitaet Muenster Schlossplatz 4, D-48149 Muenster, Germany www.uni-muenster.de/-Evolution.ebb Closing date is the March 15th 2007.

Research projects will be in one or more of the following areas (see www.uni-muenster.de/Evolution.ebb/-Research for details):

*) Analysing the evolution of domain arrangements *) Analysis of stress responses in a range of organisms using various OMICS data and modelling of biological systems *) Analysing the principles of adaptation in response to biotic and abiotic stress such as host-parasite co-evolution and climate changes using ESTs, microarray and sequence data. *) Evolution of biochemical networks, including genetic and interaction networks. *) Evolvability and adaption of RNA

Required qualifications are:

*) PhD or PG University degree in a biological area such as biochemistry/ biophysics, OR background in bioinformatics and research experience in a biological field (which should be detailed in the application). *) Basic skills in statistics *) Programming skills (in either JAVA, C, PYTHON, PERL) *) LINUX/UNIX literacy *) Motivation and proven ability to carry out bioinformatics research independently

Positions are normally paid according to the TVOED (http://paul.schubbi.org/bat/) scheme. Teaching and administrative duties are generally low, with amount and balance depending on the particular project as well as background, qualifications and experience of candidates.

Muenster hosts many excellent scientific institutions such as a newly founded Max-Planck Institute for biomedical research, a Centre for Nanotechnology or a great number of specialised research areas ("SFBs"). Muenster is a dynamic city with a world-famous heritage centre and in the middle of the beautiful "Muensterland". It is very lively, last not least because of the high number of students (around 20% of the residents) and the rich choice of social, cultural and sporting facilities (see www.muenster.de for further details).

[This announcement online: http://www.uni-muenster.de/Evolution.ebb/Jobs]

Prof Erich Bornberg-Bauer PhD, Bioinformatics, Inst. Evolution+Biodiversity School of Biology, University of Muenster, Schlossplatz 4, D48149, Germany Tel/Fax: +49(0)25183-21630/21631 www.uni-

muenster.de/evolution/ebb/ ebb@uni-muenster.de

MuhlenbergCollege Plant-InsectInteractions

POST-DOCTORAL RESEARCH ASSOCIATE: ECOLOGY OF PLANT-INSECT INTERACTIONS

We seek a Post-Doctoral Research Associate to participate in an NSF-sponsored interdisciplinary collaborative research project on the ecological, chemical, and genetic determinants of herbivory in Lindera benzoin at Muhlenberg College. The associate will have the opportunity to develop independent research projects related to the overall project mission, mentor undergraduate research students, and collaborate with faculty in Biology, Chemistry, and Math and Computer Science. There is also a possibility (but not a requirement) to develop and offer an undergraduate course related to the particular interests of the candidate.

A well-trained experimental ecologist with interests in plant-insect interactions and who may be considering a research/teaching career at an undergraduate liberal arts institution is the ideal candidate. In addition to developing independent ecological research projects, the Post-Doc will have opportunities to use or develop expertise in analytical chemistry and/or molecular genetic techniques that may include GC-MS, HPLC, and microsatellite analysis. We offer an annual salary of \$42,000 and competitive benefits. This position begins in the summer of 2007, and may be renewed for an additional year depending on continued funding and performance.

Muhlenberg College is a highly selective liberal arts college located in the Scenic Lehigh Valley in eastern PA, 75 minutes from Philadelphia, 90 minutes from New York City, and 45 minutes from the Pocono Mountains. The Biology and Chemistry Departments offer outstanding facilities for research including: greenhouse and protected field sites; plant growth chambers; SEM and TEM, automated DNA sequencing; GIS, GPS, and remote sensing facilities; PCR; CHN analyzer; HPLC; GC-MS and Field Gas Chromatography all in our newly completed interdisciplinary science center.

Review of applications will begin on February 15 and will continue until the position is filled. Please direct any questions and/or applications including: 1) cover letter indicating general expertise and interest in the position; 2) Current CV, 3) statement of research in-

terests and experience including a description of specific skills; and 4) the names and contact information of at least 3 academic references either in the mail or as separate email attachments to:

Rich Niesenbaum Biology Department Muhlenberg College Allentown, PA 18104-5586 niesenba@muhlenberg.edu

Muhlenberg College is an Equal Opportunity Employer.

Richard A. Niesenbaum. Ph.D. Professor and Chair of Biology Muhlenberg College Allentown, PA 18104-5586 USA

niesenba@muhlenberg.edu http://www.muhlenberg.edu/depts/biology/faculty/niesenbaum/page.html http://www.muhlenberg.edu/depts/biology/nsf/niesenbaum.html Tel. 484-664-3258 Fax. 484-664-3002

nmuth@life.bio.sunysb.edu

NetherlandsInstEcol EvolGeneExpression

A post-doc position is available at the Department of Foodweb Studies, Centre for Limnology, Netherlands Institute of Ecology (head Prof Ellen Van Donk) in direct collaboration with Dr Hans Matthijs / Aquatic Microbiology at the University of Amsterdam (head Prof Jef Huisman). The position is initially available for a period of 2 years, but further extension may become available. Aim of the project is to build a library of gene expression profiles under defined sets of environmental conditions (factors abiotic e.g. nutrients, temperature, pH, as well as biotic e.g. presence of grazers, other phytoplankton), and in the second phase of the study under field conditions in lakes supporting blooms of toxic cyanobacteria. Specifically transcription of microcystin genes will be linked to the expression of sets of other genes. The study will use Agilent microarrays. Funds have been requested to add 2 PhD students to the project.

Candidates with a PhD in a relevant subject are requested to send their CV to Prof E. Van Donk e.vandonk@nioo.knaw.nl; further information may be obtained from Prof Van Donk or from Dr Bas Ibelings: b.ibelings@nioo.knaw.nl / bas.ibelings@eawag.ch

Bas Ibelings, PhD Netherlands Institute of Ecology (NIOO-KNAW) Centre for Limnology - Depart-

ment of Foodweb Studies Rijksstraatweg 6 3631 AC Nieuwersluis The Netherlands tel: +31 (0)294239349 fax: +31 (0)294232224 e-mail: b.ibelings@nioo.knaw.nl web: http://www.nioo.knaw.nl/ppages/bibelings

B.Ibelings@nioo.knaw.nl

OSU CohoPedigreeFitness

The Coastal Oregon Marine Experiment Station at the Hatfield Marine Science Center in Newport, OR invites applications for a Research Associate (Post Doctoral) for the Marine Fisheries Genetics Laboratory (http://marineresearch.oregonstate.edu/genetics/index.html). This is a full-time, 12-month, fixed-term position with reappointments at the discretion of the supervisor.

The post doctorate researcher described here will be part of a larger research team working on a project funded by Oregon Watershed Enhancement Board under the title "OSU Component for Nonpareil Dam Adult Trap and Coho Genetic Pedigree". Primary responsibilities of the post are as follows: 1. Research microsatellites information content as well as technological means for efficient provision of statistical power to resolve pedigree relationships for hatchery/wild and STEP program comparisons. 2. Apply the best bank of these markers to resolve origin, relationships, relative fitness, etc. among samples. Primary expectations are four-fold: 1) effective research planning, 2) innovative research and data gathering, 3) analysis including development of novel methods, 4) effective synthesis of findings through preparation and publication in strong peer review journals. General support towards academic, research and scholarly advancement in the Marine Fisheries Genetics Program and in association with the Oregon Hatchery Research Center are also required.

OSU is one of only two American universities to hold the Land-, Sea-, Sun- and Space Grant designations and is the only Oregon institution recognized for its "very high research activity" (RU/VH) by the Carnegie Foundation for the Advancement of Teaching. OSU is comprised of 11 academic colleges with strengths in natural resources, earth dynamics and sustainability, life sciences, and the arts and sciences. OSU has facilities and/or programs in every county in the state, including 12 regional experiment stations, 41 county extension offices, a branch campus in Bend, a

major marine science center in Newport, and a range of programs and facilities in Portland. OSU is Oregon's largest public research university, conducting more than 60 percent of the research funded throughout the state's university system.

OSU is located in Corvallis, a community of 53,000 people situated in the Willamette Valley between Portland and Eugene. Ocean beaches, lakes, rivers, forests, high desert, and the rugged Cascade and Coast Ranges, and the urban amenities of the Portland metropolitan area are will within a 100- mile drive of Corvallis. Approximately 15,700 undergraduate and 3,400 graduate students are enrolled at OSU, including 2,600 U.S. students of color and 950 international students.

The university has an institution-wide commitment to diversity, multiculturalism and community. We actively engage in recruiting and retaining a diverse workforce and student body that include members of historically underrepresented groups. We strive to build and sustain a welcoming and supportive campus environment. OSU provides outstanding leadership opportunities for people interested in promoting and enhancing diversity, nurturing creativity and building community.

The Coastal Oregon Marine Experiment Station is located at the Hatfield Marine Science Center in Newport, which is 55 miles west of Corvallis. Approximately 15,600 undergraduate and 3,400 graduate students are enrolled at OSU, including 2,600 U.S. students of color and 1,100 international students. The university has an institution-wide commitment to diversity and multiculturalism, and provides a welcoming atmosphere with unique professional opportunities for leaders who are women and people of color. All are encouraged to apply.

Salary: \$40,000-\$45,000 annually, commensurate with qualifications and experience.

Required qualifications: 1) a PhD in genetics, ecology, evolution or related field with emphasis in statistics, 2) molecular genetics experience in polymerase chain reaction, microsatellite characterization, 3) population genetics analysis, 4) bioinformatics, 5) demonstrated publication record in peer review journals, 6) demonstrated effective research in a multi-user molecular genetics lab and 7) effective presentation with professional demeanor. Preferred qualifications include a demonstrable commitment to promoting and enhancing diversity.

To review posting and apply, go to http://oregonstate.edu/jobs and refer to posting number 0000252.

Closing date: February 15, 2007.

Oregon State University is an AA/EOE and has a policy of being responsive to the needs of dual-career couples.

Michael A. Banks Director of the Cooperative Institute for Marine Resource Studies Assistant Professor, Marine Fisheries Genetics

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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

PrincetonU CiliateGenomeRearrangements

postdoc position available: please post Postdoctoral Opportunity: Princeton University DNA 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

Laura Landweber <lfl@Princeton.EDU>

HUXLEY FELLOW in EVOLUTION: The Ecology and Evolutionary Biology department of Rice University (http://eeb.rice.edu/) seeks to fill a Huxley Fellow position in EVOLUTION. The position is a two-year appointment with a third year extension possible, with a start date of 1 July 2007. Our prestigious Huxley Fellow Program aims to recruit outstanding researchers with a PhD and, preferably postdoctoral experience, who merge excellence in teaching (25%) and research (75%). The Huxley Fellows receive faculty status, employee benefits, competitive salary, and research funds for independent or collaborative research. Collaborative interests with the existing faculty are a plus. Application review will begin February 15, 2007. Submit applications, including curriculum vitae, statement of research interests, and three letters of reference, to: Dr. Michael H. Kohn, Huxley Fellow Search Committee, Department of Ecology and Evolutionary Biology, MS-170, Rice University, 6100 S. Main St., Houston, TX 77005 (www.ruf.rice.edu/~hmkohn/MKohn.html). Rice University is an Equal Opportunity/Affirmative Action Employer.

Michael H. Kohn Assistant Professor Rice University Ecology & Evolutionary Biology MS170, P.O. Box 1892 Houston, Texas, 77251-1892 Phone: 713-348-3779 Fax: 713-348-5232 hmkohn@rice.edu

Michael Kohn hmkohn@rice.edu

Rotterdam TheoPopGenetics

POST-DOCTORAL RESEARCH SCIENTIST Theoretical Population Genetics

The Department of Forensic Molecular Biology (FMB) at the Erasmus University Medical Centre Rotterdam, Netherlands, is looking for a post-doctoral research scientist in the area of theoretical population genetics.

The successful candidate is expected to independently perform standard and newly developed theoretical population genetic analyses including computer simulations from newly-established human population datasets. Respective projects primarily aim to use population genetic diversity to understand human population history and migration patterns.

The successful candidate should have a strong background in population genetics (PhD), be able to independently perform relevant standard computational data analyses, be able to develop and implement new analyses tools, have computer programming skills and is highly motivated and interested to work in an interdisciplinary environment. Interested scientists with a wet-lab molecular genetics background being able to perform statistical analyses from population genetic data and with a good theoretical genetics background are also encouraged to apply.

The FMB department performs basic research (no case work) with a focus in identification and characterization of human individual and population differences (including visible traits) with the future aim of applications in forensics. Research at FMB is interdisciplinary and includes molecular genetics and biology, evolutionary and population genetics, QTL mapping, molecular pathology etc. using state-of-art tools for high-throughput data generation (e.g. expression and SNP microarrays). For further details see: www.erasmusmc.nl/fmb . FMB is housed within the interactive medical-genetic cluster of Erasmus MC, medical faculty of Erasmus University Rotterdam, comprising strong basic research departments of genetics, cell biology, clinical genetics, biochemistry, and bioinformatics (www.erasmusmc.nl/medical_genetics/) with tight links to the department of epidemiology and biostatistics. Erasmus MC is the leading medical research centre in the Netherlands and well recognized internationally. Rotterdam is a lively and highly international city closely located to many highlights of Europe.

The Post-doc position is available for 1 year with possibilities for elongation and starting data is a.s.a.p. Gross monthly salary is depending on experience with a max. of 4483 Euro plus all benefits of governmental employment. CV including publication list and three references should be submitted to Prof. Manfred Kayser, Department of Forensic Molecular Biology, Erasmus University Medical Centre, Medical-Genetic Cluster, PO Box 1738, NL-3000 DR Rotterdam, The Netherlands, preferentially via e-mail: m.kayser@erasmusmc.nl

Closing date of application is February 15, 2007.

– Prof. Dr. Manfred Kayser Head, Department of Forensic Molecular Biology, Erasmus MC - University Medical Centre Rotterdam, PO Box 2040, 3000 CA Rotterdam, The Netherlands

tel.: ++31-10-4638073 fax.: ++31-10-4089300 e-mail: m.kayser@erasmusmc.nl web: http://www.erasmusmc.nl/fmb/ m.kayser@erasmusmc.nl

February 1, 2007 EvolDir 75

TrinityCollege EvolGenetics

Post-doctoral position: A post-doctoral position is available in the Evolutionary Genetics and Bioinformatics Laboratory headed by Dr. Mario A. Fares, Department of Genetics, Smurfit Institute of Genetics, University of Dublin, Trinity College, Ireland. This position is to work in a multi-disciplinary project with the title "Biomedical and Computational analysis of heatshock proteins: optimization of protein's function and putative drug targets". The aim of the project is at understanding the role of heat-shock proteins in the activation of the immune response. This position is funded by Science Foundation Ireland under the program of the Presidents of Ireland Young Researcher Award to Dr. Mario A. Fares. This position will be available from the first of March 2007 (or sooner depending on the candidate skills) and the successful candidate should have some experience in dendritic cells and immunological techniques. Some computer skills will be highly considered as well. The project will include a one-year contract renewable in similar periods depending on the progress of the successful candidate. The salary range is (35,000 - 40,000 per year). Interested candidates please send your CV and contact Dr. Mario A. Fares at: Telephone number: 353 01 8963521, or alternatively 353 01 6083521 Email address: faresm@tcd.ie Mario Fares <faresm@tcd.ie>

UAdelaide PlantBiogeography

Postdoc in plant biogeography

A highly motivated candidate is sought to undertake a 2.5 year postdoctoral research position in plant biogeography.

The role of long distance dispersal in the evolution of the Australasian and southwest Pacific flora is hotly contended, but appropriate tests of alternative hypotheses are still lacking. This position will develop a new comparative method for biogeography, combining phylogeny, fossils, mutation rate estimation, and statistical analysis tools. This approach will be applied to the Podocarpaceae, southern pines, to test central premises of biogeographic theory, examine differences in long distance dispersal dynamics and evolutionary potential between groups, and coincidence with major past geological or climatic changes.

Specifically the postdoc will be expected to:

1. Integrate existing phylogenetic data on Podocarpaceae and undertake new sampling, phylogenetic and phylogeographic analysis for specific groups. 2. Integrate existing macro and fossil pollen data for Podocarpaceae 3. Examine the utility of preserved macrofossil sequences for developing mutation rate analyses using ancient DNA 4. Develop statistical methods for long distance dispersal and divergence time estimations to test the influence of geogological and climatic changes in the Australasian and SW Pacfic region

This position is part of an ARC discovery project

Contact Andrew Lowe for further details (andrew.lowe@adelaide.edu.au).

Andrew Lowe Professor of Plant Conservation Biology Head of Science, State Herbarium and Biosurvey Plant Biodiversity Centre Dept. of Ecology and Evolution Adelaide Botanic Gardens School of Earth and Environmental Science Hackney Road North Terrace Adelaide SA5000 Adelaide SA5005 Australia Australia Tel: +61~(0)8~8222~9326 Tel: +61~(0)8~8303~5280 Fax: +61~(0)8~8222~9326 Fax: +61~(0)8~8303~6222 Mob: 0434~607~705

Email: lowe.andrew@saugov.sa.gov.au or andrew.lowe@adelaide.edu.au Email: lowe.andrew@saugov.sa.gov.au or andrew.lowe@adelaide.edu.au

UArizonaPopulationEvolGenetics

POSTDOC IN POPULATION GENETICS, UNIVERSITY OF ARIZONA

A postdoctoral position in population genetics is available in Michael Hammer's group at the University of Arizona.

Research projects are flexible and can be tailored to suit individual interests. However, they must contribute to the group's overall focus. Current studies include inferring human demographic history from genomic data (primarily DNA re-sequencing datasets), and distinguishing the roles of natural selection and demographic

processes in shaping patterns of genomic variability. Our research group already hosts geneticists, computational biologists, applied mathematicians and anthropologists under this broad research agenda, and provides a working interdisciplinary research environment.

A major resource of the lab is a large, novel DNA re-sequencing database that represents 90 independent regions of the genome. Each 'neutral' genomic region, spanning approximately 20kb, maps to regions of moderate to high recombination far from coding DNA. Sampling is consistent across each genomic region and includes data from several indigenous populations in Africa, Eurasia and the Americas. Additional projects focus on sequencing candidate genes for complex traits such as resistance to disease and skin pigmentation on the same sample panel as the 'neutral' genomic regions. This study design creates an essentially unique genomic dataset.

Our group enjoys close ties with the laboratory of Jeffrey Wall at USC as well as other labs at the University of Arizona, notably those of Michael Nachman (EEB), Joseph Watkins (Math) and Stephen Lansing (Anthropology). Moreover, it benefits from an excellent extended community of researchers in population genetics, computer science, statistics and genomics at the University of Arizona.

Applicants for the position must have: a PhD in relevant field; a graduation date no later than 30 April 2007; training in evolutionary biology and/or population genetics; a background in either theoretical population genetics or a quantitative field such as statistics with a strong interest in genetics; and advanced computational skills, including at least one programming language.

The ideal candidate will have a strong background in theoretical population genetics or in relevant areas of mathematics and statistics, skills in computer modeling by simulation or exact mathematical analysis, and be self-motivated and independent.

This position includes outstanding UA benefits including health, dental, and life insurance; paid vacation, sick leave, and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; access to UA recreation and cultural activities; state retirement; and more.

All applicants must apply on-line by completing an appointed personnel application and attaching a CV and letter of interest. To view the on-line posting and to apply, go to www.uacareertrack.com/applicants/Central?quickFind6454 http://www.uacareertrack.com/applicants/

Central?quickFind6454> or go to www.uacareertrack.com http://www.uacareertrack.com/ and search postings using job #37181.

All applicants must also email copies of relevant publications and two letters of recommendation to David Shropshire at shrop@email.arizona.edu.

Michael Hammer <mfh@email.arizona.edu>

UArkansas USDA RiceGenetics

University Postdoctoral Research Associate

DESCRIPTION OF DUTIES: A two-year Postdoctoral Research Associate Position will be available on Jan 1, 2007 funded by the National Science Foundation. The postdoc will be hired through the University of Arkansas Rice Research and Extension Center, and will perform research at the USDA-ARS Dale Bumpers National Rice Research Center. Specific objectives are involved in analyzing the sequence data flanking Pi-ta, identifying SNP diversity across the Pi-ta genomic region. The incumbent will also be responsible for activity in growing plants, performing infection assays and other related to determining disease reaction to rice blast in sampled accessions.

<>QUALIFICATION REQUIREMENTS: Ph.D in Genetics, Biology, Molecular Biology and Plant Pathology or related degree is required. Experience in DNA sequence analysis, evolutional analysis, bioinformatics and rice pathology are desirable.

FOR SPECIFIC INFORMATION ON THE DUTIES AND RESPONSIBILITIES OF THIS POSITION OR TO SUBMIT AN APPLICATION, CONTACT:

Dr. Yulin Jia USDA-ARS Dale Bumpers National Rice Research Center Stuttgart, AR 72160 Phone: 870 672 9300 ext 229 Fax: 870 673 7581 Email: yjia@spa.ars.usda.gov <mailto:yjia@spa.ars.usda.gov>

Yulin Jia <yjia@spa.ars.usda.gov>

UBritishColumbia MolecularEvol

Postdoctoral: molecular and genomic evolution

A postdoctoral position is available at the University of British Columbia in the lab of Keith Adams to study molecular evolution and evolutionary genomics in plants. Research in the lab currently focuses on polyploidy, gene duplication, and hybridization and their effects on gene evolution and gene expression. For more details see: http://www.landfood.ubc.ca/research/faculty_webpages/adams.htm Research for the position would pertain to the above topics or related areas in the evolution of genes and gene expression. The research likely will involve both computer analyses and lab experiments. Candidates should have a strong background in molecular evolution or bioinformatics, and experience doing analyses of DNA sequences or expression data is desirable. The position is available immediately and there is flexibility in start date.

The University of British Columbia has a strong and interactive group of evolutionary biologists: see http://www.zoology.ubc.ca/evolution/ The university is located in scenic Vancouver, Canada.

For more information contact Keith Adams at keitha@interchange.ubc.ca To apply send a curriculum vitae, a description of your research interests, and names of 3 references to the above email address.

Keith Adams Assistant Professor Centre for Plant Research and Botany Department University of British Columbia Vancouver, Canada

keitha@interchange.ubc.ca keitha@interchange.ubc.ca

Experience of molecular biology is essential, knowledge of in situ hybridisation and/or transgenesis are desirable as is an interest in animal evolution.

For further details of the project contact Dr Max Telford (m.telford@ucl.ac.uk) or at the address below. The position is funded at Grade 7 point 29 on the UCL Salary scales. The starting salary will be £25,889 and £2,497 London Allowance.

Please apply in writing with a current CV, covering letter and the names of 3 referees to: Dr Max Telford, Department of Biology, University College London, Darwin Building, Gower Street, London, WC1E 6BT. (or by email)

The closing date for applications is Wednesday, 28th February 2007.

Only short-listed candidates will be contacted after that date and by 16th March 2007.

UCL Takes Action For Equality

Dr Max Telford Reader in Zoology Department of Biology, University College London, Darwin Building, Gower Street, London WC1E 6BT, UK. Tel: +44 (0)20 7679 2554 Fax: +44 (0)20 7679 7096 http://www.ucl.ac.uk/biology/academic-staff/telford/telford.html m.telford@ucl.ac.uk m.telford@ucl.ac.uk

UCopenhagen 5 CompBiology

UCollegeLondon EvoDevo

Research Fellow (Postdoctoral) in Evolution of Development

"Stasis and change in the regulation of a 'master gene' and the evolution of morphological novelty in the arthropods."

Applications are invited for a one-year, BBSRC-funded post in the department of Biology.

As part of a program of work on arthropod evolution, the research aims to compare the genetic regulation of the leg-promoting gene Distal-less (Dll) between insects and crustaceans. The work will involve cloning of target genes from the model crustacean Parhyale and assaying them for a role in Dll regulation through in situ hybridisation and mis-expression using constructs introduced into flies and Parhyale.

Five Postdoctoral Researcher positions (2 yrs) in Computational Biology available at the University of Copenhagen.

The five positions will be part of a newly established Center for Comparative Genomics at the University of Copenhagen.

(1) Computational biologist in ancient DNA We seek a computational biologist to work on analysis of ancient DNA data. The postdoc will be working closely with wet lab biologists on computational and statistical analyses of ancient DNA data from different organisms such as Wholly Rhino, muskoxen, ice cores, and hominids. The applicant should have strong computational skills, and a Ph.D. in statistical genetics, evolutionary bioinformatics, or theoretical population genetics. He/she will be supervised by Professor Eske Willerslev and will be part of a larger bioinformatics group working on evolutionary genetics, as well as a large group working on

ancient DNA.

- (2) Computational biologist/statistician in Comparative Genomics. The postdoc will be working on developing and applying new statistical/computational methods for analyzing alignments of DNA sequences from multiple species. The applicant should have a Ph.D. in biology, bioinformatics, statistics, or related field. He she will be supervised by Rasmus Nielsen and will be part of the bioinformatics group in the center.
- (3) Computational biologist/postdoc to work on the development and application of new statistical/computational methods for analysis of large scale genomic data from population genetic and association mapping studies. The applicant should have a Ph.D. in statistics, mathematics, bioinformatics, or population genetics, and a strong interest in research at the interface between statistical genetics and population genetics. He/she is supposed to work closely with other members of the group and will be supervised by Rasmus Nielsen.
- (4) Computational biologist/bioinformatician in comparative methods for non-coding RNA. The postdoc will be working on developing and applying methods for analyzing non-coding regions from multiple species, such as promoter regions and miRNA genes. The applicant should have a Ph.D. in computational biology, bioinformatics, statistics, or related field. He or she will be supervised by Anders Krogh and will be part of his group as well as the bioinformatics group in the Center for Comparative Genomics.
- (5) Comparative and functional genomics of plant stress responses. The project includes the use and development of genomic and transcriptomic approaches to study stress responses in several plant models. Applicants must have a Ph.D. in molecular biology/genetics and publications in internationally refereed journals. The applicant will work in the group of John Mundy and interact on experimental and computational projects with other members of the center for comparative genomics.

For all five positions, terms of appointment and payment will be according to the agreement between the Ministry of Finance and AC (The Danish Confederation of Professional Associations on Academics in the State). Typical monthly salary corresponds to approx. 28,000 Danish kr. plus full benefits. Applicants should send a cover letter indicating which position they are interested in and the names of 3 referees, a CV, and a short statement of research interests (max. one page) in PDF file format to Trine Toldsted TFToldsted@bi.ku.dk before March. 1st 2007. Any potential applicant is invited to apply irrespective of age, sex, race, religion or ethnic background. For more information, please see www.evolutionarygenomics.dk/comparativegenomics/

. Rasmus Nielsen <rasmus@binf.ku.dk>

UEdinburgh Drosophila Host-parasite Genet

Post-doc: Genetic variation in the susceptibility of Drosophila to viruses

Institute of Evolutionary Biology, University of Edinburgh

A Wellcome Trust funded three-year postdoctoral position is available work on genetic variation in the susceptibility of Drosophila melanogaster to viral infection. Viruses are common pathogens in natural populations of Drosophila. Despite the advantages of resistance, flies vary considerably in their susceptibility to viral infection. Much of this variation is caused by major effect polymorphisms. Our lab is interested in which genes are causing this variation and why they are maintained in the population. This project will contribute to an ongoing project using techniques including QTL mapping and association mapping to identify these genes. Once the genes have been identified, we will investigate why these polymorphisms are maintained. For example, are there costs associated with the resistance alleles, or are those resistance genes highly specific in the viral genotypes they target.

Salary: £26,402 to £31,525

Further details and informal enquiries: Frank Jiggins Institute of Evolutionary Biology University of Edinburgh West Mains Rd Edinburgh EH9 3JT Scotland Francis.Jiggins@ed.ac.uk Tel: 0131 650 5476

The lab: www.biology.ed.ac.uk/fjiggins The department: http://www.biology.ed.ac.uk/research/institutes/evolution/ Applications: http://www.jobs.ed.ac.uk/ (will be posted shortly)

fjiggins@staffmail.ed.ac.uk fjiggins@staffmail.ed.ac.uk

A post-doctoral position is available at the University of Florida, Gainesville, for computational research on the determinants of gene and protein composition and to develop new algorithms for gene-finding and reconstruction of evolutionary trees. Applicants must have a Ph.D. degree with a strong interest in molecular evolution and be enthusiastic about in silico analysis of molecular sequences through usage and development of computational tools. Familiarity with exiting bioinformatics tools, basic programming skills in the Unix environment (e.g., C, C++, Perl, etc.) and basic understanding of biological structures and processes are highly desirable. The successful candidate will have the opportunity to join in existing research projects or to develop new research lines. The position is immediately available and will be renewable after one year. Please direct inquiries and send a cover letter detailing both your previous scientific work experience and your interest in this position, curriculum vitae and contact information for three references to: Dr. Luciano Brocchieri, UF Genetics Institute, PO Box 103610, Gainesville FL 32610-3610, or by email at lucianob@ufl.edu - Luciano Brocchieri, PhD. Assistant Professor University of Florida College of Medicine Department of Molecular Genetics and Microbiology and UF Genetics Institute PO Box 103610, Gainesville, FL 32610-3610 Phone: 352-273-8131 Fax: 352-273-8284

lucianob@ufl.edu lucianob@ufl.edu

UGeorgia ApicomplexanGenomeEvol

POST-DOCTORAL RESEARCH POSITION

UNIVERSITY OF GEORGIA DEPARTMENT OF GENETICS AND CENTER FOR TROPICAL AND EMERGING GLOBAL DISEASES

Applications are invited for a post-doctoral research position to work on an NIH-funded project to study genome evolution in Apicomplexan parasites. Apicomplexan parasites are unicellular eukaryotes that are responsible for some of the worlds most devastating diseases of humans and animals (e.g. malaria, toxoplasmosis, eimeria, cryptosporidiosis).

The research will involve analyses of gene loss and gain, genome rearrangement, gene transfer and gene content. Prior experience with molecular phylogenetic analysis is strongly encouraged. More information about the laboratory can be found at: http:/-

/mango.ctegd.uga.edu/jkissingLab/ Successful applicants will be highly-motivated self-starters with excellent oral and written communication skills. A Ph.D and research experience in molecular evolution, molecular genetics, genomics and/or bioinformatics including comfort with the UNIX/LINUX operating environment are required.

The position is available beginning April 1, 2007.

Qualified applicants should send a CV and the names and contact information for three references to: Jessica Kissinger jkissing@uga.edu

Jessica Kissinger <jkissing@uga.edu>

UHospitalLausanne StaphylococcusEvol

Post doctoral position We are looking for a post doctoral fellow to participate on a project aiming at identifying evolutionary processes responsible for short term evolution of Staphylococcus aureus. In vivo microevolution will be investigated using sequential isolates from identical carriers. Population genetics analyses will be performed using sequence data. The position is available for a part time job (60%) for a period of three years. Experience in molecular biology and evolution is an advantage. Our laboratory is located in the building of the Institute of Microbiology at the University Hospital in Lausanne (CHUV) in a stimulating scientific and medical environment. Please send CV, publication list and the name and address of two referees to: Dr. Dominique Blanc Service de médecine préventive hospitalière BH19.313, CHUV 1011 Lausanne. Switzerland e-mail: Dominique.Blanc@chuv.ch. Phone: +41 21 314 02 59

Dominique Blanc < Dominique.Blanc@chuv.ch >

UJyskyl GeneticVariability

An Academy of Finland funded post-doctorate position is available at the University of Jyväskylä, Finland to work on the maintenance of genetic variability in animals with asexual reproduction in collaboration with Johanna Mappes, Jukka Jokela and Alessandro Grapputo.

The main theme of the project is targeted at investigating how parthenogenetic animals can maintain high genetic variability and compete with sexual relatives. All theories on the evolution and maintenance of sex have been based on the comparison between sexual and clonal parthenogenetic reproduction. However, asexual reproduction is not always clonal, but can involve meiosis and recombination as in automictic thelytoky, a form of parthenogenesis occurring in many insects. Automictic parthenogenetic species should have the advantage of avoiding the cost of sex and, at the same time, enjoy the advantages of genetic diversity through recombination and decrease the mutational load, making sex even more paradoxical. Recently, it has also been theoretically shown that the viability of populations with automictic parthenogenesis and central fusion increases with increasing rates of recombination. We are investigating the population structure of sexual and parthenogenetic lineages, the genetic erosion within single parthenogenetic lineages and if parthenogenetic lineages have higher rate of recombination than sexual lineages. The position will involve molecular laboratory work with bag worm moths (Lepidoptera: Psychidae) which provide one of the rare known systems where sexual and asexual species co-exist. The psychid moth could offer important insights for the evolution of sex theory since their particular mode of asexual reproduction (the automictic thelytoky).

Applicants should have a PhD degree in a relevant biological discipline, and a strong interest in evolutionary biology. Previous experience with molecular ecology and/or molecular biology methods is preferred. You will join the Centre of Excellence in Evolutionary Research at University of Jyväskylä (http://www.jyu.fi/science/laitokset/bioenv/evoluutiotutkimus/en/). Part of research could be carried out also at the ETH in Zurich with Jukka Jokela and at the Dept. of Biology of the University of Padova, Italy with Alessandro Grapputo.

Salary, according to qualifications, will be based on the new Finnish governmental salary system. Initial appointment for a qualified postdoctoral candidate can be made for one year with possible extensions.

Apply by email sending: (1) a letter of application (no more than one A4 page), including the motivation for your application (2) a CV and (3) two reference names with contact details (phone number and e-mail address) to Alessandro Grapputo alessandro.grapputo@unipd.it. Application will be accepted until the position is filled.

Informal enquiries are welcome.

– Dr. Alessandro Grapputo PhD. DIPARTIMENTO DI BIOLOGIA VIA UGO BASSI, 58/B 35121 PADOVA ITALY

TEL. +390498276250

alessandro.grapputo@unipd.it

ULausanne MolEvol

POSTDOCTORAL POSITION IN FUNCTIONAL EVOLUTIONARY GENOMICS

Center for Integrative Genomics (CIG), University of Lausanne, Switzerland

A research associate/postdoctoral position (2 years with possible extensions up to 5 years) is available immediately in the evolutionary genomics group of Henrik Kaessmann.

We are seeking highly qualified and motivated applicants - preferably with a background in molecular evolution - who have strong skills in computational biology (bioinformatics, preferably with experience in data mining and comparative genome analysis). Statisticians and/or population geneticists with strong programming skills and an interest in evolutionary genomics are also encouraged to apply.

Available projects include the analysis of the functional evolution of new genes in primates and other mammalian lineages. However, other projects are possible, depending on the skills and interests of the applicant. Data available from genomic databases may be complemented by experimental data (large- and small-scale) in collaboration with the wet lab unit of the group.

For more information on the group and our institute more generally, see the website: http://www.unil.ch/cig/page7858_en.html The language of the institute is English, and its members form an international group that is rapidly expanding. The institute is in Lausanne, a beautiful city at Lake Geneva amidst an impressive alpine scenery.

Informal inquiries may be addressed to: Henrik.Kaessmann@unil.ch

Please submit a CV, statement of research interest, and two letters of recommendation (and/or names of referees) to:

Henrik Kaessmann, Ph.D. Assistant Professor Center for Integrative Genomics Genopode University

of Lausanne CH-1015 Lausanne Switzerland E-mail: Henrik.Kaessmann@unil.ch Phone: +41-(0)21-692-3907 (administrative assistant, Annick Crevoisier: -3960) Fax: +41-(0)21-692-3965 http://www.unil.ch/cig/page7858_en.html 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., Reymond, A. & Kaessmann, H. (2005) Emergence of young human genes after a burst of retroposition in primates. PLoS Biol. 3:e357.

Burki, F. & Kaessmann, H. (2004) Birth and adaptive evolution of a hominoid gene supporting high neurotransmitter flux. Nature Genet. 10, 1061-1063.

Emerson, J. J., Kaessmann, H., Betrán, E. & Long, M. (2004) Extensive gene traffic on the mammalian X chromosome. Science 303, 537-540

Henrik.Kaessmann@unil.ch rik.Kaessmann@unil.ch

ULeeds ArthorpodFeminisation

Jobs at University of Leeds http://www.jobs.ac.uk/clients/83> Research Fellow

Research Institute of Integrative and Comparative Biology

Faculty of Biological Sciences

Project 1: The cellular mechanisms of parasite-induced feminisation in arthropod hosts.

A NERC-BBSRC-funded postdoctoral post is available immediately, for up to three years, to investigate the cellular mechanisms of parasite-induced feminisation of arthropod hosts. Parasitic sex ratio distorters are widespread in invertebrate hosts. Vertically transmitted parasites are uniparentally inherited and selection to enhance the relative frequency of the transmitting sex has led to the evolution of a number of strategies of sex ratio distortion. Feminisation is induced by the bacterium Wolbachia in the Crustacea including Armadillidium vulgare and by microsporidia (eukaryote parasites) in the Crustacea including Gammarus duebeni. Whilst Wolbachia induces feminisation in Crustacea, in insects including Drosophila bifasciata it may cause

male killing. We propose that these intracellular parasites are most likely to act by secreting molecules into the host cell which will then influence host molecular pathways, they may modify the response to external hormonal signals or even induce programmed cell death (apoptosis). Such changes could disrupt patterns of sexual development or lead to sex-specific embryo mortality.

This post is concerned with the cellular basis of Wolbachia and microsporidia induced feminisation. You will map parasite distribution during host sexual differentiation using in situ hybridisation and map patterns of apoptosis during development using TUNEL markers and investigate the impact of parasitism on host signalling through investigation of phosphorylation of host proteins.

A PhD in a relevant subject area and a strong research background in one of the following areas; cell or developmental biology, molecular parasitology, or mechanisms of sex ratio distortion are essential as is the ability to work independently. You must also be able to use software for image analysis, word processing, spreadsheet and data analysis, give presentations and exhibit effective practical skills at the laboratory bench.

University Grade 6 (£20,842 - £25,633) or Grade 7 (£26,402 - £28,010 p.a) depending upon experience

Informal enquiries to Dr Alison M. Dunn, tel 0113 343 2856, email a.dunn@leeds.ac.uk <mailto:a.dunn@leeds.ac.uk or Professor Judith E. Smith, tel 0113 343 2892, email j.e.smith@leeds.ac.uk <mailto:j.e.smith@leeds.ac.uk>

To apply on line please visit http://www.leeds.ac.uk and click on 'jobs'. Alternatively application packs are available from Mr A. Bateman, tel 0113 343 8040, email fbsjobs@leeds.ac.uk mailto:fbsjobs@leeds.ac.uk Faculty Staff Recruitment Office

Job ref 313128

Hen-

Closing date 01 January 2007

Project 2: A second post-doctoral post on this project is available at the University of Wales Bangor to work on Wolbachia. The work will involve a proteomics approach as well as the manipulation of cell cultures. For more details on this related post please email h.braig@bangor.ac.uk < mailto:h.braig@bangor.ac.uk >

Alison Dunn < A.Dunn@leeds.ac.uk>

ULondon InsectImmunity

Please note that the further details and application form are not yet posted on the website referred to in the advert, although they should be up in a day or so.

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

_Postdoctoral Research Assistant: __Immunity in a sexually selected insect_

Salary: £30,066 per annum

This full-time, 3 year fixed term post is funded through a Leverhulme Trust grant awarded to Dr Robert Knell. The aim of the project is to investigate the relationships between immunity and sexually selected traits in a horned dung beetle, /Euoniticellus intermedius/.

The post holder will carry out experiments by manipulating resource availability, immune system activation and juvenile hormone titre throughout the development of the study animal, in order to find out how these factors affect horn size and courtship behaviour, and how they feed-back into affecting each other. These experiments will provide a detailed picture of how these factors integrate to produce an adult with larger or smaller horns, and will allow tests of important theoretical ideas about the role of immunity in sexual selection. Applicants who possess a PhD (or equivalent experience) in the area of invertebrate behavioural ecology, physiology or evolutionary biology and have a working knowledge of insect immunity would be desirable. Applicants with experience in the use of liquid chromatography-mass spectrometry for studying invertebrate hormones are encouraged to apply.

Informal enquiries may be made to Dr Robert Knell, e-mail address: _r.knell@qmul.ac.uk_

Further details and a BLUE application form can be obtained from the School's website: _http:/-/www.sbcs.qmul.ac.uk/vacancies/index.shtml_ http://www.biology.qmul.ac.uk/opportunities/- jobs%20vacant.html> Alternatively, visit http://the Human Resources website on: www.hr.qmul.ac.uk/vacancies/ Completed application forms together with a copy of your CV, quoting reference no. 07035/HR, should be returned to Mrs D Griffiths, School of Biological & Chemical Sciences, Queen Mary, University of London, Mile End Road, London E1 4NS, or by e-mail: _sbcs-vacancies@qmul.ac.uk_

The closing date for applications is the 16th February 2007. * *

R.Knell@qmul.ac.uk R.Knell@qmul.ac.uk

UOslo EvolBiology

POSITION AS A POSTDOCTORAL RESEARCH FELLOW (post doc) in evolutionary biology

available at The Centre of Ecological and Evolutionary Synthesis (CEES), Dept. of Biology, Faculty of Mathematics and Natural Sciences, University of Oslo. For further information please contact: professor AsbjV, phone +47 22854640 e-mail: asbjorn.vollestad@bio.uio.no

Information about the centre and the project can be found at: http://www.bio.uio.no/cees Pay grade: 54? 57 (NOK 389 400,- NOK 410 600,-) (depending on qualifications) Deadline for application: 14 February 2007 REF. NR.: 07/1342

Applicants should submit a letter of application (marked Ref. No.), CV, a list of published and unpublished works, and a document summarizing the applicants scientific work and interests, four set of copies of certificates, and copies of at most five publications.

Applications should be sent to: Faculty of Mathematics and Natural Sciences, attn. Senior Executive Officer Bente Schjoldager, P. O. Box 1032 Blindern, N-0315 Oslo, Norway

Application documents will not be returned with exception of original publications.

A postdoctoral research position is available to work in a research group led by Prof. AsbjVon the project ?The early stages of adaptive divergence?. The project is a collaboration with colleagues in Oslo (Prof. G. P. Sætre and researcher T. O. Haugen), Finland (Prof. Craig Primmer) and Canada (Prof. Andrew Hendry). Extended visits to Finland and Canada is expected. The appointment is for 2.5 years and is funded by the Norwegian Research Council. Preferred starting date is April 1, 2007.

The successful candidate will study evolutionary processes during the early phase of adaptive divergence in grayling Thymallus thymallus. The lake Lesjaskogsvatnet was colonized by grayling in 1880s and during 120

years more than 20 demes have been established. We observe significant genetic and phenotypic differentiation between grayling spawning in different tributaries despite the short divergence time and lack of obvious isolation barriers. The main objectives of this project are to study the level of reproductive isolation and local adaptation and to explore the genetics of these two processes. This will be done using common garden and/or reciprocal transplant experiments, and molecular-and quantitative genetic methods. Extensive fieldwork is necessary. See more at: file:///Volumes/avollest/www_docs/Early%20diversification.html

Candidates should hold a doctoral degree.

We seek a candidate with an interest in combining experimental, theoretical and conceptual issues of evolutionary biology. Expertise in one or more of the following areas is particularly relevant: fish ecology, evolutionary biology, developmental genetics, and population/ evolutionary genetics. Experience with the study of the early stages of fish development will be an asset. Please contact AsbjVat the above address for more detail.

The CEES is a semi-autonomous interdisiplinary research group within the Department of Biology that combines the skills of population ecologists, evolutionary biologists, geneticists, and statisticians. It has a strong international flavor, and currently employs 11 faculty, 30 postdocs/researchers, 47 graduate students, and 15 associate scientists. The CEES has recently been awarded status as a Norwegian Centre of Excellence by the Norwegian Research Council, and is well funded.

Applicants should submit a letter of application, a CV, a list of published and unpublished works, and a document summarizing the applicant's scientific work and interests, four set of copies of certificates, and copies of at most five publications.

For more guidelines about the application procedure see: http://www.uio.no/admhb/reglhb/personal/tilsettingvitenskapelig/guidelinespostdoctor.xml

The University of Oslo is an equal opportunity employer and seeks in particular to increase its number of female scientists. Women are therefore particularly encouraged to apply.

The University of Oslo also wants more people with an immigrant background in permanent academic posts. Such people are encouraged to apply.

UiO has an agreement for all employees, aiming to secure rights to research results o.a.

AsbjV<asbjorn.vollestad@bio.uio.no>

UPennsylvania TheoBiol

POSTDOCTORAL POSITIONS – THEORETICAL BIOLOGY

Two postdoctoral fellow positions are available in the theoretical biology group of Dr. Joshua Plotkin at the University of Pennsylvania.

The specific research project is flexible and can be tailored to the interests of the individual, but it will fall under the broad purview of evolutionary theory. Areas of research in the Plotkin lab include theoretical population genetics, the evolutionary ecology of viral populations, mathematical models for the evolution of robustness, the structure of fitness landscapes and epistasis, and the determinants of protein evolutionary rates.

Requirements for the position include (1) a proven record of self-motivated research; (2) a PhD in biology, mathematics, statistics, physics, or related area; (3) excellent quantitative and computational skills. The ideal candidate should be familiar with scientific programming.

Postdoctoral positions provide a competitive annual stipend (minimum \$38,000) plus benefits and health insurance. Start date is negotiable. Applications are welcome from candidates in any country. Screening of applicants will begin March 15, 2007.

The Penn Genomics Institute offers an outstanding intellectual environmental. Research at the Institute addresses questions in biology and medicine through genomic, computational, and modeling approaches. Collaborations among research groups and across the broader Penn community are common. The Institute is housed in the newly constructed Lynch research building.

Highly motivated applicants are encouraged to email a statement of research interests, CV, and contact details for three references to jplotkin@sas.upenn.edu.

Joshua B. Plotkin Department of Biology The University of Pennsylvania 415 S University Avenue Philadelphia, PA 19104

jplotkin@fas.harvard.edu jplotkin@fas.harvard.edu

URennes PlantBiodiversity 2

This is a modified reposting of a job add that may have escaped the attention of some due to end-of-the year festivities / depressions, and of others due to a too detailed list of characters of the *ideal* candidate. Please contact me if you feel uncertain whether or not to apply. Thank you, Andreas Prinzing

2 YEAR POSTDOCTORAL POSITION

ON DIVERSIFICATION OF PLANT LINEAGES WITHIN HABITATS

- -> WHERE? University of Rennes 1, France; Institute Ecosystems, Biodiversity, Evolution; Group Ecology of Diversification (Andreas Prinzing)
- -> WHEN? Commencing early spring 2007 at the latest. The initial contract is for one year, renewable, without problems, for another year. (Review of applications starting IMMEDIATELY, application deadline is JANUARY 28, please send statement of interest as soon as possible.)
- -> THE PROJECT (funded as Action Thématique \ll ATIP \gg by Centre National de la Recherche Scientifique):

The major hypothesis for the project is that habitat types drive evolutionary diversification of plant lineages.

Many evolutionary biologists have a hierarchical view of local species communities: Communities are assembled from a regional pool of already-evolved species via a habitat filter acting on already-evolved traits. In our project we will explore the opposite view: whether and how the ecological conditions within different types of habitats may affect the pattern and pace of evolutionary diversification of phylogenetic lineages across geological time scales. We particularly account for effects of habitats on genetic variation, division of gene pools, and local persistence of genetic isolates. We are especially interested in effects mediated by genomic and life history traits of the species. This research will allow us to explore how mechanisms of diversification depend on the ecological context.

The major methodological approach is the analysis of comprehensive databases on the phylogeny, habitat use, co-existence, genome and life history of central European plant species, in order to reconstruct ancestral habitats and traits, and their influences on the pace and pattern of evolution. We aim for collecting additional information on the genome size of species (in collaboration with an external lab), a still under-recorded trait linked to both environment and diversification.

The work will mainly involve evolutionary phylogenetic analysis, for example character reconstruction, examining factors affecting speciation/extinction rates in phylogenies, examining randomness or non-randomness of branching patterns, phylogenetically independent comparative analyses.

-> ELIGIBLE are holders of a PHD (at the date of recruitment) *except French citizens* (constraint imposed by the funding agency)

-> PREFERRED CRITERIA:

- Strong statistical and computing skills ideally in one of the above listed phylogenetic approaches
- An interest in plant environments (biotic or abiotic), plant life-histories or plant phylogeny and how they interact
- Willingness to do some fieldwork such as sampling plant species
- Publication experience

-> RESEARCH ENVIRONMENT:

The host institution is the Research Unit Ecosystems, Biodiversity, Evolution, co-funded by University of Rennes 1 and Centre National de la Recherche Scientifique (CNRS), harboring 58 researchers and teachers. It was ranked A in the national evaluation of research institutions. Several further research institutions in ecology and evolutionary biology exist at Rennes. Our Research Group within the Research Unit works among other things on phylogenetic community assembly of plants and animals, on diversification of plant phenotypes along climatic gradients, and the diversity of arthropods in tree canopies. http://ecobio.univrennes1.fr and http:/-/ecobio.univ-rennes1.fr/Fiches_perso/Banque/publi1_APrinzing.doc.

-> ABOUT RENNES, FRANCE

Rennes has approximately 200 000 inhabitants (25 % students) and is the political and cultural capital of the Bretagne region with exceptional coastal and mainland landscapes, and a french-celtic heritage (http://www.region-bretagne.fr/-CRB/Public/rubriques_thematique/visiter_la_br etagne/la_bretagne_une_reg/la_bretagne_en_image/).

English is spoken everywhere in academia, but not always outside. Like in any French city, child care is excellent (almost for free, no waiting list, nearby).

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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

$\begin{tabular}{ll} UTennessee \\ DataAnalystBioinformatics \\ \end{tabular}$

A position in bioinformatics at either data analyst or postdoctoral level is available in the laboratory of Dr. Julia Krushkal at the University of Tennessee Health Science Center in Memphis, TN, USA. Below we provide the description of the data analyst position that will be posted in the near future by the University of Tennessee Health Science Center. In the meantime, interested candidates can send their inquiries to Julia Krushkal (jkrushka@utmem.edu).

JOB SUMMARY: The Data Analyst will be responsible for the handling and analysis of genetic data from a collaborative research study studying the genome potential of environmentally important microorganisms, species of Geobacter. The duties including management and manipulation of large data sets that include genome sequences, microarray data, and proteomics data; writing computer programs to handle the data; running available public and commercial bioinformatics software to analyze the data; statistical analysis; and preparation of results for scientific publication. The Data Analyst will provide automated support of genetic analysis and data handling, as well as assist with data analysis for the Geobacter project. This position will also provide technical assistance to study staff on genome data handling, analysis, and formatting, and on information systems, and will be responsible for conducting literature reviews and assisting in manuscript and grant proposal preparation and publication of study results. REQUIREMENTS: Bachelor's Degree in Biology, Biostatistics, Genetics, Epidemiology, Microbiology, Computer Science, Engineering, or other technical or biomedical discipline; three (3) years experience in data analysis with a knowledge of programming or bioinformatics or biostatistics; fluent in one or more computer programming and statistical languages on personal computer platforms or workstations:

C, C++, Perl, Fortran, Java, Unix Shell Scripting, SAS, SPSS, Splus. Must be familiar with common database applications or with tools of genome or microarray analysis, computer skills and excellent written and verbal communication skills. OR Master's Degree in above fields and one (1) year of data experience and above mentioned knowledge and job skills. OR a combination of college coursework in above fields and work experience in data analysis. TRANSCRIPT REQUIRED IF EDUCATION IS USED TO QUALIFY FOR THIS POSITION.

Julia Krushkal, Ph.D., Assistant Professor Department of Preventive Medicine and Center of Genomics and Bioinformatics

Address: Department of Preventive Medicine The University of Tennessee Health Science Center 66 N. Pauline Suite 633 Memphis, TN 38163 Tel. (901) 448-1361 Fax (901) 448-7041 and (901) 448-7641 e-mail: ikrushka@utmem.edu

http://cgb.utmem.edu/jkrushkal/ Julia Krushkal <jkrushka@utmem.edu>

UTexasArlington TransposonHumanGenome

Postdoc position: Transposition and Human Genome Biology

A postdoctoral position is available immediately in the lab of Cedric Feschotte at the University of Texas, Arlington. I am seeking a talented postdoctoral fellow to work on DNA transposons and their derived genes in humans and other mammals. In particular, we are pursuing the characterization of several human proteins that originated by capture of coding sequences from transposons, using a combination of computational, evolutionary and functional approaches (for example see Cordaux et al. 2006, PNAS 103:8101-6). The work has implications for understanding the molecular origin of biological innovation, and for human health, as several of the proteins under study are involved in chromosome dynamics, genome stability and gene regulation. For more details visit the lab website: http:/-/www3.uta.edu/faculty/cedric/ The candidate should have a strong interest in transposable elements and/or genome evolution and extensive experience with molecular and/or biochemical techniques. Previous experience with cell lines is desirable. Although this position is aimed towards the functional aspects of the project, candidates interested by more evolutionary and/or computational aspects will also be considered. A Ph.D. is required and strong written and oral communication skills are necessary.

The initial appointment is for one year and can be extended upon mutual agreement. This position is fully funded by a grant from the National Institute of Health.

UT Arlington is a fast-growing, comprehensive university in the University of Texas System and has recently established an exciting and interactive group of genome biologists. See: http://biology.uta.edu/-genome_group/ The university is located in the Dallas-Fort Worth area, a region that features all the amenities of a large metropolitan area with the added advantage of a low cost of living.

To apply send a cover letter detailing previous experience and your interest in this position, curriculum vitae and the names and contact information of three references. Direct all inquiries and applications to cedric@uta.edu

Cedric Feschotte, PhD Assistant Professor Department of Biology University of Texas, Arlington

cedric@uta.edu cedric@uta.edu

UUtah SolanumSystematics

Postdoctoral Position in Solanum Systematics. A postdoctoral position at the University of Utah is available on an internationally collaborative project to produce a global monograph of the genus Solanum (Solanaceae). The project is one of several Planetary Biodiversity Inventory programs funded by the National Science Foundation. Solanum includes between 1000 and 2000 species and is one of the largest genera of angiosperms. The species level taxonomy, including images, keys and specimen data, are available over the Internet at our project website, the Solanaceae Source (http:/-/www.nhm.ac.uk/solanaceaesource). Responsibilities include monographic taxonomy of selected species groups of solanums; specimen and image databasing and manipulation; field work for the collection of herbarium, seed and silica gel samples; generation of molecular data for phylogeny reconstruction (mainly sequences of chloroplast and nuclear genes); maintenance and analysis of living greenhouse collections of Solanaceae; data analysis, presentation, and publication; training and supervision of undergraduate lab assistants; and oversight of routine lab activities. Candidates should have a Ph.D. and experience in plant systematics; experience with Solanaceae is preferred but not required, as is experience with field work, molecular systematics and a variety of methods of data analysis. The position is available for one year beginning immediately and extendable for up to several years as long as funds are available and satisfactory progress is demonstrated.

Electronic submission of applications is encouraged.

Review of applications will begin immediately and continue until a suitable candidate is chosen. Applicants should submit a statement of interest and description of past experience, a curriculum vitae, and contact information (names, email addresses, and phone numbers) of three references to:

Lynn Bohs Department of Biology 257 South 1400 East University of Utah Salt Lake City, UT 84112 USA E-mail: bohs@biology.utah.edu <mailto:bohs@biology.utah.edu> Phone: [1] (801) 585-0380

Information on the Biology Department at the University of Utah is available at www.biology.utah.edu http://www.biology.utah.edu/ The University of Utah is an Equal Opportunity Employer.

Lynn Bohs <l.bohs@utah.edu>

UVirginia PlantEvolEcol

Postdoctoral position is available in plant evolutionary ecology at the University of Virginia: We currently have a project evaluating the age-dependent and age-independent influences on the demography of Plantago lanceolata. This project involves several large experiments in the field and in the greenhouse. This post-doc position will include collaboration on this project, funded by NIH Institute of Aging, and the development of an independent research project related to this project will be encouraged. The University of Virginia has a highly interactive group of population/evolutionary biologists, and Charlottesville is an attractive place to live.

The starting date for this position is flexible, but applications should be completed by mid-February. To apply, send a cover letter explaining your interest in the position, a CV, and names of three references, to Deb-

orah Roach, Biology Department, Gilmer Hall, University of Virginia, Charlottesville, VA, 22904-4328. Informal email inquires about the position are also welcome at droach@virginia.edu

Deborah Roach Associate Professor Department of Biology 266 Gilmer Hall University of Virginia Charlottesville, VA 22904 phone: (434)982-4858

Deborah Roach <dar2x@virginia.edu>

Uppsala SpeciationGenetics

A postdoc position available in Evolutionary Biology, Uppsala University, Sweden.

A postdoc position is available to study the genetics of speciation using Drosophila as a model organism. The project has a strong cross-disciplinary approach and will include methods of artificial selection, experimental evolution in the laboratory (adaptation to novel environments) and analysis of gene expression data generated from microarrays.

The project would be suitable for someone with a strong interest in evolutionary biology in general and in speciation related questions in particular. Two of the major questions we will address are; (1) Does hybridization promote/prevent the ability to adapt to novel environments? and (2) To what extent do the genomic regions that contribute to reproductive isolation relate to specific adaptations? Previous experience of bioinformatics, programming and of working with insects would be advantageous. Candidates should be able to work independently and have good organizational skills. The initial appointment is for one year, and can be extended, upon mutual agreement.

The Evolutionary Biology Centre provides a highly stimulating research environment, having one of the largest concentrations of evolutionary biologists in Europe. This provides great potential for interdisciplinary research. See the EBC and Dept. Animal Ecology websites:

http://www.ebc.uu.se/index_eng.php http://www.iee.uu.se/zooekol/

HOW TO APPLY:

Please email a statement of interest and research goals (1 page max), CV and publications list, to Anna.Qvarnstrom@ebc.uu.se. In addition, you should

arrange to have 2 referees send letters of recommendation to me by the closing date 26 February 2007.

Direct any questions about the position to Anna.Qvarnstrom@ebc.uu.se.

Anna Qvarnström

Animal Ecology/Dept. of Ecology and Evolution, Norbyvägen 18 D,

Evolutionary Biology Centre, Uppsala University, SE-752 36 Uppsala, Sweden.

Phone + 46 18 471 6406 Fax: +46 18 471 6484

anna.qvarnstrom@ebc.uu.se anna.qvarnstrom@ebc.uu.se

YorkU PlantPopGenet

A postdoctoral position is available in the laboratory of Stephen I. Wright at York University, Toronto, Ontario, Canada. The position will be for 1 year initially, with possibilities for renewal for an additional year. Research in the lab focuses on plant genome evolution and population genetics, with exciting opportunities emerging with the release of the complete genomes of two close relatives of Arabidopsis thaliana this year (Arabidopsis lyrata and Capsella rubella). Possible research topics include transposable element evolution, identifying genes subject to local adaptation, coevolution between nuclear and cytoplasmic genomes, and the evolution of base composition. More information on research in the lab can be found at: www.yorku.ca/stephenw. Applicants should be highly motivated, have a PhD in genomics, population genetics, molecular evolution or related field. Preference will be given to applicants with experience with programming and basic molecular biology techniques.

Please send applications, including CV outlining your experience to:

Stephen I Wright Department of Biology York University 4700 Keele St. Toronto, ON Canada

or by e-mail: stephenw@yorku.ca

Informal enquiries are welcome by e-mail. Review of applications will begin February 1, 2007, and continue until the position is filled.

Stephen I Wright, PhD Alfred P. Sloan Fellow Assis-

tant Professor Department of Biology York University 4700 Keele St. Toronto, ON Canada M3J 1P3 Phone: (416) 736-2100 ext. 20213 (lab: ext. 44034) Fax: (416)

736-5698

stephenw@yorku.ca stephenw@yorku.ca

WorkshopsCourses

Aarhus MathGenetics Apr16-17	MBL MolEvol Jul22-Aug391
Copenhagen EvolBiolCommunication Jun4-8 89	PortalArizona Bees 2007
ESF ThermalAdaptation89	Vienna PhylogeneticsOfEbenaceae Jun492
HinxtonUK HapMap Apr2-590	
INRA France GenomicsModels May21-25	

Aarhus MathGenetics Apr16-17

A workshop on Mathematical Genetics of Selection & Adaption, will be jointly hosted April 16th -17th, 2007 by the CTN (Centre for Theory in Natural Sciences) and BiRC (Bioinformatics Research Center) at University of Aarhus, Denmark. The emphasis will be on gathering a number of people from evolutionary biology, theoretical biology and mathematics to discuss (1) recent theoretical advances in the genetics of adaptation and (2) bridging mathematical models and empirical tests of the models with relevant data.

Programme Session 1 - Genetics of Adaptation: Models and Empirical Tests of the Theory

- * Thomas Lenormand CNRS Montpellier Fitness Landscape and the Genetic Basis of Adaptation
- * Steve Krone Department of Mathematics University of Idaho Spatial Structure and Adaptation
- * Paul Joyce Department of Mathematics and Department of Statistics University of Idaho The Role of the Generalized Pareto Distribution in Testing the Mutational Landscape Model for Experimental Evolution
- * Rees Kassen Department of Biology University of Ottawa The Ecological Genetics of New Mutations
- * Volker Loeschcke Institute of Biology University

of Aarhus Environmental Stress and Adaptation using Drosophila as a Model

Session 2 - Applications of the Coalescent: Searching for Footprints of Selection in Genomic Data

- * Wolfgang Stephan Department of Biology University of Munich Population Genetics of Adaptation
- * Graham Coop Department of Human Genetics University of Chicago Modelling Selective Sweeps
- * Gil McVean Department of Statistics University of Oxford The Structure of Linkage Disequilibrium around a Selective Sweep
- * Rasmus Nielsen Bioinformatics Center University of Copenhagen Detecting Selection in the Human Genome using SNPs and DNA Sequence Data

Participation to the workshop is free of charge, but *registration is necessary *to enable catering.

For further info on the Workshop, the Speakers, Travel and finding accommodation in Aarhus, and Registration consult our web site: http://birc.au.dk/ http://birc.au.dk/

Workshop%20on%20Mathematical%20Genetics%20of%20Selection%2 http://birc.au.dk/Activities/-

Workshop%20on%20Mathematical%20Genetics%20of%20Selection%2 Kind Regards, Thomas Bataillon Carsten Wiuf Enette Knudsen.

- Thomas Bataillon INRA-UMR 1097 (Montpellier, France) & University of Aarhus (Denmark).

Email: tbata@daimi.au.dk Homepage: http://-

www.daimi.au.dk/~tbata Tel +45 89 42 33 59 Fax +45 89 42 30 77

Working address: BiRC - Bioinformatics Research Center University of Aarhus Hoegh-Guldbergs Gade 10, Building 1090 DK-8000 Aarhus C. Denmark

Thomas Bataillon <tbata@daimi.au.dk>

Copenhagen EvolBiolCommunication Jun4-8

International Ph.D. course on ???The Evolutionary Biology of Communication???

4-8 June 2007, Copenhagen, Denmark

Communication is a key element of any social behaviour. Without communication, social interactions and cooperation are impossible. Understanding communication mechanisms is at the core of any attempt to analyze social organizations.

Aim of the course

The purpose of the course is to introduce students to the study of communication in a social context, and to explore its evolution and constraints. The course will combine presentations by leaders in the field of social communication with discussions of published studies and practical demonstrations of how social communication can be investigated.

There will be formal and informal opportunities for mutual interactions between students and teachers. Students will be the driving force behind the course and not simply spectators.

Corse set-up

The course is five days. The first, second and fourth day will include plenary lectures by the teachers, followed by open discussion, and group-work. Students will be given the opportunity to present their own research in two sessions of short talks. The third day will be devoted to practical work in two sessions: ???Chemical Communication in Social Insects??? and ???Acoustic Communication in Birds???. The last day will focus on perspectives and future avenues for research in communication.

Organisers

Jacobus J Boomsma (JJBoomsma@bi.ku.dk) Patrizia D???Ettorre (PDEttorre@bi.ku.dk) David Nash (DR-Nash@bi.ku.dk) Institute of Biology, Department of Population Biology, University of Copenhagen Guest Teachers Torben Dabelsteen (University of Copenhagen) David Harper (University of Sussex) Craig Roberts (University of Liverpool) Elizabeth Tibbetts (University of Michigan)

Registration and fees There will be a maximum of 20 participants. Fees: DKK 4800(??? 650) Fees include full accommodation, coffee, tea, lunches, dinners and all course materials. To register send an e-mail to Bettina Markussen at: BENMarkussen@bi.ku.dk Deadline: 1st March 2007 More Information: www.bi.ku.dk/cse or contact one of the organizers. Patrizia D????Ettorre

Patrizia D????Ettorre, associate research professor Institute of Biology, Dep. Population Biology University of Copenhagen Universitetsparken 15, 2100 Copenhagen Tel +45 353 21257; Fax +45 353 21250 pdettorre@bi.ku.dk <mailto:pdettorre@bi.ku.dk>

"D'Ettorre, Patrizia" <PDEttorre@bi.ku.dk>

ESF ThermalAdaptation

***** 2nd CALL *****

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

We here Call for Applications for local organization of Workshops on specific topics within the realm of the ThermAdapt Programme

Such workshops, financed by our ESF programme if approved, bring together between 10 and 50 participants for 2 to 4 days to focus on a specific is-

sue and are planned to occur on an annual basis over the next 5 years. We start by refraining from narrowing down the topic of possible workshops, although in the long term some structure will be desirable. See http://www.esf.org/generic/1817/-Annex4GuidelinesforScienceMeetings.pdf for application guidelines and forms. The deadline is 15 February 2007.

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

If you wish to be included in the ThermAdapt e-mail list to receive regular updates on Programme activities, please send an email to srenay@esf.org.

For further inquiries contact:

Sarah Renay (ESF office liaison; Email: sre-nay@esf.org) Wolf Blanckenhorn (chair; Email: wolf.blanckenhorn@zoolmus.unizh.ch) Mauro Santos (co-chair; Email: mauro.santos@uab.es)

Send applications, best by e-mail, to:

Dr. Wolf Blanckenhorn Zoological Museum, University of Zurich-Irchel Winterthurerstrasse 190 CH-8057 Zurich Phone: +41 44 635.47.55 Fax: +41 44 635.47.80 e-mail: wolfman@zoolmus.unizh.chhttp://www.unizh.ch/zoolmus/zmneu/englisch/forschung_e/ blanckenhorn_wolf_e.html http://www.esf.org/thermadapt wolfman@zoolmus.unizh.chwolfman@zoolmus.unizh.ch

HinxtonUK HapMap Apr2-5

Wellcome Trust Course: Working with the HapMap Wellcome Trust Genome Campus, Hinxton, Cambridge, UK April 2nd - April 5th, 2007

The Wellcome Trust Course: Working with the HapMap will be held on April 2nd - April 5th, 2007 at the Wellcome Trust Genome Campus, Hinxton, Cambridge, UK. The deadline for application is 10th January 2007. Further information can be found at: http://www.wellcome.ac.uk/doc_WTX030611.html with details of how to apply.

This 4-day residential course will provide a comprehen-

sive overview of the International HapMap Project, and will include practical experience of working with the HapMap data to map phenotypic traits to locations in the human genome. Theoretical lectures will be combined with hands-on practical sessions and introduction to relevant databases and tools.

Topics include: Introduction to the HapMap, Introduction to Association Studies, Data collection and repositories, Genetic variation and selection, Tools and resources, Association analysis, and Case studies.

Course instructors and speakers include: Paul de Bakker (MIT), Manolis Dermitzakis (Sanger Institute), Mike Feolo (NIH/NCBI), Jonathan Marchini (Oxford University), Gil McVean (Oxford University), Steve Sherry (NIH/NCBI)), Albert Vernon Smith (CSHL), Barbara Stranger (Sanger Institute), Eleftheria Zeggini (Wellcome Trust Center for Human Genetics), Lon Cardon (Wellcome Trust Center for Human Genetics), Panos Deloukas (Sanger Institute), John Todd (Cambridge University).

Barbara Stranger & Manolis Dermitzakis

Barbara E. Stranger, PhD Post-doctoral Researcher Population and Comparative Genomics The Wellcome Trust Sanger Institute Wellcome Trust Genome Campus Hinxton, Cambridge CB10 1SA UK e-mail: bes@sanger.ac.uk Tel: +44 (0)1223 834244 ext.7297 Fax: +44 (0)1223 494919

Barbara Stranger

 des@sanger.ac.uk>

INRA France GenomicsModels May21-25

International Doctoral Course, jointly organised by: INA Paris-Grignon, INRA-Animal Genetics Department, Graduate School ABIES

NEW INSIGHTS INTO MIXED MODEL METHOD-OLOGY WITH APPLICATIONS TO GENOMICS AND BIOSTATISTICS

May 21-25, 2007, La-Londe-les-Maures, France

by Dr Jean-Louis FOULLEY and Dr Florence JAF-FREZIC

Mixed Model Methodology (MMM) is a key procedure for analyzing correlated data within a broad range of covariance structures both in linear and non linear frameworks. We are now in a new stage involving more sophisticated modelling approaches. These involve multilevels of modelling (population and individual; mean and variance models) and also the use of dynamic systems based on ordinary or stochastic differential equations especially in the field of functional data analysis. On the other hand, approximated inference procedures for generalized linear and non linear mixed models have clearly shown their limits and exact methods are now required. Such methods and models are now feasible via the availability of Stochastic Monte Carlo methods such as Metropolis and Gibbs sampling. These can be applied both within a classical framework (maximum likelihood and EM algorithm) or within a Bayesian one.

The purpose of this course is twofold: (i) to review these new tools in a pedagogical way and (ii) to show how they can already be applied in many areas of biostatistics (e.g. functional data analysis and genomics) using existing softwares (e.g. SAS, winbugs, R-oriented tools). Special attention will be devoted to examples and real data processing.

The course is mainly intended to PhD students, but is also open to young or senior scientists. All the lectures will be given in English.

Detailed information and application forms are available at the following address: http://www.inapg.inra.fr/dsa/ger_genetique/intercourses/DoctoralCourse2007.pdf Contacts: Prof. Etienne VERRIER: etienne.verrier@agroparistech.fr; tel. + 33 1 44 08 17 48 Mrs. Line DE MONDINI: Line.Selme-De-Mondini@toulouse.inra.fr; tel. + 33 5 61 28 51 84

Prof. Etienne VERRIER etienne.verrier@agroparistech.fr

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etienne.verrier@agroparistech.fr etienne.verrier@agroparistech.fr

MBL MolEvol Jul22-Aug3

Workshop on Molecular Evolution

http://workshop.molecularevolution.org/ Michael P. Cummings, Director

22 July - 3 August 2007 plus extended topics session 4 August - 10 August 2007

Application Deadline 1 March 2007

The Workshop on Molecular Evolution has been the finest course of its type in the world since it was started in 1988. The Workshop consists of a series of lectures, demonstrations and computer laboratories that cover various aspects of molecular evolution. A distinguishing feature of the Workshop is a well-equipped computer laboratory with Linux workstations and servers for comparative analysis of molecular data. Authors and experts in the use of computer programs and packages such as Clustal W and Clustal X, FASTA, GARLI, GCG, LAMARC, MrBayes, PAML, PAUP*, and PHYLIP provide demonstrations and consultations. This two-week program is designed for established investigators, postdoctoral fellows, and advanced graduate students with prior experience in molecular evolution and comparative genomics. Scientists with a strong interest in molecular evolution, systematics, and population genetics are encouraged to apply. Enrollment is limited to 60 students, and 15 students will be admitted to an extended topics session for the purpose of analyzing their research data sets. Many participants find the extended topics session to be especially useful.

Topics to be covered include:

* Databases and sequence matching: database searching: protein sequence versus protein structure; homology; mathematical, statistical, and theoretical aspects of sequence database searches * Phylogenetic analysis: theoretical, mathematical and statistical bases; sampling properties of sequence data; Bayesian analysis, hypothesis testing * Character analysis in a phylogenetic context: analysis of quantitative and discrete characters; hypothesis testing * Maximum likelihood theory and practice in phylogenetics and population genetics: coalescent theory; maximum likelihood estimation of population genetic parameters * Bayesian methods in phylogenetic analysis * Molecular evolution integrated at different levels: population biology; biogeography; ecology; systematics and conservation * Molec-

ular evolution and development: gene duplication and divergence; gene family organization; coordinated expression in evolution * Comparative genomics: genome content; genome structure; genome evolution * Transposable elements: types; history; evolutionary dynamics; as a major component of genomes

Fee: \$2150 (room and board at no additional charge), plus an additional \$850 for the extended topics session.

Application Form at http://www.mbl.edu/education/-admissions/applications/ Further information at http://workshop.molecularevolution.org/ mike@umiacs.umd.edu

PortalArizona Bees 2007

For those interested in learning about identifying bees, the bee course will be held again in 2007 at Portal Arizona as usual.

Full information is available at: http://research.amnh.org/invertzoo/beecourse/-2007BEE.HTM L P < laurencepacker@yahoo.com>

Vienna PhylogeneticsOfEbenaceae Jun4

Workshop on family Ebenaceae

A single day workshop is planned in June for this family. This workshop will focus on all the ongoing projects as well as work done on different aspects, such as taxonomy, morphology, anatomy, phytochemistry,cytology as well as molecular phylogenetics of Ebenaceae. The date : 4th June 2007 Location: Faculty centre for Botany, Rennweg 14, A-1030 Vienna, Austria For further information please contact Dr. Rosabelle Samuel Tel. no. 00431/4277-54162 e-mail ? Mag. Sutee Duangjai Tel. No 00431/4277-54030 e-mail -Sutee Duangjai

People who would like to give a oral presentation please contact before the 15th of March. The final details will be given by Beginning of May 2007.

Thank you Rosabelle Samuel

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>

Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LATEX files, Excel files, etc. ... plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category "Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:" and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterward

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by LATEX do not try to embed LATEX or TEX in your message (or other formats) since my program will strip these from the message.