E v o l D i r

November 2, 2004

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

Forward

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

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

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

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Conferences

Aspen Bioinformatics Dec10-12

The 2nd Annual Rocky Mountain Regional Bioinformatics Conference (Rocky '04) will be held in Aspen, Colorado, December 10-12, 2004, and we would welcome your participation. This event is sponsored by the International Society for Computational Biology with local organizing by the University of Colorado Center for Computational Biology.

The purpose of the meeting is to build bridges among the diverse research and educational community working in the computational biosciences (broadly defined) in our region. The conference will have an exciting lineup of invited speakers and many oppportunities for networking and research exchange.

Please feel free to distribute this invitation to interested colleagues.

We also encourage you to submit an abstract for a short talk or poster describing your work to the community. Submit an abstract on the website at http://www.iscb.org/regional_meeting/-rm_paper_submit_form.php The deadline for abstract submission November 1, 2004

Here is some information from the 1st conference. 95% of the attendees found the extent of the scientific program met their expectations 80% said they formed new collaborations as a result of attending 100% of the attendees felt the overall weekend program met or exceeded their expectations

"Very impressed, given that it's the first year, with overall enthusiasm and talks." "Great conference, great location, good job."

To register, or to get more more information about the meeting, please visit our web site, http://-www.iscb.org/rocky04 . Industry sponsorship opportunities are also available here: http://www.iscb.org/-rocky04/industry.html We hope to see you in December!

Regards,

Larry Hunter & Steven Billups, Meeting Cochairs

Stephanie Hagstrom <shagstrom@iscb.org>

EBMMarseilles talks available

The Power Point of the talks that were given at the 8th Evolutionary biology meeting at Marseilles are now available on the meeting web site

http://www.up.univ-mrs.fr/evol/congres/ program 2004

Best regards Pierre

– Pierre Pontarotti EA 3781 EGEE (Evolution Génome Environnement) Université d'Aix Marseille I Centre St Charles 3 Place Victor Hugo 13331 Marseille Cedex 3 33491106489 http://www.up.univ-mrs.fr/evol We organize the 8th Evolutionary Biology Meeting at Marseille http://www.up.univ-mrs.fr/evol/congres/

IrvineCA OriginOfSpecies Dec16-18

Dear Colleague:

This is to invite you to attend a National Academy of Sciences Sackler Colloquium on Systematics and the Origin of Species. On Ernst Mayr's 100th Anniversary, to be held December 16-18, 2004 at the Beckman Center of the National Academies of Sciences and Engineering in Irvine, California. The following information, and Preliminary Program and Registration Forms, can be accessed at the NAS web site. http://www4.nationalacademies.org/nas/-nashome.nsf/urllinks/NAS-58MTTC?OpenDocument The Colloquium will celebrate the 100th birthday of the eminent evolutionist Ernst Mayr and the 62nd anniversary of the publication of his Systematics and the Origin of Species (1942), one of the four books often considered as the foundations of the modern theory of evolution. The Colloquium will explore the main topics in Mayr's book and examine the same (and related) issues in the light of current science, although the focus will be on speciation, rather than on systematics.

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

Registrations will be accepted only when the registration fee is included and in the order in which they are received. The registration fee is $350, which includes the cost of meals, reception, and banquet. However, an early registration fee of $250 (also including meals, reception, and banquet) is available to those posting their registration by November 1, 2004. And, a reduced all-inclusive registration fee of $100 is offered to Graduate Students and Postdocs who register by November 1st. A block of hotel rooms has been reserved at the Hyatt Newporter Resort at a discount rate of $106, plus tax, for a single or a double. Hotel reservations must be made when registering (see Registration Form for more information). Hotel reservations must be made by November 24, 2004. Please do not call the hotel directly for room reservations, as they can only accept reservations through the NAS. Shuttle bus service between the hotel and the Beckman Center will be provided free of charge at specified times.

Sincerely, Francisco J. Ayala for the Colloquium Organizing Committee, Jody Hey, Walter M. Fitch, and Francisco J. Ayala

Program - http://www4.nationalacademies.org/nas/-nashome.nsf/2bcd43d2a04ce99085256b87005a8c7b/-bcb31cf4edcd064085256e8d006c951c?OpenDocument
Registration Form - http://-www4.nationalacademies.org/nas/nashome.nsf/-2bcd43d2a04ce99085256b87005a8c7b/-f1ee04265ae74dfe85256e12007a9f29?OpenDocument
Graduate Student/Postdoc Grant Application - http://www4.nationalacademies.org/nas/-nashome.nsf/2bcd43d2a04ce99085256b87005a8c7b/-353e9df463de94aa85256a4200694d47?OpenDocument
Hotel and Travel Information - http://-www4.nationalacademies.org/nas/nashome.nsf/-2bcd43d2a04ce99085256b87005a8c7b/-74dfe23960b1c0c485256eed0070aa9b?OpenDocument

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

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

London Phylogenies Behaviour Dec2-3

2004 Winter ASAB - Phylogenies and Behaviour

2nd and 3rd December 2004 Meetings Rooms of the Zoological Society of London, Regent[1]s Park (next to London Zoo), UK.

Open meeting: no prior registration or registration fee

ASAB Winter meetings are very informal two-day conference with no registration fees and no accommodation booking service is provided (but London has a wide of-

fer of places to stay from B&B to 5-star hotels that can be book in advance through the London Tourism Office or via Internet). Accordingly there is no formal social program apart from a wine reception and art exhibition at the London Zoo on the Thursday evening, and free entrance to the Zoo.

The scientific program will consist of a combination of invited speakers and contributed talks, with an emphasis on case studies in which phylogenies have helped in the understanding of animal behaviour. There will also be a smaller number of talks aimed at summarizing recent developments in phylogenetic methods and highlighting the importance of these new insights for the study of animal behaviour.

Invited speakers include Goran Arnqvist (Uppsala), Tim Barraclough (Imperial), Robert Barton (Durham), Rob Freckleton (Oxford), Nick Goodwin (UEA), Ruth Mace (UCL), Jim Mallet (UCL), Peter Mayhew (York), Mike Ryan (Texas), Ole Seehausen (Bern), Michael Sorenson (Boston), Tamas Szekely (Bath).

For further details about the meeting please see the ASAB Meetings website:

http://www.societies.ncl.ac.uk/asab/meetings.html
Or contact the scientific program organiser (i.owens@imperial.ac.uk) –

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

Fax +44 (0)20 759 42339 Tel +44 (0)20 759 42215 Web www.bio.ic.ac.uk/research/iowens/ Ian Owens <i.owens@imperial.ac.uk>

Montreal GMOs Oct18-Nov15

Announcement:

Online Conference - "Biosafety Considerations in the use of Genetically Modified Organisms for Management of Animal Populations". Modern biotechnology can provide innovative approaches to management of animal populations, but what about potential risks? This online conference will facilitate exchange of views on a range of important issues such as the use of GM microorganisms, nematodes and insects for biological control (including those used to cause sterility in pest species for conservation and/or commercial purposes); the use of GM viruses to protect mammal populations against disease; and the use of GM insects for reducing disease transmission rates. The conference will be hosted on the Biosafety Clearing-House from 18 October to 15 November 2004. To join, visit http://bch.biodiv.org/-onlineconferences/GMOAM.shtml <http://-bch.biodiv.org/onlineconferences/GMOAM.shtml> . Ryan Hill Programme Officer, Scientific Assessments Biosafety Programme Secretariat of the Convention on Biological Diversity 393 St-Jacques Street, Suite 300 Montreal, Quebec Canada H2Y 1N9 tel: +1(514)287-7030 fax: +1(514)288-6588 email: ryan.hill@biodiv.org

ryan hill <ryan.hill@biodiv.org>

NHMLondon Barcoding Feb6-9 2

This is a second call for the International Conference for the Barcoding of Life particularly as the applications for the travel bursaries (see link on web page) close on Monday the 25th.

On behalf of the Consortium for the Barcoding of Life (CBOL) the Natural History Museum, London (NHM) is hosting the first International Conference for the Barcoding of Life on Sunday 6th - Wednesday 9th February 2005 in NHM's Flett Theatre, South Kensington, London.

This conference will be focused on advancing the theoretical and practical issues in DNA barcoding. It aims to review and advance the state-of-the-art, expand the worldwide community interested in 'barcoding', and harmonize research efforts.

If you would like further details log on to: http:/-/www.nhm.ac.uk/science/BOL/ Robyn Cowan Conservation Genetics Scientist Jodrell Laboratory RBG Kew, Richmond, Surrey, TW9 3AB, UK Tel: 020 8332 5355/5341 e-mail:r.cowan@rbgkew.org.uk

PennStateU NEEC Mar18-20

Northeast Ecology and Evolution Conference 2005

The third annual Northeast Ecology and Evolution Conference (NEEC) will be held at The Pennsylva-

nia State University (University Park, PA) on March 18-20, 2005. NEEC is a profession meeting organized by graduate students and post-docs to provide a forum for advanced undergraduates, graduate students, and post-docs to present their research in the form of a poster or talk. Poster and Talk topics from previous NEEC include animal behavior, biodiversity, biogeography, community ecology, conservation biology, development, ecosystems ecology, invasive species, invertebrate biology, marine biology, molecular ecology, molecular evolution, natural history, natural resources and management, paleobiology, philosophy of biology, plant sciences and mycology, population biology, phylogenetic methods, reproductive biology, speciation, systematics, and theoretical biology.

The keynote speaker for the NEEC 2005 will be Dr. Peter Kareiva. Dr. Kareiva has a very distinguished career in ecological research and presently serves as Lead Scientist for the Nature Conservancy.

Abstract submission and early registration will begin on December 1, 2004. We will accept abstracts and early registrants until February 4, 2005 with late registration continuing until the day of the meeting.

If you would like more information please visit our website (http://www.ecology.psu.edu/neec), which will be updated periodically.

TuftsU MolEvol Nov6

Dear Colleague,

We are hosting this year's New England Molecular Evolutionary Biologists (NEMEB) meeting at Tufts University on November 6th. We hope that you and/or members of your lab can attend this free regional meeting. NEMEB provides a forum for molecular evolutionists to present their work and interact with one another in an informal setting. Students, post-doctoral researchers, and principal investigators are encouraged to present their work. This year's meeting format will be similar to past years and will consist of a combination of three invited talks, a series of contributed talks (we will have as many as 14 slots), and a poster session. This years invited speakers are: Tom Kocher (University of New Hampshire), Dick Lewontin (Harvard University), and Peter Gogarten (University of Connecticut). In past years, between 100-150 researchers have attended the meeting. It will be held on Saturday, November 6th, in Pearson Hall at Tuft University's Medford campus. The meeting will run from approximately 8:00 a.m. to 5:00 p.m., with a poster session and social hour to follow.

For registration and abstract submissions, please visit our website at http://www.tufts.edu/vet/richlab/-nemeb. Abstract submissions are due by October 17th. Please be sure to indicate your choice of talk or poster; and be aware that we have a limited number of talk slots available. We'll let all abstract-submitters know their fate, i.e. whether they've been selected for a talk or poster, by October 27th. These decisions will be made in part on a "first come, first served" basis, but we also try to set things up so there is fair distribution among institutions, topics, etc.. As an added incentive this year, Sinauer Associates has offered a $25 gift certificate to all registrants chosen to give a talk at NEMEB XV.

Hope to see you there!

Stephen M. Rich, Ned Young, and Jaime Wesker
Ned.Young@tufts.edu 508-887-4540

UCSanDiego CalPEG2004 Dec10-12

To population biologists of every stripe:

The faculty and students of the UCSD EBE Section are delighted to invite you to this year's CalPEG, which will be held on the weekend of Dec. 10-12. We welcome students, postdocs and faculty to join us in a relaxed and informal setting on our beautiful campus. We also encourage you to give a short presentation of your work. Following the CalPEG tradition, we encourage talks about work in progress as well as finished reports. This will enable students partway through their thesis work to get the benefit of lots of feedback from the other participants. And this year we want to extend a special welcome to ECOLOGISTS, reflecting the fact that ecology and evolution are becoming more and more intertwined with each passing year.

Please spread the word in your labs, and send this announcement to your local lists so that other people on your campus who are not on our mailing list can learn about the meeting.

Talks will be 15 minutes (12 minutes with three minutes for questions). We will have facilities for Powerpoint presentations and overheads. We would love it if you could bring your Powerpoint file on a CD, as this would speed up the transition between speakers.

Instructions for registration and a form to be printed out and sent in along with your check will be found on the CalPEG website, http://www.biology.ucsd.edu/-labs/chao/calpeg04 The meeting will begin with a mixer at our International Center on the evening of Friday the 10th, followed by presentations all day Saturday and Sunday morning. Registration is $30 for all comers, which covers the mixer, a box lunch on Saturday, and dinner on Saturday evening at the International Center, along with plenty of additional opportunities to keep your blood sugar and caffeine levels high. To keep costs down, we ask that you specify your dietary and booze preferences on the registration form. A number of our graduate students have volunteered floor space in their apartments for students from other campuses. We have also listed three nearby inexpensive motels on the web site, and all of them allow multiple occupants in a room. BUT PLEASE REGISTER EARLY AND MAKE YOUR ACCOMMODATION ARRANGEMENTS EARLY, BECAUSE WE CANNOT GUARANTEE MOTEL OR FLOOR SPACE!

FINAL DEADLINE FOR REGISTRATION IS NOV. 30.

Looking forward to seeing you all here!

Chris Wills

– Christopher Wills Professor of Biological Sciences University of California, San Diego La Jolla CA 92093-0116

Phone: 858-534-4113 Fax: 858-534-7108

– Art Poon – Division of Biological Sciences, UCSD Muir/Biology Rm.3155, 9500 Gilman Drive La Jolla, CA 92093-0116 lab phone: (858) 822 2740 fax: (858) 534 7108

UWindsor FishResearch Jan6-9

The 2005 Canadian Conference for Fisheries Research and the Canadian Society of Limnologists meeting will be held in Windsor ON, Canada (across the river from Detroit) from January 06 - 09. The deadline for abstracts is October 25, and registration deadline is December 01.

Details can be viewed at the conference website: http://www.phys.ocean.dal.ca/ccffr/ The major session themes of the 2005 Conference are: 1. Issues in Great Lakes Water Quality and Fisheries (CCFFR/SCL) 2. Genetic approaches to conservation and management (CCFFR) 3. Fisheries policy and the protection of native fishes (CCFFR) 4. Aquatic species at risk research (CCFFR) 5. Adaptive management of aquatic resources (CCFFR) 6. Food webs and fisheries (CCFFR) 7. Climate change, fisheries and aquatic resources (CCFFR) 8. Contaminants and bioenergetics in aquatic ecosystems (CCFFR) 9. Aquatic Invasive Species (Joint SCL/CCFFR)

Daniel Heath Great Lakes Institute for Environmental Research University of Windsor Windsor, Ont, Canada N9B 3P4

Phone: (519) 253-3000; Ext 3762 Fax: 971-3616

dheath@uwindsor.ca

VenturaCA GordonQuantGenet Feb20-25

PLEASE DISTRIBUTE FREELY....

Complete schedule (also attached as a document) and summary.

2005 Gordon Conference in Quantitative Genetics and Genomics

February 20-25, 2005 Ventura Beach Marriott, Ventura, CA http://www.grc.uri.edu/programs/2005/-quantgen.htm (registration information links at bottom of URL) www.stat.purdue.edu/~doerge SUNDAY (Feb 20, 2005)

2:00 pm - 9:00 pm Arrival and check-in 6:00 pm Dinner

7:30 pm Welcome, Opening Remarks, & Announcements Chair: Rebecca Doerge (Purdue University)

7:45 pm - 9:45 pm At the Interface of Quantitative Genetics and Systems Biology

Discussion Leader: Bruce Walsh (University of Arizona)

7:35 pm - 7:45 pm Introduction and concepts (Bruce Walsh)

7:45 pm - 8:30 pm Bruce Weir (North Carolina State Univerrsity) “TBA”

8:30 pm - 8:45 pm Discussion

8:45 pm - 9:30 pm Eric Davidson (California Institute of Technology) “The genomic regulatory system for embryonic development in the sea urchin”

9:30 pm - 9:45 pm Discussion

MONDAY (Feb. 21, 2005)

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm Genetic Variation and Evolutionary Change Discussion Leader: Patrick Phillips (University of Oregon)

9:00 am - 9:10 am Introduction and concepts (Patrick Phillips)

9:10 am - 9:40 am Frederic Hospital (INRA) "The impact of selection on the apparent architecture of quantitative traits"'

9:45 am - 10:15 am Tom Osborn (University of Wisconsin, Madison) "Genetic and epigenetic changes in newly formed polyploids"

10:20 am -10:40 am Coffee Break

10:40 am - 11:10 am Joanna Masel (University of Arizona) "A population genetics framework to predict the evolution of evolutionary capacitance"

11:15am GROUP PHOTO

11:45 am - 12:15 pm Sergey Nuzhdin (University of California, Davis) "Functional analysis of expression variation: yeast and flies"

12:15 pm - 12:30 pm Discussion 12:30 pm Lunch 1:30 pm - 4:00 pm Free Time 4:00 pm - 6:00 pm Poster Viewing 6:00 pm Dinner

7:30 pm - 9:30 pm Mapping Genes Affecting Complex Traits in Humans Discussion Leader: Zhao-Bang Zeng (North Carolina State University)

7:30 pm - 7:40pm Introduction and concepts (Zhao-Bang Zeng)

7:40 pm - 8:25 pm Heather Cordell (Cambridge Institute for Medical Research) "Detection and estimation of effects at interacting loci under varying ascertainment schemes in genetic association studies"

8:30 pm - 9:15 pm Lon Cardon (Wellcome Trust Centre for Human Genetics) "Genome-wide linkage disequilibrium meets disease association"

9:15 pm - 9:30 pm Discussion

9:30 pm Posters and refreshments

TUESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm Genetic Architecture of Transcript Abundance Variation Discussion Leader: Gary Churchill (Jackson Laboratories)

9:00 am - 9:10 am Introduction and concepts (Gary Churchill)

9:10 am - 9:40 am Leonid Kruglyak/ Rachel Brem (Fred Hutchinson Cancer Research Center) "The landscape of genetic complexity in the yeast transcriptome"

9:45 am - 10:00 am Discussion

10:00 am - 10:30 am Coffee Break

10:30 am - 11:00 am Daniel Pomp (University of Nebraska, Lincoln) "Genomic architecture of obesity predisposition"

11:05 am - 11:35 am Rob Williams (University of Tennessee) "Genetic network analysis of brain transcriptome, structure and function"

11:40 am - 12:10 pm Peter Keightley (University of Edinburgh) "Resolving genes that underlie quantitative variation for growth in mice"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch 1:30 pm - 4:00 pm Free Time 4:00 pm - 6:00 pm Poster Viewing 6:00 pm Dinner

7:30 pm - 9:30 pm So Much Diversity: Applied Genetics and Genomics in Trees Discussion Leader: TBA

7:30 pm - 7:40 pm Introduction and concepts (TBA)

7:40 pm - 8:10 pm Jeanne Romero-Severson (University of Notre Dame) "Genetic maps in intractable species of forest trees"

8:15 pm - 8:45 pm Dave Neale (University of California, Davis) "Association genetics of natural genetic diversity and complex traits in pine"

8:50 pm - 9:20 pm Ron Sederoff (North Carolina State University) "Transcript abundance variation in forest trees and the molecular basis of superior phenotypes"

9:20 pm - 9:30pm Discussion 9:30 pm Posters and refreshments

WEDNESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm Statistical Genetics and QTL Analysis

Discussion Leader: Rebecca Doerge (Purdue University)

9:00 am - -9:10 am Introduction and concepts (Rebecca Doerge)

9:10 am - 9:55 am Orjan Carlborg (Uppsala University) "Interactive genetics - Epistasis and the control of complex traits"

10:00 am - 10:30 am Coffee Break

10:30 am - 11:15 am Dina St. Clair (University of Cal-

ifornia, Davis) "Quantitative traits in plants: QTL architecture, interactions, and dissection"

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GradStudentPositions

France MarineBivalves

PhD position

MARINE GENOMICS EUROPE

Network of Excellence funded by the European Commission

PhD studentship in Evolutionary Genomics

A 3 year PhD studentship funded by the FP6 NoE "Marine Genomics Europe" (http://www.sb-roscoff.fr/-marine-genomics-europe) is available to study the evolutionary genomics of marine bivalves. The student will join a collaborative study between several labs of the Fish & Shellfish node of the NoE but will be based in France among three labs: The Laboratory "Evolution et Génétique des Populations Marines" (Station Biologique, Roscoff, France), the Laboratory "Génétique et Pathologie" (IFREMER, LaTremblade, France) and the Laboratory "Génome, Populations, Interactions, Adaptation" (Station Méditerranéenne l'Environnement Littoral, Sète, France).

The aim of the PhD thesis will be to analyse polymorphism levels and divergence rates in coding DNA sequences of two marine bivalves: the cupped oysters of the genus Crassostrea and hydrothermal vent mussels of the genus Bathymodiolus.

Marine bivalves exhibit one of the highest enzyme diversities reported in animal species to date. We are thus expecting to obtain datasets with a high density of polymorphic sites, allowing us to precisely estimating the selective constraints on proteins. In addition, the presence of hybrid zones in the two genera (between Crassostrea gigas and C. angulata, and between Bathymodiolus azoricus and B. puteoserpentis) could be used as selective filters to identify chromosomal chunks, or even genes involved in reproductive isolation.

Candidates with a M.Sc. or equivalent obtained this year (in 2004), with an interest in evolutionary genetics and marine sciences, preferably with an experience in molecular techniques, bioinformatics (ESTs annotation) and marine ecosystems (and especially hydrothermal vents) with a good to moderate knowledge of French should send via e-mail a letter of motivation, a CV, and the names and e-mail of 1 referee before the first of November 2004 to Didier Jollivet (jollivet@sb-roscoff.fr) and Pierre Boudry (Pierre.Boudry@ifremer.fr). Final decision will be taken on the following week (8th of November 2004).

Didier Jollivet Equipe "Evolution et Génétique des Populations Marines" Station Biologique, BP. 74, Place Georges Teissier, 29682 Roscoff France Tel +33 2 9829

2367 Fax +33 2 9829 2324 mailto:jollivet@sb-roscoff.fr

NCStateU QuantitativeTraits

Department of Genetics at North Carolina State University

Research Training Program in the Genetic Architecture of Quantitative Traits

The National Institute of General Medical Sciences of the National Institutes of Health has awarded the Department of Genetics an Institutional Research Training Grant for predoctoral training in "The Genetic Architecture of Quantitative Traits."

Quantitative, or complex, traits are affected by multiple interacting genes, each of which have small effects and are sensitive to the environment. Understanding the molecular nature of genetic variation for quantitative traits will have an enormous impact on medicine, livestock and crop breeding, and the study of evolution. For over half a century North Carolina State University has been a leading center for research in quantitative genetics. To enable future scientists to advance our understanding of the genetic architecture of quantitative traits, we offer a research and training program that integrates quantitative, population, molecular and developmental genetics, statistics and molecular evolution.

Our program offers:

* $20,772 stipend with tuition and health insurance * Travel allowance and research funds * State-of-the-art research facilities * Internationally recognized faculty with expertise in theoretical and experimental quantitative genetics * A stimulating academic environment near the University of North Carolina at Chapel Hill, Duke University and the Research Triangle Park * A beautiful and affordable location with a pleasant climate between the beaches and the Appalachian mountains

US citizens and permanent residents are eligible for Fellowships. The Department of Genetics is strongly committed to promoting diversity in the scientific community and encourages applications from individuals of historically under-represented minority groups.

Training Faculty

Jose Alonso: Ethylene signal transduction in Arabidopsis; characterization of Arabidopsis genome.

Robert Anholt: Molecular and quantitative genetics of olfaction.

William Atchley: Developmental quantitative genetics and molecular evolution.

Philip Awadalla: Coalescent estimates and the evolutionary significance of recombination.

Patricia Estes: Development of the Central Nervous System (CNS) and cellular and molecular response to hypoxia.

Robert Franks: Development of the carpel margin meristem in Arabidopsis thaliana.

Gregory Gibson: Molecular and quantitative variation in developmental pathways in Drosophila.

Fred Gould: Ecological, genetic and chemical aspects of plant/herbivore interactions, pest management, and behavioral ecology of arthropods.

Patrick Hurban: Elucidation of biological networks.

Todd Klaenhammer: Physiology, metabolism and genetics of lactic acid bacteria.

James Mahaffey: Drosophila developmental genetics.

Trudy Mackay: Molecular quantitative genetics in Drosophila.

Laura Mathies: Genetic control of early gonad development in C. elegans.

Michael Purugganan: Molecular genetics of morphological evolution in plants.

Ronald Sederoff: Molecular genetics, quantitative genetics and genomics of pine.

Jeffrey Thorne: Statistical methods for analysis of sequence data.

Bruce Weir: Statistical methods for characterization of population structure, detecting human disease genes and individual identification.

Shaobang Zeng: Theory and statistical methodology for characterizing and analyzing genetic variation.

For information and application materials, contact:

Director of Graduate Programs Department of Genetics North Carolina State University Raleigh, NC 27695-7614 Telephone: 919-515-2292 http://-www.cals.ncsu.edu/genetics/

Julie Pederson <jdpeders@unity.ncsu.edu>

SanDiegoStateU MuleDeer

Graduate Student Position in Mule Deer Genotyping

A master's student position is available at San Diego State University, beginning Fall 2005, for a molecular ecology study of mule deer in San Diego County, California. The goal of this project will be to infer patterns of movement using microsatellite markers. All DNA will be extracted from noninvasively obtained scat samples. This continues a previous graduate project, in which reliable laboratory and field techniques were established. The student will be expected to excel in field and laboratory components, as well as statistical analysis of the results. Our laboratory has a number of existing partnerships with local environmental, governmental and land management agencies to aid with this research.

Support for this position includes a combination of research assistantships and teaching assistantships. Applicants that have experience with microsatellite analysis and/or large mammal ecology are especially encouraged to apply. Good laboratory, mathematical and writing skills are highly desirable. Potential applicants may email Andrew Bohonak <bohonak@sciences.sdsu.edu> for further information.

Information on applying to San Diego State University can be found at http://www.bio.sdsu.edu/eb/-degree.html. Materials include 1) an admissions application to San Diego State University, 2) an admissions application to the Department of Biology, and 3) application for a teaching assistantship to the Department of Biology. Although the official deadline is March 1, 2005, applications should be submitted by February 1 for full consideration.

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Andrew J. Bohonak

Assistant Professor San Diego State University Department of Biology 5500 Campanile Drive San Diego, CA 92182-4614

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Phone: 619-594-0414 Fax: 619-594-5676 Email: bohonak@sciences.sdsu.edu Web: http://-www.bio.sdsu.edu/pub/andy/index.html Office: 212 Life Science North

SpanishNatlCancerCenter Bioinformatics

Dear Evoldirs,

The Bioinformatics Unit of the Spanish National Cancer Center (http://bioinfo.cnio.es ; http://-bioinfo.cnio.es) seeks two Latin American biologists, chemists or computers highly interested in make a PhD in the area of population genetics, molecular evolution and biomed applications.

Those interested, graduates at november 2004, please send a short CV (less than 4 pages) to Hernán J. Dopazo (hdopazo@cnio.es).

The selected students will be presented at the High Level Research Fellowship Program of the European Union for Latin American. PhD research fellowships is about 18,000 Euros per year. Details at http://-www.programalban.org.

Thank you very much!

Hernán J. Dopazo Bioinformatics Unit. Centro Nacional de Investigaciones Oncológicas CNIO. c/ Melchor Fernández Almagro 3 28029, Madrid, España Tfn: (34) 91 224 69 00 ext: 2428 Fax: (34) 91 224 69 72 hdopazo@cnio.es http://bioinfo.cnio.es http://bioinfo.cnio.es/ ˜ hdopazo/ Hernan Dopazo <hdopazo@cnio.es>

UCaliforniaRiverside TrophicInteractions

Graduate Student Position, Tritrophic Interactions

A graduate student position (M. S. or PhD.) is available in the Fall of 2005 for a highly motivated student to join an NSF-funded research project to study tritrophic interactions in a natural system. In southern California, plants of Datura wrightii produce leaves that are covered either with glandular or non-glandular trichomes. Glandular trichomes secrete defensive chemicals, and plants with glandular trichomes are resistant to many of D. wrightii's insect herbivores. The primary objective of this position is to test the working hypothesis

that glandular trichomes of Datura wrightii impede the natural enemies of D. wrightii's herbivores and reduce the benefits of producing glandular trichomes. Such reductions may constrain the increase in the frequency of glandular genotypes.

The preference and performance of natural enemies attacking herbivores on plants with glandular or nonglandular trichomes will be emphasized. Potential areas of investigation can include: 1) analyses of insect behavior after manipulating the concentration of defensive chemicals, 2) orientation and host-finding behaviors of herbivores and natural enemies to volatile chemicals from plants varying in trichome morphology, or 3) community-level analyses of herbivores and natural enemies on plants varying in trichome morphology in natural populations.

Application information for the UCR graduate school can be obtained from the UC Riverside Biological Sciences Graduate Student Affairs Center, 1151 Batchelor Hall, University of California, Riverside, CA 92521. Phone (951)-827-4716 or (800) 735-0717. Website: http://www.bioscigrad.ucr.edu/index.html . For further information about the research please contact Dr. J. Daniel Hare by e-mail at daniel.hare@ucr.edu, or by surface mail at the following:

Dept. of Entomology and Evolution and Ecology GRU University of California Riverside, CA 92521.

Complete applications for graduate study should be received by December 31, 2004.

Dr. J. Daniel Hare Telephone: (951) 827-3858 Professor FAX: (951) 827-3086 Department of Entomology and e-mail: daniel.hare@ucr.edu Evolution and Ecology GRU University of California Riverside, California 92521 http://www.entomology.ucr.edu/people/-hare.html

UFZHalleGermany PlantPopGenetics

PhD project in plant population genetics

A3-year PhD project is available in the Department of Community Ecology at the UFZ-Centre for Environmental Research Leipzig-Halle GmbH from 01.12.2004 funded by the German Ministry of Education and Science (BMBF).

In the project genetic diversity of plant species will be compared between populations in spontaneously colonized antropogenous secondary habitat and adjacent seminatural primary habitats, e.g. on mining sites or industrial fallows. Such secondary habitat can harbour high biodiversity and may be valuable for nature conservation. However, it is unknown, to which degree genetic diversity of the colonizing species is comparable to their original sites. At the same time, such habitats may be prone to selection of new genotypes and microevolution. We will use molecular markers to analyse genetic diversity and population structure, determine colonization processes (e.g. source populations) and microevolutionary processes (e.g. intraspecific hybridisation) during the course of succession. The work will be accomplished by analyses of plant fitness and demography.

The project is part of the network SUBICON successional change and biodiversity conservation within the framework of the BMBF-focus Biodiversity and Global change (BIOLOG)

The successful candidate is expected to have a diploma or similar degree in Biology. We are looking for an independently acting person with interest in population biology and evolutionary biology of plants and nature conservation. Practical experience in analyses of molecular genetic markers (e.g. microsatellites, AFLP) and plant population biological methods, and the use of appropriate statistical methods is advantageous. Further information is available from: Dr. W. Durka: Tel. ++49 (0)345/558 5314 e-mail: walter.durka@ufz.de Salary will be according to the appropriate civil service level (BAT-O, IIa/2). The place of work is Halle, Germany. Women are explicitly encouraged to apply to increase their share in science and research. Physically handicapped persons will be favoured if they are equally qualified. Recruitment advertising of the UFZ takes place in the internet under www.ufz.de <http://-/www.ufz.de/service/ausschreibungen.html> . Please send your complete application documents (curriculum vitae, references) under the code digit 71/2004 up to 15th November, 2004 to the personnel department, P.O. Box 500136, 04301 Leipzig, Germany. — — Walter Durka UFZ - Centre for Environmental Research Leipzig-Halle Dept. of Community Ecology Theodor-Lieser-Straße 4 06120 Halle (Saale) Germany phone: +49-345-558 5314 fax: +49-345-558-5329 Walter.Durka@ufz.de

home: http://www.hdg.ufz.de/index.php?en=798 INVASIONS: http://www.ufz.de/index.php?en=2773

UFranfurt EvolAquaticSystems

s Reply-To: Markus Pfenninger <Pfenninger@zoology.uni-frankfurt.de>

Ph.D. position in comparative phylogenetics and phylogeography

Research project:

A Ph.D. position will be available to join a DFG-funded project in the framework of the priority program "The impact of climate variability on aquatic ecosystems (AQUASHIFT)". The candidate will study the relative role of climate variability on the species ranges of European freshwater pulmonates (Gastropoda). Integrating a phylogenetical informed, macroecological (top-down) and a population based, phylogeographic (bottom-up) approach, factors shaping the geographical ranges of this taxon will be analysed comprehensively, using a wide variety of observational and experimental methods in a phylogenetically informed framework. Beyond the importance for our understanding of the processes governing the distribution and biodiversity of this taxon in space and time, the ultimate aim of the study is to provide a base for the prediction of future range changes due to global warming scenarios.

Requirements:

The desired candidate will possess experience in a number of bench skills (such as DNA extraction, PCR, and sequencing). At least basic knowledge in (phylogenetical) statistics is required. Experience with ecological experiments would be desirable, but is not a necessary prerequisite.

The Abteilung Ökologie & Evolution has several well equipped laboratories, dedicated to the study of phylogeography, phylogenetics, evolutionary genetics, evolutionary ecology and evolutionary ecotoxicology. As such, it provides a rich international academic environment for those interested in the proximate and ultimate causes for the limits of species ranges.

The position depends on a final funding agreement of the DFG. If granted, initially two years of funding are available. The salary will be according to German BATIIa 1/2 which depends on age and family status (approx. ~1000 ???/month). To apply, email a statement of research interests, a CV and the email addresses of two references to Markus Pfenninger. (Pfenninger@zoology.uni-frankfurt.de).

The funding starts most probably at the beginning of 2005, applications will be considered until the position is filled.

PD Dr. Markus Pfenninger Abt. Ökologie & Evolution J.W.Goethe-Universität BioCampus Siesmayerstraße D-60054 Frankfurt am Main Germany Tel.: ++49 69 798 24714 Fax: ++49 69 798 24910 eMail: Pfenninger@zoology.uni-frankfurt.de Web: www.rz.uni-frankfurt.de/ ~ markusp Markus Pfenninger <Pfenninger@zoology.uni-frankfurt.de>

UKansas Genetics

Graduate student positions are available in the new Genetics Program at the University of Kansas. The program includes 32 faculty from 4 departments. Research areas include:

Molecular and Developmental Genetics

-Molecular genetics of cells and organisms (prokaryotic, eukaryotic, and viral). -Gene expression. -Signal transduction. -Molecular mechanisms of organismal development. -Neurogenetics and behavioral genetics. -Molecular genetics of cancer and other diseases. -Genomics -Bioinformatics.

Evolutionary and Ecological Genetics

-Population and conservation genetics. -Molecular and genetic analysis of complex phenotypes. -Quantitative trait loci mapping. -Molecular systematics. -Gene expression in ecological and evolutionary contexts. -Evolutionary and ecological genomics. -Molecular evolution.

Human Genetics

-Familial studies of human variation. -Genetics of human populations. -Molecular genetics and epidemiology of human disease.

For more information, please see http://www.ku.edu/-~ genet/index.html or contact the program chair, Dr. Erik Lundquist, erikl@ku.edu.

Jennifer Gleason Assistant professor The University of Kansas Department of Ecology and Evolutionary Biology 1200 Sunnyside Ave, Rm 6006 Lawrence, KS 66045 phone: 785-864-5858 FAX: 785-864-5860 email: jgleason@ku.edu http://www.ku.edu/ ~ eeb/faculty/-gleason.htm

UNebraskaLincoln EvolBiol

Graduate Fellowships in Ecology, Evolution and Behavior University of Nebraska-Lincoln

The Program in Ecology, Evolution and Behavior at the University of Nebraska-Lincoln has been awarded a Graduate Training Grant by the U.S. Department of Education (GAANN Fellowship Program). This training grant will fund fellowships for graduate students in the ecology, evolution and behavior GREG (Graduate Research Emphasis Group).

Our program combines the expertise of 14 core faculty members in the School of Biological Sciences and 8 affiliated faculty members from other academic units. The research interests of our faculty members include: behavioral ecology, community ecology, ecosystem ecology, evolutionary ecology, life history evolution, molecular evolution, physiological ecology, plant-animal interactions, population ecology, sexual selection and systematics. Our group is particularly strong in the study of behavioral ecology, evolutionary genetics and plant-animal interactions.

The fellowships will carry a stipend of up to $27,500 per year plus tuition, health insurance, and book stipend. Other benefits include travel and research funds for participants.

We are particularly interested in recruiting students from traditionally underrepresented groups. Please note that only United States citizens and permanent residents of the United States are eligible for fellowship support through this program.

For additional information, please visit our web site: http://cricket.unl.edu/gaann.html William E. Wagner Jr. Associate Professor School of Biological Sciences University of Nebraska-Lincoln Lincoln, NE 68588-0118, USA

e-mail wagner@cricket.unl.edu wwagner@unlserve.unl.edu phone 402-472-0742 fax 402-472-2083

http://cricket.unl.edu/wagner.html "William E. Wagner Jr." <wwagner@unlserve.unl.edu>

UNotreDame EcolEvolEnvironment

Dear Evolution Colleagues: I would appreciate your assistance in circulating the following announcement among qualified undergraduate students in your department.

Thank you,

Hope Hollocher

Graduate Program in Ecology, Evolution and the Environment at the University of Notre Dame

The Program in Ecology, Evolution, and the Environment (EEE) in the Department of Biological Sciences at the University of Notre Dame offers a wide-range of research opportunities and graduate coursework in ecology and evolutionary biology, allowing students to excel in field, laboratory, and mathematical biology. Strengths of the program include: population and evolutionary genetics, aquatic community and ecosystem ecology, and the impacts of global changes, including climate change, invasive species, and nutrient pollution. Our close-knit faculty provides interdisciplinary research opportunities and excellent research mentorship.

Graduate Research and Teaching Assistantships are available for students wishing to pursue M.S. or Ph.D. degrees. Competitive fellowships are available for Ph.D. students. All students receive a generous stipend of $20,000 per year. Full tuition is provided by the Graduate School.

Our students take advantage of many resources at Notre Dame, including excellent laboratory facilities, state-of-the-art instrumentation, and the University of Notre Dame Environmental Research Laboratory (UNDERC) in the Upper Peninsula of Michigan. Students also are actively engaged in field studies throughout the Midwest and in Wyoming, Alaska, British Columbia, Montana, Utah, Africa, and throughout the Caribbean.

Interested students are encouraged to visit our departmental website (http://biology.nd.edu/EEE.shtml) and directly contact faculty in your area of interest:

Terrestrial ecology and modeling; conservation biology, Gary.E.Belovsky.1@nd.edu Evolution and population genetics of malarial vectors, Nora.J.Besansky.1@nd.edu Neuroendocrine control of animal behavior, Boyd.1@nd.edu Genetics of arthro-

pod vectors of human pathogens, Collins.75@nd.edu Subzero temperature adaptations antifreeze proteins, John.G.Duman.1@nd.edu Ecological and evolutionary genetics, Jeffrey.L.Feder.2@nd.edu Genomics of drug resistance and virulence in a malaria parasite, Michael.T.Ferdig.1@nd.edu Vector borne disease ecology and epidemiology, Paul.R.Grimstad.1@nd.edu Insect indicators: ecology, evolution, environment, Ronald.A.Hellenthal.1@nd.edu Terrestrial ecology; global change biology; biogeography, Jessica.J.Hellmann.3@nd.edu Population and evolutionary genetics; speciation; evo-devo, Hope.Hollocher.1@nd.edu Microbial ecology and bioremediation, Charles.F.Kulpa.1@nd.edu Stream ecology and plant-animal interactions, Gary.A.Lamberti.1@nd.edu Ecology of freshwater communities, invasive species, David.M.Lodge.1@nd.edu Population genetics of forest trees and insects, Jeanne.Romero-Severson.1@nd.edu Quantitative and population genetics of mosquitoes, Severson.1@nd.edu Stream ecosystem ecology and biogeochemistry, Jennifer.L.Tank.1@nd.edu

To request an application form or to apply electronically, see our departmental website (http://-www.nd.edu) or the Graduate School website (http:/-/graduateschool.nd.edu). The application deadline for Fall 2005 admission is 15 January 2005, but submission before Jan. 1 is strongly encouraged.

–

Hope Hollocher Clare Boothe Luce Associate Professor Department of Biological Sciences Galvin Life Sciences University of Notre Dame Notre Dame, IN 46556 USA

tel.: (574) 631-4569 FAX: (574) 631-7413 e-mail: Hope.Hollocher.1@nd.edu

UOtago EvolParasites

Graduate position:

PhD SCHOLARSHIP IN ZOOLOGY

DEPARTMENT OF ZOOLOGY, UNIVERSITY OF OTAGO DUNEDIN, NEW ZEALAND

Evolutionary biology of parasites

Applications are invited from suitably qualified students for one PhD scholarship to work under the supervision of Prof Robert Poulin. The scholarship is funded by the Marsden Fund and is available as of early 2005 for three years.

Our research programme aims to investigate the influence of relatedness among parasites sharing the same host on the parasites' strategies of development and host exploitation. The research will involve three local trematode species, parasitic in freshwater or intertidal ecosystems, all amenable to both field and laboratory investigations. The work involves (1) characterising microsatellite loci and genotyping individual parasites at multiple loci to estimate levels of relatedness (or clonality) in field-infected hosts, and (2) in laboratory experiments, using single- and multiple-clone infections to quantify the growth of parasites in their host, their ability to alter host behaviour, and their likelihood to abbreviate their life cycle. The PhD project will fit within this overall theme. Candidates should have interests and/or experience in either host-parasite interactions or molecular ecology. More importantly, candidates should be highly motivated and enthusiastic about this sort of research.

PhD applicants must have been awarded the degree of BSc Honours or MSc before taking up the scholarship. The emolument is NZ$22,000 per annum for 3 years. There is an additional NZ$4,000 per year to cover tuition fees, and some money available in the final year for thesis preparation costs.

Specific enquiries may be made to Prof Robert Poulin, Tel 64 3 479 7983, Fax 64 3 479 7584 or email robert.poulin@stonebow.otago.ac.nz

METHOD OF APPLICATION

Applicants should send a cover letter stating briefly why they are interested in this scholarship, together with the names, addresses, fax numbers and e-mail of 2-3 referees. Candidates should also include a curriculum vitae. These documents should be sent to Prof Robert Poulin, Department of Zoology, University of Otago, P.O. Box 56, Dunedin, New Zealand (FAX: 643 479-7584; email: robert.poulin@stonebow.otago.ac.nz).

Further details regarding the University and how to apply for admission in postgraduate programs can be found at our homepage at http://www.otago.ac.nz –

Prof. Robert Poulin, FRSNZ Department of Zoology University of Otago P.O. Box 56 Dunedin New Zealand

Courier: 340 Great King Street, Dunedin, New Zealand

phone +64 3 479-7983 fax +64 3 479-7584 http://-www.otago.ac.nz/Zoology/staff/academic/poulin.html (home email: poulin@xtra.co.nz) (home email: poulin@xtra.co.nz)

VanderbiltU EcolEvol

GRADUATE STUDIES IN ECOLOGY AND EVOLUTION AT VANDERBILT

Dear colleagues and prospective students,

The Department of Biological Sciences at Vanderbilt University seeks interested and highly motivated graduate students to join a group of laboratories with complementary research interests focusing on ecological and genetic mechanisms of evolutionary diversification. Ongoing research investigates all stages of evolutionary diversification (population structure, reproductive isolation, speciation, phylogenetic radiation) and several fundamental ecological processes (adaptation, ecological specialization, symbiosis, social interactions).

Our group occupies a new (2002) building complete with our own DNA sequencing facility, abundant environmentally controlled rooms, and an adjoining state-of-the-art greenhouse. Vanderbilt researchers enjoy the participation of excellent undergraduates and the resources of a thriving medical center. Our beautiful campus is located in the heart of Nashville, a friendly and inexpensive city situated amidst the lush rolling hills of biologically diverse middle Tennessee. Graduate students receive generous stipends and are trained in a highly interactive inter-lab community.

Ecology & Evolution faculty, research interests include:

Patrick Abbot (abbot@uts.cc.texas.edu) - social evolution, symbioses, molecular evolutionary genetics in insects and microbes

John Burke (john.m.burke@vanderbilt.edu) - genetic basis of adaptation and speciation in plants

Dan Funk (daniel.j.funk@vanderbilt.edu) - ecological specialization and speciation, phylogenetics, herbivorous insect biology

Manuel Leal (manuel.leal@vanderbilt.edu) - animal communication and mate choice, predator-prey interactions, and sensory ecology in lizards

Dave McCauley (david.e.mccauley@vanderbilt.edu) - population biology, population structure, local adaptation in plants and insects

For further information on research and graduate study at Vanderbilt, please consult our departmental web page at: http://sitemason.vanderbilt.edu/biosci. Specific questions can be directed to any of the above faculty.

Daniel Funk <daniel.j.funk@vanderbilt.edu>

Jobs

BucknellU EvolPhysiology

Note: Applications received after 10/29 will be reviewed, but hurry.

Bucknell University invites applications for two entry-level, tenure-track Assistant Professor positions beginning August 2005 in the Department of Biology:

Vertebrate Anatomy and Physiology: Teaching responsibilities will include an advanced course in comparative vertebrate anatomy, participation in an introductory level course for biology majors, a non-majors course in anatomy and physiology and supervision of undergraduate research.

Ecological Physiology: Applicants should be broadly trained physiologists with expertise in ecological and comparative physiology. Teaching responsibilities will include participation in an introductory level course for biology majors, an advanced course in ecological and/or comparative physiology, and supervision of undergraduate research.

A cover letter, statements of teaching philosophy and research goals, curriculum vita, and three letters of recommendation should be submitted to: Dr. Mitchell Chernin, Chair Biology Department Bucknell University Lewisburg, PA 17837 chernin@bucknell.edu Phone: 570-577-1124 FAX: 570-577-3537 http://-www.bucknell.edu/biology/ Review of applications will begin on October 29, 2004. The search will remain open until the positions are filled. Bucknell University encourages applications from women and members of minority groups (EEO/AA).

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

CalStatePolytechnicU Bioinformatics

FACULTY POSITION BIOINFORMATICS

The Biological Sciences Department at California State Polytechnic University, Pomona invites applications for a tenure-track, ASSISTANT PROFESSOR position in bioinformatics, beginning September 2005. Consideration is given to candidates who combine modern experimental and computational tools in genomics and/or proteomics to address basic biological questions. A Ph.D. in bioinformatics or related field is required. Post-doctoral experience is preferred. The successful candidate will have the potential for excellence in undergraduate teaching, and for developing an externally-funded research program that will involve undergraduate and Master's students. Teaching responsibilities will include a bioinformatics course, contributions to introductory biology courses and other undergraduate courses related to the individual's area of expertise, and the development of additional specialty courses. Research collaborations are encouraged within the department and with members of a newly-established interdisciplinary program in bioinformatics that includes faculty members from biology, chemistry, and computer science. Access to a high-performance computing facility is available. Cal Poly Pomona is a comprehensive Master[1]s level university with a diverse student body. The successful candidate will have demonstrated ability to be responsive to the educational equity goals of the university and its increasing ethnic diversity and international character. Applicants should forward (1) curriculum vitae, (2) statement of teaching philosophy, (3) proposed plan of research, (4) representative publication reprints, and (5) the names and contact information of five references to: Chair, Bioinformatics Search Committee, Biological Sciences Department, California State Polytechnic University, 3801 West Temple Av-

enue, Pomona, CA 91768-4132. Review of applications begins on December 15, 2004. Official transcripts and three letters of reference will be required of all finalists. For further information, visit the Department web site at: http://www.csupomona.edu/ ~ biology . California State Polytechnic University, Pomona is an Equal Opportunity, Affirmative Action Employer. Cal Poly Pomona ascribes to all state and federal regulations and prohibits discrimination based on gender, race, sexual orientation, national origin, handicap, marital status, age, religion, or veteran status.

John R. Demboski, Ph.D. Biological Sciences Department California State Polytechnic University, Pomona 3801 West Temple Avenue Pomona, California 91768-4032 Phone: (909) 869-4064 FAX: (909) 869-4078

John Demboski <jrdemboski@csupomona.edu>

DuquesneU BiolChair

We are conducting a search for Professor and Chair of Biological Sciences. This ad will appear in Science and elsewhere later this week. More information about our department can be found on our website (www.science.duq.edu/biology).

Thanks,

Michael Jensen-Seaman (seamanm@duq.edu)

CHAIR OF BIOLOGICAL SCIENCES Duquesne University

The Bayer School of Natural and Environmental Sciences invites applications and nominations for the position of Professor and Chair of the Department of Biological Sciences. Our collegial and dynamic department currently has 14 research faculty, 3 teaching faculty, and 23 graduate teaching assistants. Faculty research interests are in the areas of cellular and molecular biology, microbiology, cellular and systems physiology, genetics, and evolution. The Department offers B.S., M.S., and Ph.D. programs with a strong emphasis on research. Additional information regarding our programs can be found at the Department's (www.science.duq.edu/biology/) and the Bayer School's web sites (www.science.duq.edu).

We are seeking an accomplished scientist with imagination and energy, as well as the leadership ability to enable us to continue strengthening our educational and research programs. The preferred candidate will have an excellent record of publication and extramural support, a commitment to education, and strong leadership skills. The Universitys strategic plan identifies biotechnology as a particular focus area for development. The successful candidate will therefore be expected to collaborate with the endowed Edward Fritzky Chair in Biotechnology Leadership and to foster interactions within the University community and with the burgeoning biotechnology initiatives in the Pittsburgh area. Salary will be commensurate with qualifications and experience. Review of applicants will begin December 10 and will continue until the position is filled.

Applicants should submit a letter of interest, curriculum vitae, and a list of three references to:

Chair Search Committee Department of Biological Sciences Duquesne University Pittsburgh, PA 15282

Founded by the Holy Ghost Fathers, Duquesne University is Catholic in mission and ecumenical in spirit. The University values Equality of Opportunity both as an Educational Institution and as an Employer.

EmoryU 2 EvolBiol

Dear Colleagues:

The Biology Department at Emory University is currently searching for two Assistant (or possibly higher rank) Professors in Evolutionary Biology. Our advertisement, below, suggests we are recruiting "molecular geneticists" who study evolution and we do indeed require that the candidates be composed of molecules. However, we are looking for the very best people in evolutionary biology, broadly defined; whether they consider them themselves "molecular geneticists" or not. If you see yourself in this "very best" evolutionary biologist category and are not opposed to working at well-endowed, supportive university in a beautiful and progressive city (Atlanta really is that), I strongly urge you to apply for this position.

Bruce

The Official Ad Follows.

The Department of Biology at Emory University is seeking to recruit two molecular geneticists who study fundamental questions about the processes and mechanisms of evolution. The Department will consider applicants holding a Ph.D. or equivalent degree from a wide range of specializations including, but not limited

to, evolutionary genetics, population genetics, molecular ecology, experimental evolution, the evolution of developmental pathways, and functional and comparative genomics/bioinformatics. The positions are for tenure-track assistant professors, although an appointment of higher rank will be considered in exceptional circumstances. Applicants must provide evidence that they will develop a strong, independently funded research program. A commitment to undergraduate teaching is expected and the appointees will also participate in appropriate Ph.D granting programs of the interdepartmental Graduate Division of Biological and Biomedical Sciences. Applicants should submit a curriculum vitae and a statement detailing their current and future research plans, and arrange for submission of three letters of recommendation. Please address applications to

Dr. John C. Lucchesi, Evolutionary Genetics Search, Department of Biology Emory University 1510 Clifton Road, Atlanta, Ga. 30322 Tel.: (404) 727-4234; Fax: (404) 727-2880 Email:evol_srch@biology.emory.edu.

Review of completed applications will begin December 1, 2004. Information on the Biology Department can be found at http://www.emory.edu/BIOLOGY/ and a description of the graduate programs in theGraduate Division of Biological and Biomedical Sciences is provided at http://www.biomed.emory.edu/ . Bruce R. Levin blevin@emory.edu Samuel Candler Dobbs Professor (404) 727 2826 Office Department of Biology (404) 727 2956 Lab 1510 Clifton Rd. (404) 727 2880 FAX Atlanta, GA 30322, USA http://www.eclf.net/

GeorgiaInstTech EvolBiology

As posted recently in Science:

The School of Biology at the Georgia Institute of Technology seeks outstanding junior and senior faculty to complement existing strengths in molecular/cellular/structural biology, ecology/evolutionary biology and bioinformatics/computational biology. Georgia Institute of Technology, one of the consistently top ranked educational/research institutions in the country, is committed to the continuation of significant growth in the biological sciences. Candidates should forward a letter of application, full curriculum vitae and contact information for four references to the contact individuals indicated below at the School of Biology, Georgia Institute of Technology, 310 Ferst Street, Atlanta, GA 30332.

Molecular/Cellular/Structural Biology

Chaired Professorship: We are searching for an individual with an outstanding record of research accomplishments and with the desire to provide intellectual leadership in areas of molecular/cellular biology. We are particularly interested in identifying individuals with research programs that will integrate with established strengths in bioinformatics/ systems biology. Contact: Professor/Chair John McDonald

Assistant/Associate Professors of Molecular/Cellular Biology: Applications are invited for Assistant/Associate Professor positions in molecular/cellular biology. Outstanding candidates in all areas of molecular/cellular biology are encouraged to apply including prokaryotic and eukaryotic molecular geneticists, plant and animal developmental biologists and those working on macromolecular structure and function or cell signaling. We are particularly interested in candidates whose research programs will integrate with existing strengths in systems biology and genomics. Contact: Molecular Search , % Dr. Yury Chernoff.

Assistant/Associate/Full Professors in Cryo-electron microscopy: As part of an expanding effort in structural biology, we are searching for investigators who are using cryo-electron microscopy to investigate important biological problems. Senior scientists are especially encouraged to apply for this position, but entry-level faculty may also be considered. Contact: Structural Biology Search, % Professor Steve Harvey.

Ecology

Full Professor in Aquatic Community/Ecosystem Ecology: We are seeking a senior level community/ecosystem ecologist with demonstrated leadership and experience with cross-cutting, multidisciplinary programs and environmental policy to help build a multidisciplinary center focused on ecosystem engineering where the scientific infrastructure of ecology and evolution will combine with proactive engineering /policy approaches to leverage communities or ecosystems back to desired states of structure/function. Contact: Aquatic Community/Ecosystem Search, % Professor Mark Hay.

Assistant/Associate Professors of Ecology: We are searching for a microbial ecologist investigating fundamental ecological principles and processes and how these may scale-up to affect community and ecosystem-level patterns and for a molecular/chemical signaling ecologist using molecular biological approaches to study chemical signaling among organisms . Contact: Microbial Ecologist/Molecular Ecologist Search, % Dr. Julia Kubanek

Bioinformatics

Assistant/Associate Professors of Bioinformatics. We are searching for systems biologists who will integrate computational with molecular/biochemical approaches to the study of cell function and for bioinformaticists pursuing innovative research in areas such as the development of methods for DNA and protein sequence analysis, protein function prediction, genomics (microarray) and/or proteomics data analysis, mathematical and statistical modeling of molecular evolution. Contact: Bioinformatics Search, % Professor Mark Borodovsky

J.T. Streelman Assistant Professor School of Biology The Georgia Institute of Technology 310 Ferst Drive Atlanta, GA 30332-0230 404-385-4435 (office) 404-385-4436 (lab) 404-894-0519 (fax department) 404-897-3395 (fax home) E-mail: todd.streelman@biology.gatech.edu http://www.biology.gatech.edu/professors/-streelman.htm http://www.biology.gatech.edu/-professors/streelman.htm

KentStateU MolEvolBiol

MOLECULAR EVOLUTIONARY BIOLOGY. Applications are invited to fill a tenure-track position in the Department of Biological Sciences (www.kent.edu/-biology) at the level of Assistant Professor beginning in August 2005. This position supports the Department's expanding emphasis in Ecology and Evolutionary Biology. Notable strengths of the Department include strong academic affiliations with the basic science departments at Kent, superb core research facilities for molecular-based investigations and competitive start-up funds. The successful candidate is expected to establish a high-quality, externally funded research program and exhibit a commitment to excellence in graduate and undergraduate education. Applicants must have a Ph.D. degree in a relevant discipline and post-doctoral research experience. We particularly seek individuals focused on the application of modern molecular approaches to investigation of evolutionary questions and with a strong commitment to collaborative and interdisciplinary research.

Review of applications will begin on November 15th and continue until the position is filled. Applicants should submit curriculum vitae, concise statements of research interests and teaching philosophy, and arrange for three letters of reference to be sent. All materials should be sent to: Chair, Molecular Evolution Search Committee, Department of Biological Sciences, Kent State University, P.O. Box 5190, Kent, OH 44242.

Kent State University is an Equal Opportunity/Affirmative Action employer and encourages applications from candidates who would enhance the diversity of the University's faculty.

aschwarz <aschwarz@kent.edu>

LafayetteLA GeneticTech

The Marine Mammal Molecular Genetics Laboratory of the NMFS Southeast Fisheries Science Center is soliciting applications for a DNA technician to join a lab-based project studying the population genetics of bottlenose dolphins in Mississippi Sound. The successful applicant will be highly organized, have an attention to detail, and be able to work as an independent part of a team.

Qualifications: The successful candidate will have a minimum of a BS in Biology, Genetics, Molecular Biology, or related field and have demonstrated experience with DNA extractions and PCR, familiarity with DNA-based genetic analyses of sequence and/or microsatellite data and facility with standard computer software programs. Experience running an ABI capillary sequencer is preferred but not required. This is a two year position through the Institute for Marine Mammal Studies with an immediate start date.

Screening will begin immediately. Send a letter of application, description of experience, resume, and names of three references to Patricia Rosel, NOAA Fisheries, 646 Cajundome Blvd., Suite 234, Lafayette, LA 70506 or email to patricia.rosel@noaa.gov.

patricia.rosel@noaa.gov

MichiganStateU BiolStatistics

MICHIGAN STATE UNIVERSITY, DEPT. OF STATISTICS AND PROBABILITY, East Lansing, MI 48824-1027

The Department of Statistics and Probability at Michigan State University invites applications for a tenure

track position at the rank of Assistant Professor (in an exceptional case, Associate Professor appointment may be considered) to start August 16, 2005. Candidates should have a Ph.D. with a concentration in statistics and/or probability and strong research and teaching potential. Moreover candidates should have research interests in applications of these fields to interdisciplinary research in the biological sciences. Please supply a curriculum vitae, a summary of scholarly interests, and evidence of teaching experience, as well as having three letters of recommendation sent directly to: Search Committee, Department of Statistics and Probability, A415 Wells Hall, Michigan State University, East Lansing, MI 48824-1027. The selection process will begin December 15, 2004 and continue until the position is filled. MSU is an Affirmative Action/Equal Opportunity Institution. Persons with disabilities have the right to request and receive reasonable accommodation. Minorities and women are strongly encouraged to apply. For additional information about the MSU Department of Statistics and Probability please visit: www.stt.msu.edu <http://www.stt.msu.edu/>

Rob Tempelman <tempelma@msu.edu>

MichiganStateU QuantPlantBiol

Faculty Position in Quantitative Plant Biology

Michigan State University

As part of a broad initiative to strengthen quantitative approaches in the biological sciences at Michigan State University, the Department of Plant Biology seeks an individual who will use mathematical or statistical methods to address fundamental biological questions in plant systems. The candidate can work in any biological discipline (e.g. physiology, metabolism, cell biology, development, ecology, or evolution), and at any level of biological organization, from genes to cellular processes to ecosystems. Research experience with plant systems is desirable, but is not a requirement. The successful candidate will be expected to develop an independent research program addressing biological problems in plant systems that is supported by extramural funding, and we are particularly interested in those who will participate in collaborative interdisciplinary research. The successful candidate will have the option of a joint appointment with another suitable department, will contribute to undergraduate teaching, and will develop a graduate course in their area of expertise.

The faculty position is a tenure-track, academic year appointment at the Assistant Professor level. In exceptional cases, an appointment at the associate professor level will be considered. Applicants must have a Ph.D., and postdoctoral research experience is desirable. Applications should include a curriculum vita, a summary of research accomplishments and future research objectives, a brief description of teaching philosophy and goals, and three letters of reference. Information about the Department of Plant Biology can be found at http://www.plantbiology.msu.edu <http://www.plantbiology.msu.edu . The review of applications will begin November 30, 2004 and will continue until a suitable candidate is identified. Questions regarding this position may be sent to Douglas Schemske (schem@msu.edu <mailto:webber@msu.edu>). Application materials can be sent electronically to jtate@msu.edu, or mailed to:

Douglas W. Schemske Chair, Mathematical Plant Biologist Search Department of Plant Biology Michigan State University East Lansing, MI 48824

Michigan State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply. Persons with disabilities have the right to request and receive reasonable accommodation.

MississippiStateU 3 EvolBiol

THREE FACULTY POSITIONS IN BIOLOGICAL SCIENCES

The Department of Biological Sciences, Mississippi State University, (http://www.msstate.edu/-dept/biosciences), invites applications for the following three tenure-track ASSISTANT PROFESSOR positions, as part of an expansion of biological sciences, beginning August 16, 2005.

1. Cell Biologist: Chair: Dr. Dwayne Wise 2. Evolutionary Biologist: Chair: Dr. Walter Diehl 3. Microbiologist: Chair: Dr. Karen Coats

Successful applicants should be able to make use of the University's state- of-the-art infrastructure in proteomics, genomics, and computing capabilities. Qualifications include postdoctoral experience and an established record of research productivity. The successful candidates are required to develop externally funded

research programs and to direct graduate students. To apply send curriculum vitae, reprints of three representative publications, a concise statement of current and future research interests, and a statement of teaching interest. Applicants should provide names and addresses of at least three references. Screening will begin December 8, 2004 and will continue until the positions are filled.

Applications should be sent to appropriate search committee chair, Department of Biological Sciences, P.O. Box GY, Mississippi State University, Mississippi State, MS 39762. Mississippi State University is An Affirmative Action/Equal Opportunity Employer

Mark Fishbein, fish@biology.msstate.edu Mark Fishbein, fish@biology.msstate.edu

NCStateU Bioinformatics

The Department of Statistics at North Carolina State Uniuversity invites applications for a tenure-track Assistant Professor position specializing in bioinformatics. The appointee will be a tenure-track member of the Statistics Deaprtment, will be housed in the Bioinformatics Research Center, and will have teaching responsibilities for the bioinformatics and statistics graduate programs. Applicants should have a Ph.D. in bioinformatics, statistics or a related field, as well as a demonstrated interest in molecular biology. Some preference may be given to applicants whose research complements that of the statistical genetics program at NC State and that falls into the general areas of proteomics, metabolomics or gene expression.

Further details may be found at http://-bioinformatics.ncsu.edu Bruce Weir

Bruce Weir <weir@stat.ncsu.edu>

PortlandStateU EvolBiol

The review of applications for these four positions will begin 25 October.

Expansion of the Department of Biology at Portland State University continues this year with the addition of faculty members in the areas of plant systematics, plant physiology, genetics, and microbial physiology/ecology. We expect to continue to add new faculty for the next three to five years to build on our thematic strengths in ecology and evolutionary biology, environmental genomics, conservation biology, extremophile biology, physiology and behavior, and science education. We are particularly interested in applications from individuals whose interests and research activities span one or more of the above areas. More information about the department can be found on our web site: http://www.bio.pdx.edu/. Following is a copy of the ad that appeared in Science.

The Department of Biology at Portland State University invites applications for the following four positions at the Assistant through Professor level:

Plant Systematist: We seek an individual who is applying molecular phylogenetic tools to general questions on the evolutionary history of plants. The department is especially interested in individuals who are taking an integrative approach, with expertise in development, morphology, or other areas of plant biology. Interest in overseeing the curation of our herbarium is also desirable.

Experimental Geneticist: We seek an individual working with established non-mammalian genetic systems or with emerging or novel systems. The ideal candidate would combine genetic, molecular and genomic approaches to understanding key concepts of cell and/or organismal biology

Microbial Physiologist/Ecologist: We seek an individual using genomic and/or proteomic approaches to study the physiology and ecology of Archaea or Bacteria. The Department has specific interests in microbes and viruses from extreme environments.

Plant Cell Physiologist: We seek an individual with expertise that would span the fields of organismal and cellular physiology. We are particularly interested in candidates who are studying plant physiology in an environmental or evolutionary context.

Minimum qualification is a Ph.D. in the biological sciences, with priority given to candidates with postdoctoral experience and who have demonstrated success in developing a research program through publications and external funding. We encourage applications from individuals whose interests complement existing departmental strengths (see the departmental web site: (www.bio.pdx.edu/). The successful candidate will be expected to develop an externally funded research program, be effective in teaching at the undergraduate level, and participate in the training of graduate students in our masters and Ph.D. programs. These are

tenuretrack, 9month appointments to begin in the fall of 2005. Review of applications will begin 25 October, 2004, and will continue until the positions are filled. A curriculum vitae, statement of current and future research, and three letters of reference should be sent to: Chair, (Appropriate) Search Committee, Department of Biology, P.O. Box 751, Portland State University, Portland, Oregon 97207. Portland State University is an Affirmative Action, Equal Opportunity institution and, in keeping with the President's diversity initiative, welcomes applications from diverse candidates and candidates who support diversity.

– Mitchell B. Cruzan, Associate Professor Department of Biology P.O. Box 751 Portland State University Portland, OR 97207

http://web.pdx.edu/~cruzan/

RoyalBotanicGardens EvolDevolGeneticist

Research Scientist Evolutionary-Developmental Geneticist at Kew (London, UK) The Royal Botanic Gardens, Kew has an international reputation for research in plant and fungal biology, systematics and conservation, and unparalleled resources in living plant material and herbarium collections for the study of plant diversity. Opportunities exist for training graduate students in association with universities. This post will complement recent strategic research appointments in the fields of genetics, population genetics and anatomy, coupled with existing research expertise in phylogenetic systematics, morphology/anatomy, palynology, cytogenetics, secondary compounds and seed physiology. You will be responsible for developing a new research initiative to build an independent high-impact research programme in evolutionary-developmental genetics with an emphasis on the processes underpinning the diversity of plants. This will include addressing key questions about the evolution of plant form, either reproductive or vegetative. You will have a PhD in a relevant subject and a strong research publication record. Experience in developmental genetics and molecular biology, especially in plants, is required, together with an interest in evolution and a broad background in plant biology. You will be based in a new laboratory within the extended Jodrell Laboratory, due for completion in early 2006. Starting salary will be negotiable, depending on experience. Benefits include a choice of final salary or stakeholder pension, generous annual leave, and a stunning working environment. Application form and further information available from the HR Department, RBG Kew, on 020 8332 5184/5150 (24 hour anserwphone), or email: jobs@kew.org Please quote ref 44. Closing date for applications: 6 January 2005, or until the position is filled. Committed to equality through diversity. Selection is on merit alone.

Dr Vincent Savolainen Molecular Systematics Section Royal Botanic Gardens, Kew Richmond, Surrey TW9 3DS London UK Tel +44-(0)20-8332-5366 Fax +44-(0)20-8332-5310 Email v.savolainen@kew.org

Join the Society of Systematic Biologists at //systbiol.org/

Vincent Savolainen <v.savolainen@rbgkew.org.uk>

SanFranciscoStateU EvolEnvStudies

Please post this ad for a Program Director. Any job inquiries should be directed to Michael Vasey mvasey@sfsu.edu. Please write me if any questions about this posting. Thanks, Wilson

DIRECTOR OF ENVIRONMENTAL STUDIES PROGRAM San Francisco State University

Director (Associate Professor to Professor rank with tenure) for an innovative, expanding, interdisciplinary Environmental Studies Program. The ENVS Program at San Francisco State University currently has about 150 majors, awards degrees in 5 concentrations, and incorporates coursework in six of the eight University colleges. Ph.D. in a relevant field, demonstrated leadership qualities, commitment to teaching and research, and clear potential for securing external funding. Candidates must be committed to working collaboratively with an interdisciplinary group of faculty and students. Rank and salary negotiable and commensurate with experience.

For more details on the position and ENVS Program, please visit our website at http://bss.sfsu.edu/-envstudies. Please send letter of application, curriculum vitae, three letters of reference, and statement of philosophy of academic leadership to: Chair, ENVS Search Committee; c/o Department of Geography and HES; San Francisco State University; 1600 Holloway Avenue; San Francisco, CA 94132. Review of applicants will begin on 1 December 2004.

San Francisco State University, a member of the California State University system, serves a diverse student body of over 28,000 undergraduate and graduate students. The University seeks to promote an appreciation of scholarship, freedom, and human diversity through excellence in instruction and intellectual accomplishment. We are particularly interested in attracting women, ethnic minorities, and persons with disabilities. San Francisco State University is an Affirmative Action/Equal Opportunity Employer.

Wilson Yee <wilsonwyee@yahoo.com>

Scotland Biomathematics

Director of Biomathematics & Statistics Scotland (BioSS)

BioSS is an internationally renowned group of statisticians, mathematicians, bioinformaticians and computing specialists. BioSS undertakes research, training and consultancy work to underpin the work of eight scientific institutes, augmented by a range of research grants and contracts, and operates with an annual budget of circa £1.2M.

We seek to appoint as Director an exceptional individual with:

- an international standing in applied statistics, biomathematics, bioinformatics or a related field;

- experience of collaborations with subject-area scientists to solve problems in agriculture, the environment, food or health; and

- the organisational skills to co-ordinate and develop a highly motivated, distributed, group of specialist staff.

See http://www.bioss.ac.uk for details of BioSS, the post and the attractive salary and benefits package.

Closing date for applications November 5th 2004.

BioSS is formally a part of Scottish Crop Research Institute (http://www.scri.sari.ac.uk), an equal opportunities employer grant-aided by the Scottish Executive Environment and Rural Affairs Department (SEERAD).

TexasStateU EvolDevel

TEXAS STATE UNIVERSITY-SAN MARCOS

DEPARTMENT OF BIOLOGY, TEXAS STATE UNIVERSITY

DEVELOPMENTAL BIOLOGIST

The Department of Biology invites applications for a tenure-track Assistant Professor position effective 1 September 2005. The successful candidate must have a strong academic background in developmental biology and an understanding of the cellular and molecular bases for development, preferably in an evolutionary or phylogenetic context. Examples of representative research areas include field and laboratory approaches to morphogenesis in eukaryotes, effects of toxins on development in aquatic organisms, or evolutionary genomics in a developmental context. Departmental resources include automated DNA sequencers, a microscopy center (confocal and electron microscopy), aquatic wet labs and wetland areas, tissue culture facilities, and a full complement of related equipment. Teaching responsibilities include an entry-level majors' course in cell biology, an upper division course in developmental biology, and a graduate course in the applicant's specialty. Not all courses are taught each semester. Postdoctoral experience is strongly preferred. Salary and start-up funds are competitive and commensurate with experience.

Texas State University-San Marcos is a member of the Texas State University System. The campus is located in the scenic Texas Hill Country midway between Austin and San Antonio. San Marcos is also in proximity to blackland prairie, rolling plains, and coastal prairie. Texas State University owns and manages the headwaters of the spring-fed San Marcos River and associated ecosystems, and Freeman Ranch, a 3,000 acre ranch and research station located just west of the campus.

Applicants should submit a curriculum vitae, copies of up to five publications, statements of teaching and research philosophies, copies of transcripts, and a list of three references including telephone numbers and e-mail addresses to Joseph R. Koke, Interim Chair, Department of Biology, Texas State University, San Marcos, TX 78666. More can be learned about the department at http://www.bio.txstate.edu . Review of ap-

plications begins on November 30, 2004 and continues until a suitable candidate is identified. Texas State is an Equal Opportunity Employer, and is committed to increasing diversity in faculty and administrative positions. Please refer to position 2005-115 in your response. –

Caitlin R. Gabor, Ph. D. Assistant Professor Texas State University (Formerly SWT) Department of Biology, Science Building Room 384 San Marcos, TX 78666-4615 Work: (512) 245-3387; Fax: (512) 245-8713 E-mail: gabor@txstate.edu

http://www.bio.txstate.edu/ ˜ gabor/gabor.htm
Caitlin Gabor <gabor@txstate.edu>

UAberdeen EvolPopEcol

UNIVERSITY OF ABERDEEN

SCHOOL OF BIOLOGICAL SCIENCES

LECTURER / SENIOR LECTURER IN ANIMAL POPULATION ECOLOGY

Salary £23,643 - £36,428 per annum

Investments are being made in the School of Biological Sciences to expand the scope of its research in ecology. This will be achieved by making a lecturer/senior lecturer appointments in the general area of population ecology, for which you will have a background in one or more of the following disciplines: Mathematical/Statistical modelling of ecological dynamics including epidemiology, pathogen-host ecology, links between life history/genetic/behavioural variation and population dynamics, harvesting, and conservation. You will have a strong quantitative background as well as a good understanding of the theory behind population dynamics. You will run an active externally funded research program in any aspect of population ecology, supervise postgraduate students and contribute to teaching ecology at the undergraduate and MSc Ecology levels.

Informal enquiries may be made to Professor Xavier Lambin (tel: 01224 273259, email x.lambin@abdn.ac.uk) or to Professor Chris Secombes, Head of School (email c.j.secombes@abdn.ac.uk).

Online application forms and further particulars are available from www.abdn.ac.uk/jobs. Alternatively email jobs@abdn.ac.uk or telephone (01224) 272727 (24-hour answering service) quoting reference number YZY006AX for an application pack.

UAlaskaFairbanks MuseumCurators

Dear all,

The University of Alaska Museum in Fairbanks, Alaska is pleased to announce the availability of two tenure-track, Assistant Professor curatorial positions in Entomology & Botany (see announcement below). These positions reflect the strong continued support of the University of Alaska for collections-based science, and we are excited to be enhancing faculty curator positions while at the same time expanding our physical facility (to be completed in fall 2005: have a look at http://-137.229.42.101:8080/view/view.shtml).

Please forward this announcement to anyone who might be interested in these positions; we invite all qualified applicants who are interested to send an application.

Best, – Kevin Winker University of Alaska Museum 907 Yukon Drive Fairbanks, Alaska 99775 ffksw@uaf.edu

TWO CURATOR-FACULTY POSITIONS

ENTOMOLOGY & BOTANY

UNIVERSITY OF ALASKA FAIRBANKS World-class Outdoor Opportunities!

The University of Alaska Museum of the North and the Department of Biology & Wildlife at the University of Alaska Fairbanks seek qualified applicants for two tenure-track, Assistant-Professor positions: Insect Geneticist/Curator of Insects and Curator of the Herbarium. Successful candidates are expected to: establish a vigorous, extramurally funded research program complementing the University's programs; curate the respective collection; teach one course per year (Entomology/Systematic Botany or a specialized course); and advise undergraduate and graduate students. The positions will also be associated with the Institute of Arctic Biology. A newly expanded museum and laboratory, greenhouse, core laboratory for nucleic acid research, and supercomputer facilities are available. Opportunities exist to use field areas such as the Bonanza Creek/Poker Creek and Toolik LTER sites. Preferred applicants will have a strong background in developing, managing, and using museum collections and in a specialized research area (which is flexible). An earned Ph.D. is mandatory, and postdoctoral experience is preferred. Applicants who can successfully implement their vision for how traditional collections can be used

on the leading edges of science are especially encouraged to apply. Laboratory space and startup funds are included.

Further information about the University and Museum is available at www.uaf.edu/museum, mercury.bio.uaf.edu, and mercury.bio.uaf.edu/iab. Applications should include: a completed applicant form (www.alaska.edu/hr/forms/hr_employmentforms); curriculum vitae; three letters of reference; and separate summaries of interests and experience in research, curation, and teaching. Please send complete application package by 15 January 2005 to Curator of Insects or Curator of the Herbarium Search, c/o UAF Human Resources, P.O. Box 757860, Fairbanks, Alaska 99775-7860. Questions about this announcement can be addressed to Kevin Winker (ffksw@uaf.edu) or Molly Lee (ffmcl@uaf.edu).

The University of Alaska is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Kevin Winker <ffksw@uaf.edu>

UCDavis ResAssoc DrosGenomics

University of California, Davis Staff Research Associate II - $2876-$4,628/mo Genomic scientist needed to establish and run a high-throughput sequencing pipeline measuring DNA variation in a 6 megabase region of 50 D. melanogaster lines (<see http://www.dpgp.com>). Experience with large projects, automated liquid handling devices, and LIMS systems required. Many opportunities for technical and scientific innovation. We hope to extend scope of project to 50 whole genomes. For more information and required application process, go to: <http://jobs.hr.ucdavis.edu/jm/-ViewVacancy?id64>. Visit dpgp.org for more information on the project. Open until filled, no later than 11/19/04 - must reference VL# 042055. Lab supplement required. UC-Davis is an equal opportunity employer.

Charles H. Langley 3342B Storer Hall The Center for Population Biology & The Section of Evolution and Ecology University of California - Davis One Shields Avenue Davis, CA 95616-8554 Phone: (530) 752-4085 - Office (530) 752-4253 - Lab (530) 752-1449 - Fax Email: chlangley@ucdavis.edu

UCDavis StatGenomics

The UC Davis Genome Center integrates experimental and computational approaches to address key problems at the forefront of genomics. The Center is being housed in a new research building with state-of-the-art computational and laboratory facilities with Biomedical Engineering and School of Medicine. Candidates may apply at any academic level.

Statistical Genomics: The Genome Center invites applications for multiple tenure-track faculty positions in statistical genetics and genomics. Candidates should be strongly motivated by the biological importance of their research and should value the opportunity to work in close collaboration with experimental groups. Potential areas of research include, but are not limited to, statistical analyses of large datasets generated by expression, proteomic, metabolomic or network analyses as well as problems in human genetics. Successful candidates will have faculty appointments in any of several departments including Statistics, Evolution and Ecology, or the Division of Biostatistics in the School of Medicine.

Microbial Genomics: The Genome Center invites applications for multiple tenure-track faculty positions in experimental and computational microbial genomics. Potential areas of research include, but are not limited to metabolic pathway analysis, infectious disease, and comparative genomics. Successful candidates may have faculty appointments in any of several departments including Microbiology, and Medical Microbiology and Immunology.

These positions require a Ph.D. or equivalent. Applications should be submitted online at www.genomecenter.ucdavis.edu. Applications should be in by Nov. 1 for full consideration.

– David Begun Section of Evolution and Ecology and Center for Population Biology University of California Davis, CA 95616 ph 530-754-6362 FAX 530-752-1449 FAX 530-752-1449

UCaliforniaBerkeley EvolMedicine

Job: positions in computational biology and evolutiona Evolutionary medicine

The Department of Integrative Biology at the University of California, Berkeley, is seeking a scientist for a tenure-track position (Assistant Professor) in evolutionary biology and its interface with biomedicine and the health sciences. We seek a colleague to join a department with a strong multidisciplinary emphasis, and to help the Berkeley campus develop its Health Sciences Initiative. Applicants with a Ph.D. and an exceptional research record in the emerging field of evolutionary biology in medicine will be given serious consideration. Representative areas of research include the evolution of antibiotic resistance, comparative genomics and animal models of human disease, parasite and pathogen dynamics in ecological and evolutionary contexts, and population-level genetic aspects of disease. Candidates will be required to contribute to our undergraduate and graduate teaching program in one of our organismal-level undergraduate courses as well as in their specific area(s) of expertise and develop a new course in evolutionary biology and the health sciences.

Interested applicants should send their CV, including a bibliography of published work, a brief description of research accomplishments and objectives, a statement of teaching interests, selected reprints, and arrange to have three letters of reference sent to:

Chair, Evolutionary Medicine Search Committee, Department of Integrative Biology, 3060 Valley Life Sciences Building, University of California, Berkeley, CA 94720-3140 USA

Applications must be postmarked by November 8, 2004 ---------- Computational biology

The University of California, Berkeley invites applications for a tenure-track position in the area of computational biology at the assistant, associate or full professor level starting July 1, 2005 (appointment subject to budgetary approval). The University has committed to creating Berkeley as the premier institution for education, training and research in Computational Biology, with numerous inter-campus research activities, full integration between multiple UC campuses through QB3, and relevant programs at the Lawrence Berkeley National Laboratory (LBNL) and the Joint Genome Institute (JGI). The position is associated with the newly created Center for Computational Biology but will have a primary appointment, tailored to the individual, in a traditional department, among them Bioengineering, Biology (Molecular and Cell, Plant and Microbial, Integrative), Biostatistics (Public Health), Computer Science (Engineering), College of Natural Resources, Mathematics, and Statistics, creating an exceptional environment for both research and training in this rapidly growing field. The successful candidate will have a unique opportunity to provide intellectual and technological leadership in computational biology and facilitate programmatic interactions across the University of California.

Applicants should have (or be about to receive) a doctoral degree or equivalent in the biological or physical sciences or engineering, and a research focus in the broad area of computational biology. Specialized areas may include, but are not limited to:

* Systems Biology: identification and functional analysis of cellular molecules and their interactions; molecular and cellular process analysis, synthetic biology, computer modeling of cells as molecular machines * High Throughput Sequence or Genomic Analyses: mechanisms of evolution and development, phylogeny, genome annotation

We seek individuals with demonstrated excellence in research, and the potential for excellence in teaching and leadership. Successful applicants will be expected to establish a pre-eminent research and educational program, and develop and teach courses in appropriate areas of science and engineering.

Applicants should send a complete CV, a selection of publication reprints (five or less), a brief statement of future research plans and teaching interests, and the names of at least three references to:

Professor Gene W. Myers, Director, Center for Computational Biology, University of California, Berkeley, 227 Hildebrand Hall, Berkeley, CA 94720-3220

The review of applications will commence on November 1, 2004; all applications must be received by January 10, 2005 for consideration in this year's recruitment cycle. –

UCaliforniaRiverside 2 Genomics

*U of California Riverside - Inst for Integrative Genome Biology. Assistant, Associate or Full Professor Deadline is Jan 1

Searches Underway for Two Faculty Positions

The Institute for Integrative Genome Biology invites applications for two faculty positions: one in Human Disease-Vector Molecular Biology and Genomics and the other in Gene Silencing, Molecular Genetics or

Molecular Evolution. For details, see our Announcements page at http://www.genomics.ucr.edu/ – Chris Cameron, NSERC Post-Doctoral Fellow

Department of Biology telephone: (250) 592-2649 University of Victoria fax: (250) 721-7120 Victoria, BC, Canada, V8W 2Y2

http://cluster3.biosci.utexas.edu/faculty/cameronc/-CBC.htm (research interests, publications, Hemichordata)

Chris Cameron <jetsam@uvic.ca>

UChicago EvolBiol

Martin Kreitman University of Chicago Ecology and Evolution

The Department of Ecology & Evolution seeks candidates for at least one open rank appointment on the tenure track. All qualified applicants, especially women and minorities, are encouraged to apply.

We are interested in applicants from all disciplines in ecology and evolution that complement and extend our existing strengths. We are particularly interested in identifying individuals whose research addresses novel problems or employs new approaches and methods. Research that bridges or draws from other disciplines is especially attractive.

Applicants should have outstanding records of research achievement, commensurate with rank, and are expected to have or develop strong, extramurally supported research programs. The appointee is expected to contribute to teaching and departmental functions.

Applications will be reviewed beginning on November 15 and accepted until the position(s) are filled. Mail hard copies of curriculum vitae, statement of research and teaching interests, and three letters of reference (mailed directly by the referees) to:

Martin Kreitman Ecology & Evolution Search Department of Ecology & Evolution 1101 E. 57th St. Chicago, IL 60637 mkre@midway.uchicago.edu mkre@midway.uchicago.edu

UConnecticut Paleobiologist

PALEOBIOLOGIST Department of Ecology & Evolutionary Biology University of Connecticut

The Department of Ecology & Evolutionary Biology at the University of Connecticut seeks applications for a tenure-track faculty position at the assistant professor or possibly higher level in Paleobiology, to begin September 2005. The successful candidate will use analyses of fossils to study evolutionary patterns and processes in invertebrates, vertebrates, plants, or microorganisms, and will establish an innovative research program in Paleontology. Candidates must have a Ph.D. (or equivalent) in biological or geological sciences, or a related field. Areas of interest include, but are not limited to, phylogenetic relationships among major taxa, dynamics of mass extinction, patterns and processes of macroevolution, biomarkers and organismal evolution, investigations of tempo and mode in evolution, paleobiogeography, and evolution of morphospace utilization. The appointee will be expected to teach at the undergraduate and graduate levels and to establish links with the Geosciences program. Send curriculum vitae, statement of teaching and research interests, reprints, and three letters of recommendation to: Janine N. Caira, Chair, Paleobiology Search Committee, Department of Ecology & Evolutionary Biology, Unit 3043, University of Connecticut, 75 N. Eagleville Rd., Storrs, CT 06269-3043. Application screening will begin January 10, 2005 and continue until the position is filled. The University of Connecticut is experiencing a dramatic enhancement of physical facilities, supported by a more than two billion dollar capital investment from the State of Connecticut. New buildings, including laboratory spaces for the paleontology position, are components of building plans currently underway. This increase in support for infrastructure is accompanied by the addition of 150 new faculty positions, approximately 25 in the biological sciences. We encourage applications from under-represented groups, including minorities, women and people with disabilities.

schlicht@uconnvm.uconn.edu
schlicht@uconnvm.uconn.edu

UFlorida AnthroChair

THE UNIVERSITY OF FLORIDA invites applications and nominations for Chair of the Department of Anthropology, to be filled at the rank of professor effective August 1, 2005. According to the last survey by the National Research Council, the department ranked 6th among public universities nationally (11th overall), and is the highest ranked department among 30 units in the College of Liberal Arts and Sciences at the University of Florida. With 34 tenure track faculty and 23 affiliated faculty from other centers and departments, 180 graduate students and 325 undergraduate majors, it is among the largest anthropology departments in the nation. The department supports a holistic, four-field approach to anthropology with a strong commitment to field and laboratory research. The department strongly values collegiality, an interdisciplinary focus and the free exchange of ideas among our numerous and diverse faculty. Applicants for Chair must have 1) an earned doctorate and scholarly credentials commensurate with professorial rank at a major research-intensive institution, 2) an active research program with a record of good external funding, 3) effective communication and organizational skills, 4) demonstrated teaching skills and 5) experience as a leader and administrator at a major scholarly institution. In addition, international experience and an ability to interact with other disciplines, departments and programs are highly desirable. The Search Committee seeks to develop a pool of candidates with wide diversity in ethnicity and gender. Consideration of completed applications will begin January 15, 2005. Salary and start-up costs will be competitive and commensurate with qualifications. Applicants should submit 1) a letter explaining their interest in the position, 2) a separate statement describing their administrative experience and their approach to the responsibilities of a Department Chair, 3) a full Curriculum Vitae and 4) contact information for four persons who can supply letters of reference. Send the application to: Chair Search Committee, Anthropology Dept., P. O. Box 117305, Univ. of Florida, Gainesville, FL 32611-7305. Applicants must also complete a one-page application form online at http://jobs.ufl.edu/ . – Connie J. Mulligan, PhD Assistant professor Department of Anthropology 1112 Turlington Hall PO Box 117305 University of Florida Gainesville, FL 32611 Tele: (352) 392-2253, ext 248 Fax: (352) 392-6929 email: mulligan@anthro.ufl.edu website: http://www.clas.ufl.edu/-users/mulligan/Webpage/index.html

UFlorida EvolBiol

Faculty Position in Integrative Biology University of Florida

Assistant/Associate/Full Professor in the Department of Zoology at the University of Florida. We seek an integrative biologist broadly defined as one who combines empirical and conceptual tools from traditionally disparate disciplines. Candidates will be evaluated on innovation as well as productivity. The successful candidate will join a vibrant and collegial research community that integrates behavior, development, ecology, genetics, morphology and physiology with evolutionary principles. The Department enjoys strong ties with the Florida Museum of Natural History, UF Genetics Institute and multiple University centers in biomedical, veterinary and agricultural sciences, making it central to a University-wide expansion in the life sciences. The research area is open. The new hire will be expected to develop an internationally recognized research program and to excel in teaching. Current teaching needs include comparative and functional morphology, genetics, evolution and physiology. Please submit a curriculum vitae, three reprints, statements of research interests and teaching philosophy, and have three letters of reference sent to Integrative Biology Search Committee, Department of Zoology, PO Box 118525, University of Florida, Gainesville, FL 32611-8525. Applications must be received by November 18, 2004.

For more information, contact ibsearch@zoo.ufl.edu or visit http://www.zoo.ufl.edu/ibsearch. Our department is committed to diversity as a component of excellence. Women, minorities and other under-represented groups are particularly encouraged to apply.

Marta L. Wayne P.O. Box 118525 Department of Zoology University of Florida Gainesville, FL 32611-8525 (courier: B30 Bartram Hall) vox: 352-392-9925 fax: 352-392-3704 http://www.zoo.ufl.edu/mlwayne http://-/www.zoo.ufl.edu/mlwayne

UIllinoisUC VertEvolBiology

VERTEBRATE BIOLOGIST School of Integrative Biology University of Illinois at Urbana-Champaign

The School of Integrative Biology at the University of Illinois in Urbana-Champaign invites applications for a nine-month, tenure-track position as Assistant Professor of Vertebrate Biology. The position starts in August 2005. We seek a broadly trained biologist who uses integrative approaches (e.g., biomechanical, molecular, physiological, etc.) to understand the ecology, behavior, adaptation and/or evolutionary biology of vertebrate organisms. A Ph.D. in a relevant field is required, and postdoctoral experience is preferred. The successful candidate will be expected to establish a creative, externally funded research program. Responsibilities include teaching at the undergraduate and graduate levels in organismal biology, and participation in graduate training. The School provides a highly collaborative and supportive environment with opportunities to interact with faculty in other units on campus and to participate in the Program in Ecology and Evolutionary Biology (www.life.uiuc.edu/peeb/)/. Salary is commensurate with experience. Minorities, women, and other designated classes are encouraged to apply.

To ensure full consideration, applications must be received by November 30, 2004. Applicants should submit a CV, statements of research and teaching interests, copies of three representative publications, and names of four individuals from whom letters of recommendation can be requested to: Dr. Patrick Weatherhead, Chair, Vertebrate Biology Search Committee, School of Integrative Biology, University of Illinois, 286 Morrill Hall, 505 S. Goodwin Ave., Urbana, IL 61801 (phone: 217/333-3044; fax: 217/244-1224; email: sib@life.uiuc.edu website: www.life.uiuc.edu/-sib/). The University of Illinois is an Affirmative Action/Equal Opportunity Employer

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Kim Hughes <kahughes@life.uiuc.edu>

ULyon EvolBiol

EVOLUTIONARY BIOLOGY

Paleobotanists and develomental geneticists at the University of Lyon (France), Department of Biology, are seeking contact with evolutionary biologists interested in applying for two new tenure-track positions at the Professor and Assistant Professor levels beginning Fall 2005. The Lyon University has a long reputation in systematics and conservation, and unparalleled resources in living plant material and herbarium collections. We are particularly interested in identifying individuals with research programs that will integrate with established strengths in the fields of morphology / anatomy, palynology, phylogenetic systematics, developmental genetics, cytogenetics. The successful candidates will be expected to pursue active research programs and to teach in their area of expertise. Applications are especially welcome from candidates developing research programmes in evolutionary-developmental biology with an emphasis on the processes underpinning the transition(s) Gymnosperms ? Angiosperms and the origin of Angiosperms. Key words for the requested expertise include combinations of:comparative morpho-anatomy, paleobotany, comparative and functional genomics, molecular systematics, plant architecture.

Applicants should submit a short letter of interest by mail to Georges.Barale@univ-lyon1.fr and ioan.negrutiu@ens-lyon.fr and a curriculum vitae, statements of research and teaching interests, and the names and addresses of 3 references to: Georges Barale, Professor Head of the Search committee Laboratoire de Biodiversité et Evolution Université Claude Bernard LyonI 7, rue Dubois F-69622 Villeurbanne Cedex

IMPORTANT NOTE: in the French system, the candidates need to be registered and qualified at the Ministry of Education, Science and Technology prior to their application. Eligible candidates must have obtained the qualification for the present application.

Ioan Negrutiu <Ioan.Negrutiu@ens-lyon.fr>

UMaryland Genomics

TENURE-TRACK FACULTY POSITION IN COMPARATIVE OR FUNCTIONAL GENOMICS (RANK OPEN)

The Department of Biology at the University of Maryland, College Park, is seeking tenure-track faculty working within the field of genomics, broadly defined. This includes, but is not limited to, the molecular basis of adaptation, the origin of species, genome evolution and organization, comparative studies of gene expression or function and the evolution of biodiversity. We seek outstanding candidates who are taking empirical, experimental or theoretical approaches.

Successful candidates will join a vibrant group of researchers in neuroscience, behavior, development, evolution and ecology. Candidates should have developed, or demonstrate the potential to develop, an outstanding research program and a record of extramural funding. We will provide competitive startup packages. The Department of Biology expects to continue hiring in this area as it expands into laboratory space within a new 155,000 sq. ft. Bioscience Research Building. The University of Maryland, College Park is the flagship campus of the University of Maryland System and one of the most rapidly advancing public research universities in the country. Our close proximity to Washington, Baltimore, and the Maryland Biotechnology Corridor facilitates interactions with an extraordinary range of major research institutions, including the NIH, FDA, Smithsonian Institution, USDA, and TIGR. For more information visit our web site at www.life.umd.edu/-biology. To apply send a curriculum vitae, statements of research and teaching interests, sample publications, and the names and addresses (mail and email) of three references to: Comparative or Functional Genomics Search Committee, Department of Biology, University of Maryland, College Park, MD 20742, USA. For best consideration, submit materials no later than Dec. 1 2004. The University of Maryland is an equal opportunity/affirmative action employer. Applications from minorities and women are encouraged.

TENURE-TRACK FACULTY POSITION IN ECOLOGICAL SUSTAINABILITY (RANK OPEN)

The Department of Biology at the University of Maryland invites applications for faculty appointments in ecology at any rank. We seek outstanding candidates who are taking experimental, informatic, and/or theoretical approaches to ecological sustainability at the population, community, and/or ecosystem levels.

Successful candidates will join a vibrant group of researchers in ecology, evolution, behavior, conservation biology, neuroscience, and development. Candidates should have developed, or demonstrate the potential to develop, an outstanding research program and a record of extramural funding. We will provide competitive startup packages. The Department of Biology expects to continue hiring in this area as it expands into laboratory space within a new 155,000 sq. ft. Bioscience Research Building. The University of Maryland, College Park is the flagship campus of the University of Maryland System and one of the most rapidly advancing public research universities in the country. Our close proximity to Washington and Baltimore facilitates interactions with an extraordinary range of major research institutions (including the Smithsonian Institution, USDA, and USFWS' Patuxent Research Center) and major non-governmental organizations. For more information visit our web site at www.life.umd.edu/-biology. To apply send a curriculum vitae, statements of research and teaching interests, sample publications, and the names and addresses (mail and email) of three references to: Ecological Sustainability Search Committee, Department of Biology, University of Maryland, College Park, MD 20742, USA. For best consideration, submit materials no later than Dec. 15 2004. The University of Maryland is an equal opportunity/affirmative action employer. Applications from minorities and women are encouraged.

TENURE-TRACK FACULTY POSITION IN NEUROSCIENCE (RANK OPEN)

We seek applicants using cellular or molecular approaches to address problems in broad areas of sensory neuroscience and/or sensorimotor integration and especially those using genetically modifiable model organisms. We prefer applicants whose work complements our strengths in auditory neuroscience, visual system development and plasticity, and sensorimotor integration. We also seek to expand our expertise to include chemosensory systems.

Successful candidates will join a vibrant group of researchers in neuroscience, behavior, development, evolution and ecology. Candidates should have developed, or demonstrate

the potential to develop, an outstanding research program and a record of extramural funding. We will provide competitive startup packages. The Department of Biology expects to continue hiring in this area as it expands into laboratory space within a new 155,000 sq. ft. Bioscience Research

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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

UMiami EvolGenetics

The Department of Biology, University of Miami, invites applications for a faculty position in EVOLUTIONARY GENETICS. We seek a Ph.D. scientist who uses molecular methods to address evolutionary questions. Hiring will be at the tenure-track Assistant Professor level. The successful candidate will be expected

to maintain an innovative, externally funded research program and to participate in teaching at the undergraduate and graduate levels. Applicants should send a curriculum vitae, representative reprints, a statement of research interests, and have three letters of reference sent to: David Janos, Chair of the Evolutionary Genetics Search Committee, Department of Biology, University of Miami, P.O. Box 249118, Coral Gables, FL 33124-0421. Application review will begin immediately. An Equal Opportunity/ Affirmative Action Employer

UMichiganAnnArbor EvolBiology

Faculty Position in Evolutionary Biology University of Michigan

The Department of Ecology and Evolutionary Biology solicits applications for a faculty position in evolutionary biology (open at all ranks). We seek creative and productive researchers in any area within this broad discipline, as well as its intersection with ecology in evolutionary ecology and ecological genetics. Areas of particular interest within evolutionary biology include evolutionary genetics and genomics, population and quantitative genetics, evolutionary theory, phylogenetics, and evolution of morphology, function, and behavior. Successful candidates will join a number of other new faculty in an exciting and growing department. Women and minorities are encouraged to apply and applicants should note that the University is supportive of the needs of dual career couples.

To apply please send curriculum vitae, summaries of research and teaching experience and interests, evidence of teaching excellence, copies of publications, and arrange to have 3 letters of reference sent to:

Chair, Evolution Search Committee Department of Ecology and Evolutionary Biology 830 N. University, Room 2019E University of Michigan, Ann Arbor, MI 48109-1048.

Senior candidates may send three names of reviewers with their application.

Review of applications will begin November 15, 2004. The University of Michigan is a nondiscriminatory, affirmative action employer.

<evolsearch@umich.edu>

Connie J. Rockman Ecology and Evolutionary Biology University of Michigan 830 N. University Ann Arbor, MI 48109-1048 734)615-4915

"Rockman, Constance" <connier@umich.edu>

UMontana AssocDeanBiol

ASSOCIATE DEAN and PROFESSOR to lead the Division of Biological Sciences. The Division offers undergraduate, MS, and PhD degrees in a variety of biological disciplines (http://biology.dbs.umt.edu/dbs/). The 40 faculty are committed to excellence in teaching and research. The Division is a vigorous and growing group; faculty received over $12 million in new grants last year. We are looking for someone with the vision, leadership, desire, and skills to enhance development of the Division. Applicants must have a doctoral degree in a biological science, evidence of excellence in teaching and research, and strong administrative and communication skills. Send CV, contact information for five references, and letter of interest that includes a statement of leadership philosophy, research and teaching accomplishments, and career goals to Chair, Assoc. Dean Search Committee, Division of Biological Sciences, University of Montana, Missoula, MT 59812. We will begin reviewing applications on 31 October 2004. For more information see the web page above or contact fred.allendorf@umontana.edu. The University has recently been awarded an NSF ADVANCE grant to support an increase in the number of women faculty in the sciences and mathematics (http://pace.dbs.umt.edu/-default.aspx).

The University of Montana is an Equal Opportunity/Affirmative Action Employer

Fred W. Allendorf Division of Biological Sciences University of Montana Missoula, MT 59812 USA

Phone (406) 243-5503 Fax (406) 243-4184 Fax (406) 243-4184

UOxford Bioinformatics

UNIVERSITY OF OXFORD

Lecturership in Bioinformatics

Department of Statistics in association with St John's College

The Department of Statistics is experiencing an exciting period of growth and development, and is one of the leading UK departments.

The University seeks to appoint a lecturer in bioinformatics to take up this post from 1 January 2005, or from a mutually agreed later date. The Lecturership will be held in conjunction with a Supernumerary Fellowship at St John's College.

The University interprets bioinformatics widely, to include the whole range of applications of mathematical, statistical, or computational techniques to the analysis of data arising in modern molecular genetics. Whilst applications are welcomed from candidates with research interests in any area of methodological development in bioinformatics, there is a strong preference for candidates working on post-genomic problems which complement or build on existing strengths in bioinformatics within the Department of Statistics. These include structural bioinformatics, comparative genomics, statistical alignment, population genomics and genetic variation, human disease studies, and analytical tools for modern experimental techniques such as gene expression arrays, proteomics, metabonomics etc.

The University salary for the post is on a scale up to £45,707 p.a. Additional college allowances are available as set out in the further particulars. This post is in an area currently designated as a shortage subject under the HEFCE "Golden Hello" Scheme. Appointees may therefore, under certain conditions, be eligible for a 3-year salary supplement.

Entitlement to research leave accrues at the rate of one term's leave for every six terms with normal duties.

Further particulars can be found in .pdf format at the link below or contact the Personnel Administrator, Department of Statistics, 1 South Parks Road, Oxford OX1 3TG (Tel 01865 272860), email jobs@stats.ox.ac.uk. The closing date for applications is Friday 22th October 2004.

The University of Oxford is an Equal Opportunities Employer

http://www.stats.ox.ac.uk/jobs/StJohnfp.pdf

USC MolecularComputational

As seen in the 17 September issue of Science:

The Program in Molecular and Computational Biology at the University of Southern California invites applications for multiple tenure-track and tenured faculty positions. Our program continues to undergo significant expansion, including occupancy of a new research building in Spring 2005. We are an interactive multidisciplinary faculty looking for colleagues who will enhance and complement our present research strengths. Extramural funding is expected.

We seek scientists who use modern molecular, genetic, or computational approaches to address fundamental molecular, cellular, or developmental processes. Investigators within the disciplines of Evolutionary Biology, Neurobiology, Plant Biology, Systems Biology, or Bioinformatics are especially encouraged to apply, although outstanding candidates in related fields will also be considered.

Review of applications will begin October 15, 2004. Please send a curriculum vitae, statement of research objectives, and three letters of recommendation to msearch@usc.edu. For additional information about our program, please visit http://www.usc.edu/dept/-LAS/biosci/mcb . USC is an Affirmative Action/Equal Opportunity Employer.

Magnus Nordborg <magnus@usc.edu>

UTexasAustin ComputationalBiol

COMPUTATIONAL BIOLOGY: MOLECULAR EVOLUTION AND BIOSTATISTICS

The Center for Computational Biology and Bioinformatics at the University of Texas (UT) at Austin (website: http://ccbb.biosci.utexas.edu/), together with the Section of Integrative Biology (website: http://-www.biosci.utexas.edu/IB/), seeks applications for an ASSISTANT PROFESSOR in computational biology in the fields of molecular evolution and biostatistics. The successful applicant will join a strong program in computational and evolutionary biology, with particular areas of strengths in the areas of structure/function relationships, population genetics, theoretical evolutionary biology, experimental evolution, and phylogenetics.

Applicants may work on any area of computational biology as it relates to molecular evolution. Teaching duties will include a graduate course in the applicant's area of specialty, as well as an undergraduate course in biostatistics. Applicants should send curriculum vi-

tae, a brief statement of research and teaching interests, no more than five reprints or preprints, and the names of at least three references to: David Hillis, Computational Biology Search, Center for Computational Biology C4500, University of Texas, Austin, TX 78712, U.S.A. Review of applications will begin December 1, 2004. For more detailed information, see website: http://www.biosci.utexas.edu/jobs/. UT-Austin is an Equal Employment Opportunity/Affirmative Action Employer.

Lauren Ancel Meyers The University of Texas at Austin Integrative Biology 1 University Station C0930 Austin, Texas 78712-0253 Ph (512) 471-4950 Fax (512) 471-3878 ancel@mail.utexas.edu http://-www.biosci.utexas.edu/IB/faculty/MEYERS.HTM http://www.biosci.utexas.edu/IB/faculty/-MEYERS.HTM

UToronto 2 EvolGenomics

Dear Colleagues, We will be hiring two positions into the Comparative and Evolutionary Genomics cluster at the University of Toronto. Successful candidates will be nominated for junior Canada Research Chairs. We have a strong group of evolutionists in the Zoology and Botany Departments, and we are excited about the prospect of expanding. The official ads for the jobs are listed below.

Sincerely, Aneil Agrawal and Locke Rowe (afagrawal@zoo.utoronto.ca, lrowe@zoo.utoronto.ca)

---------- Two Canada Research Chairs: Evolutionary Genetics and Cell/Developmental Biology The Department of Zoology, University of Toronto, invites applications for two tenure-stream assistant professorships, starting July 2005.Successful applicants will be nominated for Tier II Canada Research Chairs (http:/-/www.chairs.gc.ca), which are appropriate for junior candidates with postdoctoral experience, publications, and exceptional potential. CRC searches are explicitly international.Job expectations include an outstanding, internationally recognized research program and highly effective teaching of graduate and undergraduate students. Toronto is an exciting, extraordinarily multicultural city.

Evolutionary geneticist, with expertise in population and quantitative genetics, to bring complementary strengths in evolutionary biology to the department and the Evolutionary Genetics/Biodiversity subgroup of the 13-chair CRC Cluster in Comparative and Evolutionary Genomics. Review of applications begins 1 December 2004. Cell/Developmental biologist(including evolutionary developmental biology) to complement strong existing groups that investigate cell and molecular biology of animal development in diverse invertebrate and vertebrate systems. The University has several hundred laboratories in the molecular life sciences, over 35 of which actively participate in the acclaimed Collaborative Graduate Program in Developmental Biology (http://www.utoronto.ca/devbiol). Review of applications begins 3 January 2005.

Curriculum vitae, statements on research and teaching, and three recommendation letters should be sent to: Chair's Office, Department of Zoology, University of Toronto, 25 Harbord St., Toronto, ON M5S 3G5 Canada.

E-mail inquiries:All application procedures, Dianne Heximer (dheximer@zoo.utoronto.ca); evolution position, Locke Rowe (lrowe@zoo.utoronto.ca); cell/development position, Ulrich Tepass (utepass@zoo.utoronto.ca). Department site: http:/-/www.zoo.utoronto.ca . All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. The University of Toronto is strongly committed to diversity within its community, and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

UWisconsinMadison Botany

UNIVERSITY OF WISCONSIN-MADISON

Assistant Professor, Botany

The University of Wisconsin Madison, Department of Botany seeks to hire a tenure-track Assistant Professor employing innovative approaches to study significant questions in the field of Botany. Anticipated start date: August 22, 2005. Two particular areas of research are targeted: (1) ethnobotany; (2) the molecular biology or physiology of cryptogams (e.g., bryophytes, ferns, algae, filamentous fungi). However, outstanding candidates in other areas that complement existing departmental strengths will also be considered. Teaching duties would include contributions to undergraduate and graduate classes. Applicants should sub-

mit a curriculum vitae, a statement of research and teaching goals, selected reprints, and should also arrange for three letters of recommendation to be sent to: Dr. David A. Baum Botany Faculty Search 430 Lincoln Drive Madison, WI 53706 All application materials should be received by 30 Nov. 2004. For more information contact David Baum (dbaum@wisc.edu) or consult www.botany.wisc.edu. The University of Wisconsin is an equal opportunity employer. We promote excellence through diversity and encourage all qualified individuals to apply.

carollee@wisc.edu

UWisconsinMadison MolecularBiometry

Faculty Position in Molecular Biometry

The University of Wisconsin-Madison seeks outstanding candidates for faculty in Molecular Biometry. Candidates trained in mathematics, statistics, computational biology, or related fields, whose research responds to challenges from molecular and cell biology are urged to apply. This position will lead in building strong new connections between the mathematical and biological sciences on the campus. To apply or learn more, visit http://www.stat.wisc.edu/~yandell/molbiom. Closing date is 16 December.

Brian S. Yandell, Professor Chair, Molecular Biometry Search Committee Statistics, Horticulture & Biometry University of Wisconsin-Madison www.stat.wisc.edu/-~yandell –

WoodsHole ResAssist

Date: 06/21/2004

Type: RESEARCH

Position: RESEARCH ASSISTANT I/II [RAI II ME], Josephine Bay Paul Center, Full Time, Non-Exempt or Exempt

Description: The Marine Biological Laboratory is seeking applicants for a full-time, year round Research Assistant I/II position in the Josephine Bay Paul Center in Comparative Molecular Biology and Evolution to work on projects that use high throughput techniques to study microbial ecology.

Duties: Duties include but are not limited to: High throughput sequencing activities, extraction of nucleic acids from microbial cultures, Polymerase Chain Reaction, cloning of PCR amplicons, automated preparation of DNA sequencing reactions, phylogenetic analysis and molecular database searching and maintenance.

Conditions: This position is available as of July 1, 2004.

Education: A B.A or M.S. in molecular biology. Training in molecular techniques. Familiarity with Mac OS, Windows and Linux/Unix a plus. Actual position level will depend upon education and experience.

Instructions: Applicants should submit a curriculum vitae, statement of research interests and a list of three references including telephone numbers and email address to to: Marine Biological Laboratory, ATTN: Human Resources reference code [RA I II ME], 7 MBL Street, Woods Hole, MA 02543-1015, email resume@mbl.edu. An Equal Opportunity/Affirmative Action Employer/Non-smoking workplace.

Deadline: Until a suitable candidate is identified.

WoodsHoleMA EndosymbiontMolEvol

The Marine Biological Laboratory, Woods Hole, MA

RESEARCH ASSISTANT I Position in Molecular Evolution of Intracellular Bacteria

The Marine Biological Laboratory is seeking applicants for a Research Assistant I within the Josephine Bay Paul Center in Comparative Molecular Biology and Evolution. This position is part of a multi-institutional effort funded by the National Science Foundation to understand how insects co-exist with their widespread intracellular bacterial parasites (i.e., the endosymbiont Wolbachia). The successful candidate will join a stimulating research center in molecular evolution, comparative genomics and the evolution of infectious diseases. The applicant will work on projects that use high throughput techniques to study microbial evolution and genomics. Questions can be address to sbordenstein@mbl.edu. Additional information about the Center and the Bordenstein Lab can be found at http://hermes.mbl.edu/labs/JBPC/ and http:/-

/jbpc.mbl.edu/jbpc/Pages/bordensteinInterest.html . Duties: Primary research projects will focus on but are not limited to: the molecular evolution of Wolbachia genes and the enrichment of Wolbachia genomes from host insets. Primary responsibilities comprise but are not limited to molecular biology activities, high throughput sequencing, sequence analyses, extraction of nucleic acids from insect bacterial endosymbionts, primer design, polymerase chain reaction, gel electrophoresis, cloning of PCR amplicons, automated preparation of DNA sequencing reactions, phylogenetic analysis and molecular database searching and insect rearing. Skills in some of these duties are required.

Conditions: This position is available November 1, 2004 with continuation contingent on performance and available funds. This position includes co-authorship in publications.

Education: B.A. or B.S. degree and experience in Molecular Biology, Evolution, Genetics or a related field. Training in some molecular biology techniques required, including bioinformatics, polymerase chain reaction, gel electrophoresis, sequence alignments, population genetics or genomics. Familiarity with computational skills, Mac OS, Windows and Linux/Unix a plus. The successful candidate is expected to have good team skills but work with a high level of independence.

Instructions: Applicants should submit a cover letter, curriculum vitae or resume, transcripts and a list of three or more references including telephone numbers and email addresses to: Marine Biological Laboratory, ATTN: Human Resources, reference code [RAI WOL], 7 MBL Street, Woods Hole, MA 02543-1015, 508 289-7422, email resume@mbl.edu. An Equal Opportunity/Affirmative Action Employer/Non-smoking workplace.

Deadline: Until a suitable candidate is identified.

Questions should be addressed to sbordenstein@mbl.edu. – Seth Bordenstein Assistant Research Scientist Josephine Bay Paul Center for Comparative Molecular Biology and Evolution The Marine Biological Laboratory 7 MBL Street Woods Hole, MA 02543

phone: 1-508-289-7220 fax: 1-508-457-4727 email: sbordenstein@mbl.edu http://jbpc.mbl.edu/jbpc/-Pages/bordensteinInterest.html http://jbpc.mbl.edu/-jbpc/Pages/bordensteinInterest.html

Other

AFLPs

Hi,

I've been using the AFLP Analysis System I kit from Invitrogen with fish DNA, but I've experienced some problems - no pre-amplificated DNA. I believe the problem might be on the ligation of adapters, but I got no conclusive data on this. Has any of you had similar experience? Do you have any clues on what might be going wrong?

Thanks in advance!

Rita Pardal

Rita Goncalves Pardal <rmpardal@fc.ul.pt>

AFLPs on CEQ8000

Evodir colleagues:

We are mapping QTL involved in host specificity of insects with AFLP markers. We are using a Biomek 2000 robot to set up reactions and a CEQ 8000 capillary electrophoresis machine for fragement analysis. I would very much like to chat/correspond about problems and techniques with anyone who is using either machine for AFLP analyses.

Yours, Keith Hopper

Keith R. Hopper USDA-ARS-BIIR, 501 South Chapel St., Newark, DE 19713; phone 302-731-7330 x238; fax 302-737-6780; email khopper@udel.edu

BeckmanSEQ2000 FragmentAnalysis

We are about to start a project that involves large scale microsatellite analyses. We have at hand a Beckman SEQ2000XL that until now has been dedicated to EST-sequencing. But since it also comes with software for fragment analysis, we're considering to use it for our microsatellite runs. However, some people I have spoken to have recomended us to upgrade to a newer Beckman machine, such as the SEQ8000, for fragment analysis (for reasons that were not all that clear to me).

Is there anyone who use or have used an SEQ2000 for fragment analysis that can give me some input on how well it works? Also, I would appreciate some input on how the SEQ2000 rates compared to other, newer, Beckman machines and whether an upgrade really worth all the money or not?

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, Sweden tel. +46-(0)90-786-7414, fax. +46-(0)90-786-6705 web: http://mendel.eg.umu.se pelle@eg.umu.se

Bluebird microsats

Hi, I had a question I wanted to post: I want to do parentage on bluebirds using microsatellites and I was wondering if anyone has any suggestions for particular primer sets that yield polymorphic loci. thanks -lauren

L Kordonowy <kordonowyl@kenyon.edu>

Cassowary eggs

Dear Evoldir members,

In the scope of a project that is to be set up, we are looking for a place where we can get (buy) fertile cassowary eggs.

Eggs of other ratites are fairly easy to get from ostrich farms. However, as far as I know cassowaries are not commonly kept at such farms. Does anyone know of a place where we can get fertile cassowary eggs? And maybe also of other places besides farms where we can get ratite eggs? Eggs from farms tend to be quite expensive..

Many thanks,

Henri

H.A. Thomassen Institute of Biology Leiden Leiden University, The Netherlands

hthomassen@rulsfb.leidenuniv.nl

DNA extraction

"Hi folks! I would greatly appreciate having some feedback about extracting DNA from samples stored in IMS (industrial methylated spirit). Is there a commercial kit known to be working nicely? Is there a maximum of storage-time beyond which I'd better not even bother trying?

Thank you very much in advance!

Stefano.

Dr. Stefano MARIANI Molecular Ecology and Fisheries Genetics Laboratory Department of Biological Sciences University of Hull, HU6 7RX, UK ph. +44.1482.465542 Fx. +44.1482.465458 mb. +44.7867.926332 E-mail: s.mariani@hull.ac.uk http://-www.hull.ac.uk/molecol/Stefano.html Stefano Mariani <S.Mariani@hull.ac.uk>

DNA from hair

Dear Evoldirs,

I am extracting DNA form hairs but I have few problems to digest (in using the classical products, DDT, SDS, NaCl, EDTA, Pro K, Tris-HCl) some of them. The black hairs (from all geographical origin) are digested in 12 hours but the white/yellow are not digest, even after 5 days of incubation (56C)!!!

Is there someone who met the same kind of problems or have an explanation/hypothesis?

Thanks Francois,

Dr Francois-xavier Ricaut Department of Biological Anthropology Leverhulme Centre of Human Evolutionary Studies University of Cambridge, Downing Street Cambridge CB2 3DZ UK Email: fx.ricaut@infonie.fr Tel: +44 (0) 1223 763870 Fax: +44 (0) 1223 335460

DNA from hair answers

Dear members,

Thank you very much for your answers. I post them below for all the people that are interested in them. Kind regards, FX Ricaut.

Hello Francois. Check out the following protocol optimized forensic samples: Walsh et al. 1991 (Biotechniques: 506-513). It is based on the use of CHELEX 100-Resin (BioRad) to extract DNA even from crude remainders of cell tissue or hair. Good luck. Sébastien

Francois Hair shafts are made of keratin and contain no cells and therefore no DNA If you are extracting DNA from these samples, then it will be from hair bulb or other cells on the outside of the hair shaft If you cannot see a hair bulb it may be present + dried up In any case- digesting the hair follicle won't help with the DNA extraction there may be cause to be worried about contamination of the hair samples with other cells also Carolyn you shouldn't need to digest the hair - just lyse the cells in the hair bulb to release the DNA so it can be PCR'd

Dear Francois! I don't do hair extractions but I am using NaOH/Tris/HCl extractions for nematode worms and I freeze them after I place the worm into NaOH. It seems to help with breaking up the cuticle. Just a thought. Good luck, Birgit

Francois, It has been my experience that one does not need to digest the entire hair–just the follicle end. I recommend using the standard Chelex methods (just Chelex and H2O, no proteinase needed). If you would like, I will forward you my protocol. Chris Sorry, I do not have a protocol for the shafts. I might still try the Chelex protocol, though, because you can boil the hair in a small solution, say 100-200 microliters, and have the DNA highly concentrated, though with potential inhibitors. The inhibitors could be gotten around by adding a little BSA to the PCR. I think the main prob-

lem you are going to have is with low DNA concentration, though.

Chris Chris H. Floyd, Ph.D. Assistant Professor Department of Biology University of Wisconsin-Eau Claire Eau Claire, WI 54702 Phone: 715-836-4163 Fax: 715-836-5089 floydch@uwec.edu

Dear Francois, I don't have any explanations to offer, but I'd be very interested in hearing the responses you get, as we are digesting hair here also. We've got good results using Promega's DNA IQ kit (meant for forensics). Both squirrel hair and human hair (in a variety of colours including yellow) is compeletly dissolved using a combination of their 'Tissue & hair extraction kit', which contains proteinase K and DTT (probably SDS also), and the lysis buffer from the DNA IQ kit. Sadly, the indgredients of the lysis buffer are not listed. Good luck, Melissa Melissa Gunn M.Gunn@sheffield.ac.uk Ph. +44(0)114 2220106 Department of Animal and Plant Science University of Sheffield Western Bank Sheffield S10 2TN United Kingdom

Aloha Francois, I'm afraid that I have no insights into your question. May I say, however, that a simple chelex extraction (5% chelex incubated 56C ~10 min, vortex, incubate boiling water bath ~8min, vortex, spin for 30s and take from the supernatant for your PCR reaction avoid the chelex beads as they will chelate the Mg in your reaction) worked very well for me in a population study of orangutan. Hope that helps. Cam Cam Muir Ph.D. President Sigma Xi Hilo Chapter Assistant Professor Natural Sciences University of Hawai'i - Hilo 200 W. Kawili St. Hilo, HI 96720 cmuir@hawaii.edu www2.hawaii.edu/~cmuir 808-933-3154 (office

Hi Franois! Can you clarify me just one doubt? Do you want the hair digested or the hair bulb? What are you doing the DNA hairs for? Microsatellites, mtDNA analysis? The hair bulb is readily digested by the temperature effect. I have some protocols that I can suggest you if you want to, but the easiest one is using the hair bulb directly in the PCR mix, without even doing any extraction procedure. It works fine and the DNA needs only the temperature from the PCR to be "extracted". Best wishes, Cristina Luis

Hi Francois, It seems that some hairs are simply resistant to proteinase K due to their structure. I don't think there is anything formal published on this, but I have read various descriptions on the matter on the web. One way that I have found suitable in getting around this issue is to boost the levels of SDS and DTT you use. Also you may want to remove the EDTA completely, as it hinders the proteinase K and isn't really necessary in the digestion mix. I recently developed a new method of digesting hair (based on a protocol published elsewhere by Pfeiffer et al) that you might want to try. I personally find that it is superior to the usual methods. In essence, make up a digestion mix containing (at final concentration) 100mM Tris pH 8 100mM NaCl 3mM CaCl2 (this is a great ingredient that appears to boost the rate of proteinase K activity) 2% SDS 40 mM Dithiotreitol (DTT) (approximately) 250 ?g/ml Proteinase K (approximately) I normally use about 0.75 ml of this mixture for a couple of cm of hair shaft.

— / —

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

DNA ladders

Hi All,

I am wondering if anyone knows of a commercially available DNA ladder suitable for sizing microsatellites? I am running manual small format 6% acrylamide gels (Sequagel), staining with Sybr-Gold and visualizing under UV light. I would like to know if anyone knows of a commercially available DNA ladder, with fragments sizes from around 80 - 250 bp in increments of 10bp (or less). With fingers crossed!

Alex Wilson Dr Alex Wilson PERT Postdoctoral Fellow Center for Insect Science Department of Ecology and Evolutionary Biology The University of Arizona acwilson@email.arizona.edu

Alex Wilson <acwilson@email.arizona.edu>

Eel samples

Dear Colleagues.

Under the co-direction of Prof. Axel Meyer and Dr. Thierry Wirth, (Ref. 1,2) I am currently studying the genetic structure of past and recent Atlantic eel populations (Anguilla anguilla and A. rostrata). Moreover, we have also developed genetic markers in order to investigate the population structure of eel swimbladder

parasites (Anguillicola crassus; Ref. 3). This nematode might be involved in the dramatic decline of eel stocks during the last twenty years. We want to determine the number of successive waves that led to the arrival of the parasite from infected Japanese eels. We also want to date these events and compare the speed and the strength of the parasite spread in Europe and North America using a coalescence approach.

Therefore we are looking for:

- historical glass eel samples from the North-American coast, from the North, the Baltic and the Mediterranean Seas (covering the whole of the 20th century, in ethanol, frozen or even in formol).

- recent Anguillicola crassus samples from Europe and Asia (in ethanol).

I would be grateful if you can help me getting this biological material. For a Pdf-Reprint of References 1 & 2 please contact me under my email address given below.

With best regards

Sébastien Wielgoss

Ref1: Wirth, T. & Bernatchez, L. Genetic evidence against panmixia in the European eel. Nature 409, 1037-1040 (2001). Ref2: Wirth, T. & Bernatchez, L. Decline of North Atlantic eels: a fatal synergy? Proc. R. Soc. Lond. B 270, 681-688 (2003). Ref3: Sures, B. & Knopf, K. Letters: Parasites as a threat to freshwater eels? Science 304, 207 (2004).

Department of Biology Universitaetsstrasse 10, University Konstanz, D-78457 Konstanz, Germany

tel. +49 (0) 7531 88 2763; gsm. +49 175 68 44 253; fax. +49 (0) 7531 - 88 3018 email: sebastien.wielgoss@uni-konstanz.de

Enzyme restrictions

Hi Folks,

I'm attempting to restrict genomic DNA recovered from bryozoans using a Qiagen kit and find large differences between samples in the success of the restriction (all work to a certain extent but some show evidence of a band of intact genomic DNA). The best results were obtained when the enzymes were brand new (Mse I and EcoRI from NEB), however they've been properly stored at -20 with very limited thawing/refreezing and work on other species, so I doubt that the enzymes have degraded. They have also been used since on other species with good results. I know that you could probably write a book about optimising restriction reactions, however, can anybody suggest a few "tricks of the trade" which may help the reproducibility.

Thanks in advance, Bill Hutchinson

PLEASE REPLY TO: w.f.hutchinson@hull.ac.uk

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

Evolution text

Hello all,

I'm looking for a textbook to use in my upcoming Evolution and Population Genetics course. The audience is jr. sr. level students with no more exposure to evolutionary concepts than is presented in the Raven and Johnson general biology text. I would appreciate suggestions.

Thanks, Paul Arriola

******* Paul E. Arriola, Ph.D. Associate Professor of Biology voice: (630) 617-3109 Genevieve Staudt Chair fax: (630) 617-3735 Elmhurst College e-mail: paula@elmhurst.edu 190 Prospect Avenue http://-www.elmhurst.edu/ ~ bio/arriola Elmhurst, IL 60126-3296

Individual inbreeding coeffs

Hello all,

I am currently engaged in a project studying the population genetics of Rio Grande cutthroat trout using microsatellites. We have found significant heterozygote deficiency in many of our populations. This appears to be a genuine phenomenon rather than the result of artifacts such as null alleles and we are therefore interested in investigating it further. One possibility is that these heterozygote deficiencies are due to inbreeding, for example because dispersal of sibs is limited by physical boundaries within a stream. We have taken

the approach of calculating Ritlands (1996) individual inbreeding coefficient for each individual in the population. We can then ask the question- is the median inbreeding coefficient significantly greater than would be expected if mating was random with respect to relatedness? However, it is unclear what approach we should be using to calculate the significance.

Currently, we are randomly permuting alleles between individuals in order to simulate a sample of fish which would result from random mating and comparing the true median individual inbreeding coefficient to the distribution of medians from 2000 of these simulated samples. Using this approach, a number of our true medians fall outside the 95% confidence limits of the distribution of medians from the simulated data sets. However, it has been suggested to us that the correct approach, since the sample deviates from Hardy-Weinberg equilibrium, is to permute single-locus genotypes, rather than alleles, between individuals. This approach retains much of the homozygosity present in the original data set and therefore none our true medians fall outside the 95% confidence interval of our simulated medians. Since we are intending to compare the results that we observe with those which would be expected from random mating with respect to kinship (i.e. a population which does not deviate from HW equilibrium), then we are unsure whether this actually is the correct approach. Can anyone enlighten us further?

Thank you for your help.

Victoria Pritchard

Ritland K (1996) Estimators for pairwise relatedness and individual inbreeding coefficients. Genet. Res. 67: 175-185.

Victoria L. Pritchard, Department of Fishery & Wildlife Sciences, New Mexico State University, P.O. Box 30003, MSC 4901, Las Cruces, NM 88003, U.S.A.

Tel: (505) 646 3576

vpritcha@nmsu.edu vpritcha@hotmail.com

JMaynardSmithPrize

2005 John Maynard Smith Prize: call for candidates

The European Society for Evolutionary Biology has established The John Maynard Smith Prize to be awarded to outstanding young researchers in the field of evolutionary biology.

The prize is named after John Maynard Smith (6 January 1920 - 19 April 2004), eminent evolutionary biologist, and author of many books on evolution, both for scientists and the general public. He was professor emeritus at University of Sussex, UK, Fellow of the Royal Society, winner of the Darwin Medal, and laureate of the Crafoord Prize of the Swedish Academy of Sciences. See the interview by 'the Evolutionist' for an account of his life long fascination with evolution, and http://www.eseb.org/ for a biography. The fifth prize winner will be announced at the 2005 congress of the society in Krakow, Poland.

Previous winners 2003: Patricia Beldade - The genetic basis of phenotypic variation: evolution and development of butterfly wing patterns. (Abstract)

2001: Alexander Badyaev - Paradox of rapid evolution of sexual size dimorphism: the role of ontogeny and maternal effects. (Abstract)

1999: Nicolas Galtier - Non stationary models of nucleotide substitution and the evolution of base composition. (Abstract)

1997: Marie-Charlotte Anstett - Facilitation and constraints in the evolution of mutualism? (Abstract)

Nomination

Candidates for the prize must be nominated by a senior colleague; the nomination must be accompanied by the candidate's CV, a list of publications, a short description of future research plans, the names and addresses of two referees, and a letter from the candidate approving the nomination. Candidates for the 2005 prize must have received a PhD (or equivalent) degree no earlier than January 2003.

The nominations (three copies if sent by mail) should be sent to: Michel Raymond, Institute for Evolutionary Sciences, University of Montpellier II, F-34095 Montpellier, France e-mail: raymond@isem.univ-montp2.fr

and postmarked no later than February 1, 2005. The winner is expected to attend the 2005 congress, where he or she will deliver the John Maynard Smith Lecture. The society will pay registration, accommodation, and travel expenses (economy fare).

Michel Raymond <raymond@isem.univ-montp2.fr>

Linkage analysis

Dear Colleagues,

I was wondering if anyone knew of a software program (or programs) that calculated Lewontin's D', but preferrably R (standardized linkage disequilibrium). My data is in the form of RFLPs at several nuclear loci. I would also be interested to hear input/suggestions on appropriate linkage disequilibrium analyis (ses) regarding interspecific hybridization.

Sincerely,

Cory Bettles

Cory Bettles Fish Biologist Conservation Biology Unit Science Division/Fish Program Washington State Dept. Fish & Wildlife 600 Capitol Way N. Olympia, WA 98501-1091 Ph: (360) 902-2801 Fax: (360) 902-2944 Email: bettlcmb@dfw.wa.gov

Linkage analysis answers

Thanks to everyone who responded to my question regarding software programs available for calculating Lewontin's D' (standardized Linkage Disequilibrium). Since posting my question, I have found that Arlequin software V. 2.000 will also calculate D and D' values for each loci pair (using microsatellites and RFLP codominant nuclear loci), but will not give a value over all pairwise comparisons for a given population.

For those of you who expressed an interest, I have included the responses that I received.

Cory Bettles bettlcmb@dfw.wa.gov

The program "dnaSP" performs both calculations that you mentioned. Cheers,

Matt Saunders ———————

Hi Cory

Black and Krasfur's LINKDOS/LINKDIS might help you with what you want, although you would have to get the data into standard codominant format.

There is a nice web interface available at the bottom of the GENEPOP web interface at:

http://wbiomed.curtin.edu.au/genepop/index.html

Paul

Dr. Paul Sunnucks Senior Lecturer Department of Genetics La Trobe University Bundoora 3086 Victoria Australia phone (office) + 61 3 9479 2264 phone (lab) + 61 3 9479 3636 fax + 61 3 9479 2480 ———————

dear Cory

I guess you could use DnaSP by Julio Rozas.

Could you please let me know the answers to your question)

all the best

santos ———————

I have a PERL code that calculates R (John Sved's correlation coefficient between alleles of different loci) and can use any input as long (microsat or anything that characterizes an allele. This R is a little different from the Weir's r, but can be easiliy fixed to give you what you want. Well, just let me know if you want it.

Julianno ———————

Dear Cory: The LDA program available at http://-www.kumarlab.net/publications.html might be useful. Sudhir ———————

Cory, Lewontin's D is very easy to calculate using, for example, Excel. I have it programmed to assess chromosomal linkage. Weir's population genetics data analysis text used to come with programs for stuff like this.

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

McDonaldKreitman test

Dear Evoldir members, Im performing a nucleotide variability survey in a gene region of a Drosophila species and I have several doubts about the interpretation of the results of the McDonald-Kreitman test. According to it, my sample has an excess of non synonymous polymorphism and I found in the literature three hypothesis to explain such result: changes in the selective constraint of the gene, selection against deleterious mutations and episodic selection. My species also has an excess of singletons in synonymous and non synonymous sites that may be due to a recent population expansion, because this pattern is also present in other gene regions. Can I say that this change in Ne is not responsible for the departures in neutrality

in MK because the pattern is absent in other genes? I ask because although the change in Ne should have affected all the genome in the same way, the relationship between Ne and s (that determines the selective constraint) could be different for each gene. I also wonder how I can distinguish between selection against deleterious mutations and episodic selection if demography is affecting the spectrum frequency. I appreciate any suggestions that you can send me. Kind regards, Romina

Dra. Romina Piccinali Lab. de Eco-Epidemiología Facultad de Ciencias Exactas y Naturales Universidad de Buenos Aires Argentina rpicci@bg.fcen.uba.ar

McDonaldKreitman test answers

Dear members, Thank you very much for your answers. I post them below for all the people that are interested in them. Kind regards, Romina.

Dear Romina

In my opinion, it is going to be difficult to distinguish between poopulation growth or positive selection, or even background selection just from intraespecies polymorphism data. The frequency spectrum can be different for every gene depending on many variables, including theta (the parameter reflecting the combined effect of mutation and population size), recombination rate, gene conversion, the intensity of selection, etc. In this context the history of a gene is difficult to compare if you do not know for sure the history of the gene you are comparing it with.

Have you done a Ka/Ks test? This might give you some clues on the direction of selection...

In any case I would be grateful if you could send me the answers to your question.

all the best

santos

****

You can try to look only at replacement and syn. polymorphism that are more than 15% frequent. This should test for the possibility that you have a significant number of slightly deleterious AA polymorphisms biasing the MK test.

Dmitri

There have been various discussions on the excess of nonsynonymous polymorphisms. I recommend you to read Rand and Kann, Mol Biol Evol 13, 735-748(1996) and Mes,Jour Mol Evol 58,466-478(2004). I also attach here my article (PNAS 99: 16134-16137) that may be of some help to think about slight negative selection.

Tomoko Ohta

Dear Romina

Dear Evoldir members, Im performing a nucleotide variability survey in a gene region of a Drosophila species and I have several doubts about the interpretation of the results of the McDonald-Kreitman test. According to it, my sample has an excess of non synonymous polymorphism and I found in the literature three hypothesis to explain such result: changes in the selective constraint of the gene,

recently strengthened would fit your data

selection against deleterious mutations

I would add SLIGHTLY deleterious: selection weak enough to detect polymorphism, but at a low frequency, hardly fixed

and episodic selection. My species also has an excess of singletons in synonymous and non synonymous sites that may be due to a recent population expansion, because this pattern is also present in other gene regions. Can I say that this change in Ne is not responsible for the departures in neutrality in MK because the pattern is absent in other genes?

I ask because although the change in Ne should have affected all the genome in the same way, the relationship between Ne and s (that determines the selective constraint) could be different for each gene.

Yes, this statement would assume that the distribution of selection coefficients is the same across genes (same proportion of nearly neutral mutations that can become effectively neutral if there is a contraction of effective population size or become effectively selected if there is an expansion).

I also wonder how I can distinguish between selection against deleterious mutations and episodic selection if demography is affecting the spectrum frequency.

With slightly deleterious mutations, you would expect non synonymous polymorphisms to show a lower frequency (on average or proportion of rare ones higher) than synonymous ones . episodic selection can to my view make any prediction about the freq spectrum and is , to my view, hardly testable. Best, Frantz

---

Hola Romina, te escribo en castellano, ya que veo que estas en la UBA. Si queres, despues traduzco esto, si lo vas a enviar a Evoldir.

Hay algunas cosas de tu email que no me quedan claras, pero voy a tratar de dar mis puntos de vista: 1. entiendo que estas trabajando con una sola especie, y que no tenes datos de especies emparentadas, es asi? hablas de "my sample", therefore =1. El test de MacDonald -Kreitman es para comparar non-syn vs syn entre y dentro de 2 species (o muestras, o subepecies, etc). Que programa utilizaste? con que comparaste? 2. hay otro problema que planteas, el cambio en Ne. Hay varios test de neutralidad disponibles (personalmente, me gusta el de Fu 1997). Basicamente, es dificil dsitinguir entre un efecto demografico de seleccion para explicar desvios de m-drift equilibrium. Hay algunos test que son mas sensibles a los efectos demograficos (Fu 1997), otros mas sensibles a seleccion (hay varios de estos tests implementados en el programa DNAsp, de Rozas y Rozas, tiene Fu and Li test D, Fu 1996, Fu 1997). Realmente la manera mas directa es ver otros genes. Los procesos demograficos afectan a todo el genoma, mientras que la seleccion no tiene el mismo efecto en todos los genes(hay un paper muy didactico de David Rand, 1996, ademas tiene varios trabajos en

— / —

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

MegaBACE Sequencing

Dear colleagues,

I wish to hear comments about the MegaBACE DNA Analysis Systems for sequencing or genotyping applications. Are users generally satisfied with these systems? Does anyone have comments with respect to the performance of a system of this type versus other available automated/capillary sequencers (e.g. ABI or others) ? I would be grateful for any information.

Kind regards, Gabriela Ibarguchi

Gabriela Ibarguchi

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

ibarguch@biology.queensu.ca or gibarguchi@biology.ca

tel (613) 533-6000 ext. 75051 fax (613) 533-6617

Microsat divergence software

Dear Evoldirs,

I was wondering if anyone knew of a software program (or programs, better if they are free) that calculates time of divergences between populations) based on microsatellite data (several nuclear loci).

Thank you very much in advance! Amaya Gorostiza

Escuela Nacional de Antropología e Historia México, Distrito Federal tel : 00-52-771-116-3830 fax : 00-52-771-71-72133 e-mail : ilargi@megazero.sct.ub.es

ilargi@megazero.sct.ub.es

NSFReport EukaryoticMicrobes

As follow-up to an NSF-funded workshop, we have now posted a draft of a report entitled:

"Frontiers in Genomics: Insights into Protist Evolutionary Biology"

You can find the report, along with a sign-up for a mailing list devoted to genomics of eukaryotic microbes, at

http://www.biology.uiowa.edu/workshop/-Genomics_of_Eukaryotic_Microbes.html We welcome comments from the community on the white paper.

We will be updating the webpage with relevant info on funding opportunities, meetings, etc.

Laura A. Katz and Debashish Bhattacharya (co-organizers)

–

+ Laura A. Katz, Associate Professor Department of Biological Sciences College Road Smith College Northampton, MA 01063 Phone: 413-585-3825 Fax: 413-585-3786 http://www.science.smith.edu/-departments/Biology/lkatz/ +

Nomogram software

Dear All,

My name is Naomi O'Brien and I am currently writing my honours thesis at Melbourne University under the supervision of Dr. Terry Fletcher and Dr. Mariyln Renfree studying population dynamics and affects on growth after cross-fostering between species in the pademelon and tammar wallaby. I am hoping that if anyone has information on software avalible to generate a nomogram - used as an indicator of developmental stage amongst pouch young that they would get in contact with me via: n.obrien@ugrad.unimelb.edu.au . Any information regard this query would be fantastic. Thanks for your time

Regards Naomi

meng he <daoye419@hotmail.com>

PCR fidelity

I am trying to amplify 2 kb regions in the promoters of Drosophila genes and need a very high fidelity enzyme. I cannot tolerate any PCR errors. I have tried MasterAmp Extra Long Polymerase Mix from Epicentre Technologies but it is encorporates too many errors. I have been trouble shooting with Stratagene's PfuUltra Hot Start High Fidelity enzymes but I did not find appropriate sized bands even after many attempts to modify annealing temperature, and modifying amounts of DMSO, template DNA, salts, dNTPs, enzyme, or primers. Does anyone recommend a very high-fidelity enzyme for amplification of 2kb from Drosophila genomic DNA?

Thanks, Becca Brown rpbrown@uchicago.edu

Rebecca Petersen Brown <rpbrown@uchicago.edu>

Phylgeny from seq

I have constructed a phylogeny based on amino acid alignments, which looks very robust under different methods (parsimony, ML, Bayesian). However, my species have unequal amino acid compositions, which could have biased the results. Any suggestions of how to exclude this possibility?

Thanks,

Martin –

Martin Lercher, Ph.D. Dept. of Biology & Biochemistry University of Bath M.J.Lercher@bath.ac.uk

Phylip guide

Dear Evoldir members, I would like to learn about using Phylip programs, so do you mind suggesting some books or website which is good guide for that programs? Thank you very much for your opinions Binh Thai

Binh Thai School of Ecology and Environment Deakin University P.O. Box 423 Warrnambool, Victoria, 3280 AUSTRALIA Phone: 03 5563 3569, 0408038242 Fax: 03 5563 3462 e-mail: tbt@deakin.edu.au

Plant microsat

Dear Evoldirs,

We are going to analyse the genetic diversity of three endemics plant species from the Canary Islands: Myrica rivasmartinezii; Sambucus palmensis and Gnaphalium teydeum using microsatellites.

Does anyone know any research group working with similar species using microsat?

Thank you in advance

Prof. Dr. Pedro A. Sosa Department of Biology University of Las Palmas Campus Universitario de Tafira 35017 Las Palmas Canary Islands Spain

psosa@dbio.ulpgc.es

Restriction analysis software

Dear all,

I was wondering if anyone knew of a software program (or programs) that can analyze several sequences at the same time and provides you different restriction patterns to make distinction between isolates from the same genus.

Thanking you in advance.

Sincerely,

Monica Romero

PhD student in Environmental Sciences School of Biology University of Newcastle upon Tyne UK Email: h.m.romero-arce@ncl.ac.uk

Restriction analysis software answers

Dear all,

A few days ago we have posted an enquiry concerning restriction analysis software that could analyse several sequences at the same time and provides different restriction patterns to make distinction between the isolates of the same genus.

We have received more inquiries asking to post the answers than solutions to this problem. We think that the most suitable program is the one on the STEC website, answer provided by Dr. T. Whittam:

http://www.shigatox.net/cgi-bin/mlst7/rflppredictor <http://www.shigatox.net/cgi-bin/mlst7/-rflppredictor>

Thanks all of you for your suggestions.

Best,

Monica Romero

Email: h.m.romero-arce@ncl.ac.uk

Anastasios Tsaousis

Anastasios.tsaousis@newcastle.ac.uk

Seed robber

hello

i had once read about an insect (arthropod?) seed robber that cuts holes into flowers (e.g. primula) from below to take the seeds. does anyone know which species (or taxon in general) does this? and could you perhaps point me to a reference?

thanks in advance

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

Phone: +41 1 635.47.55 Fax: +41 1 635.47.80 e-mail: wolfman@zoolmus.unizh.ch

Selection estimation

My current research involves estimating selection affecting lines of plants based on AFLP fingerprint profiles. Can any one suggest me papers and programs That could help me calculating selection coefficients and so on?

Thank you very much.

Pablo Orozco

Pablo Orozco-terWengel Universiteit van Amsterdam The Netherlands p.orozcoterwengel@student.uva.nl

Selection in micros

I'm interested in methods for detecting selection in codominant data (e.g. Microsatellites), so if anybody could help me with this one, it would be of much help, specially if there are programs for such estimation available.

Thanks a lot for any help, Pablo Orozco-terWengel Universiteit van Amsterdam The Netherlands p.orozcoterwengel@student.uva.nl

Similarity indices

Dear Evoldirs,

I was wondering if anyone knew of a free software program (or programs) that calculated similarity indexes (like Dice or Jaccard) based on microsatellites data (several nuclear loci). I would need also to construct the corresponding UPGMA dendrogram. Notice that I have a large data set (more than 300 samples)...

Thank you very much in advance! Véronique Jorge

Véronique Jorge I.N.R.A. - Unité Amélioration, Génétique et Physiologie Forestières Avenue de la Pomme de Pin BP 20619 Ardon 45166 Olivet cedex tel : +33 (0)2 38 41 78 28 fax : +33 (0)2 38 41 48 09 e-mail jorge@orleans.inra.fr

Squat Lobster samples

Dear All,

My name is Deborah Bailie and I am a PhD student at Queens University, Belfast under the supervision of Dr. Paulo Prodöhl and Dr. Dai Roberts. The aim of my project is to study many aspects of the population genetics, phylogeny and phylogeography of squat lobsters with a focus on the species from the genus Galathea and Munida. I am writing to you in the hope that you may be able to help me with my project in regards to obtaining samples to fulfil the phylogeography and phylogeny components. I would only require a small biopsy of 5-10 specimens of each species stored in ethanol so that I could carry out DNA extraction and subsequent analysis. If required vials containing ethanol could be sent to you to aid in the sample transport to me. If this would not be possible, could you provide me with any contacts that may be able to help me? Thanking you in advance for your cooperation in this matter and any help you could provide me with would be greatly appreciated.

Kindest Regards

Deborah

Deborah Bailie Fisheries Genetics and Evolutionary Ecology Lab School of Biology and Biochemistry Queens University of Belfast 97 Lisburn Road Belfast BT9 7BL Northern Ireland

Squat Lobster samples 2

Dear All,

Please forgive me for sending this email twice but it has been kindly pointed out to me that I didn't add my email address last time for replies (it's been one of THOSE weeks!). If you can help, please contact me at d.bailie@qub.ac.uk <mailto:d.baili@qub.ac.uk>

My name is Deborah Bailie and I am a PhD student at Queens University, Belfast under the supervision of Dr. Paulo Prodöhl and Dr. Dai Roberts. The aim of my project is to study many aspects of the population genetics, phylogeny and phylogeography of squat lobsters with a focus on the species from the genus Galathea and Munida. I am writing to you in the hope that you may be able to help me with my project in regards to obtaining samples to fulfil the phylogeography and phylogeny components. I would only require a small biopsy of 5-10 specimens of each species stored in ethanol so that I could carry out DNA extraction and subsequent analysis. If required vials containing ethanol could be sent to you to aid in the sample transport to me. If this would not be possible, could you provide me with any contacts that may be able to help me? Thanking you in advance for your cooperation in this matter and any help you could provide me with would be greatly appreciated.

Kindest Regards

Deborah

Deborah Bailie Fisheries Genetics and Evolutionary Ecology Lab School of Biology and Biochemistry Queens University of Belfast 97 Lisburn Road Belfast BT9 7BL Northern Ireland

b1823099@qub.ac.uk

Staining DNA

Dear Evoldir members,

I would like to know if anyone has used an alternative method to EtBr stainingof dsDNA on agarose gels. I've commercial referrences for megafluor (Euroclone) and syber green (molecular probes) staining methods. However I would like to receive feedback from anyone who has tried any of these.

Thanks.

Catarina Ginja PhD Student cginja@hotmail.com

Vicariance question

Hello all:

I know that vicariance occurs when populations are allopatric. But, if we consider barriers that reduce but not completely eliminate gene flow, can this also be considered vicariance? I have not found a clear-cut answer in the literature.

Thanks, Erika (erika.crispo@mail.mcgill.ca)

Winboot

Dear All,

Could anyone indicate where we could get "Winboot" software: A programme for performing bootstrap analysis for binary data to determine the confidence limits of UPGMA based dendrograms (Yap & Nelson, 1996).

Thank you

Prof. Dr. Pedro A. Sosa Department of Biology University of Las Palmas Campus Universitario de Tafira 35017 Las Palmas Canary Islands Spain psosa@dbio.ulpgc.es

cDNA alignment

Below are the programs suggested by evoldir members for aligning cDNA to genomic DNA. Sorry this didn't get posted earlier.

WEB platforms:

Spidey from NCBI - this works great, but it does not have a nice fasta file output with "-" filling in around your cDNA as it is aligned to your genomic DNA. I would really like to have that. But, it does have a very nice graphical output and an exon table with % match which can easily be copied into excel spreadsheets. THere is also an executable form, but I have not explored this. http://www.ncbi.nlm.nih.gov/IEB/-Research/Ostell/Spidey/ The Sim4 package appears to be very popular, but runs on Unix/Linux, but there is a web interface at http://pbil.univ-lyon1.fr/sim4.php this output can be viewed by the program LalnView, which has a nice graphical image, and is buggy if you try and zoom, but other wise it is very nice (spidey gives you just as much though). This program does output in an alignment format, which is supposed to be ClustalW, but I can't get this converted into any other format by programs that can read *.aln file formats.

Est2genome is part of the EMBOSS package, and a public server that will let you try this out is here: http://bioweb.pasteur.fr/seqanal/interfaces/-est2genome.html or the EMBOSS webpage itself http://www.hgmp.mrc.ac.uk/Software/EMBOSS/-index.html but the output does not have an aligned cDNA with introns padded with "-", but rather aligned with truncated intron sequence. EST_genome has the same output as the EST2genome.

So, in sum, there are programs to predict your intron/exon boundaries and Spidey does this well if you are not unix savy. But as for getting a nice aligned output where you can actually assess the genomic intron sequence, along with your exons, one has to do this by hand as far as I can tell. i did not check ESTwise

All the best and if someone knows of a program or makes one, than can output the sequences in an aligned format, like FASTA, with the cDNA padded with "-" among its exons, please let me know.

Chris

Here is some more documentation and programs:

Sim4: "A Computer Program for Aligning a cDNA Sequence with a Genomic DNA Sequence" Liliana Florea, George Hartzell, Zheng Zhang, Gerald M. Rubin, and Webb Miller Genome Research Vol. 8, Issue 9, 967-974, September 1998 If you don't wish to install it on your own machine (to my knowledge you'll need a linux/unix box), and if your data are not confidential, then you could try using this public web-based server (there are probably others): http://pbil.univ-lyon1.fr/sim4.php

Alternatives: 'est_genome', written by Richard

Mott (and maintained by Peter Rice) and available on the HGMP public http://www.hgmp.mrc.ac.uk/-Registered/Option/est_genome.html Probably estwise, which is part of genewise (available from the Sanger Center www.sanger.ebi.ac.uk), does the job. Be warned, it is slow. You need to keep in mind that to achieve a correct alignment, you need to do the alignment on protein level, otherwise it does not work (as I learned).

PC - there is an executable form of Spidey, but I have not explored this.

Christopher West Wheat, Ph. D.

Max Planck Institute of Chemical Ecology Department of Genetics and Evolution Hans Knoll Str. 8 07745 Jena, Germany

cell: 49-(0)-179-7397059 work phone: 49-(0)3641-571415 fax : 49-(0)3641-571402

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PostDocs

Charleston MarineDiseases

Please contact Lou Burnett about this position <burnettl@cofc.edu>.

POSTDOCTORAL POSITION is available immediately to study the integration of physiological and immunological responses to disease pathogens in shrimp, crabs and oysters. Our laboratory uses a broad array of molecular, cellular, tissue and whole animal techniques to understand the impact of environmental change on the host:pathogen relationship in marine organisms. Applicants must have a Ph.D. in a relevant area of research. Preference will be given to candidates who have used multiple techniques to address a single scientific problem, and to individuals who can work well in a collaborative team. Training or experience in marine biology and familiarity with histological techniques is preferred, but not required. The research laboratory is located in the Hollings Marine Laboratory (<http://www.cof.edu/ ˜ hml>www.cofc.edu/ ˜ hml) at Fort Johnson in Charleston, South Carolina, a facility occupied by 5 partner institutions including the College of Charleston. This NSF/NOAA grant-funded position has a minimum duration of two years. Candidates should send a c.v. and the names of three references to Dr. Karen G. Burnett (burnettk@cofc.edu), College of Charleston, Grice Marine Laboratory, 205 Fort Johnson, Charleston, SC 29412. Additional information about the lab's research and location is available at <http://-

www.cofc.edu/ ˜ burnettk>www.cofc.edu/ ˜ burnettk, <http://www.cofc.edu/ ˜ burnettl>www.cofc.edu/-˜burnettl . –

Erik Sotka <erik.sotka@stanford.edu>

Cincinnati EPA InvasiveSpecies

The USEPA Molecular Ecology Research Branch (MERB), is seeking a POSTDOCTORAL RESEARCH ASSOCIATE, for a two year appointment in Cincinnati, Ohio. The MERB conducts large scale molecular ecology, population genetics, ecological genetics and functional genomics research. We are seeking a highly motivated individual to support and develop ecological genetics research on Great Lakes and Pacific coast estuarine invasive species. Specifically, the incumbent will assist with the study of transport pathways and community genetics of estuarine invasive species between California and Alaska. The incumbent will also assist with the development and application of genomic techniques for targeted screening of invasive species and exploratory characterization of communities in ship ballast and recipient environments. The incumbent will further assist with the application of genomic techniques to characterize invertebrate species diversity in freshwater communities. The ideal candidate for this position will have expertise in population genetics, molecular biology, ecological genetics, or evolutionary biology, and knowledge of modern genomic laboratory methods. Knowledge of nucleic acid extraction, PCR, molecular cloning, and DNA sequencing is essential. Familiarity with SNP detection, bioinformatic databases, quantitative PCR and microarrays is desirable.

The incumbent will work with other MERB researchers on current research projects while developing independent research projects that integrate with existing lines of research being carried out by MERB and other EPA labs. Ph.D. is required. Applicants must either be in the process of completing their degree, or must have received their degree within the last two years. The annual salary for the position is set at $45,000 including benefits. The position is offered under contractual conditions involving annual employment and salary review. The start date for the position is flexible. Please refer to http://www.epa.gov/oamrtpnc/-q0500002/index.htm for more information about this position as well as complete application instructions. Additional information about MERB is available at http://www.epa.gov/nerleerd/merbdes.htm. Please direct all further inquiries to:

Dr. Michael Blum Molecular Ecology Research Branch National Exposure Research Laboratory U.S. E.P.A. Cincinnati, OH and Research Triangle Park, NC (919) 541-2903 blum.mike@epa.gov

IowaStateU ReptileAging

A postdoctoral position is available to study the comparative biology of aging in reptiles, with primary focus on snakes, turtles, and lizards. The postdoc would be through my lab at Iowa State University, but would coordinate with several collaborators at other institutions. The position is funded by an NSF grant for field and laboratory studies of life-history ecology and evolution, with special emphasis on senescence. Desired skills include: a familiarity with molecular techniques (e.g., gene sequencing, gene expression, primary cell culture), and/or experience with physiological techniques (e.g., mitochondrial techniques, enzyme assays, oxygen consumption), and an interest in participating in fieldwork across North America. Field experiments focus on multiple longterm mark/recapture studies in collaboration with the investigators conducting those studies. A desire to have fun, a willingness to work both independently and as part of team, and an openness to spontaneous field excursions are more important than any particular skill. To apply, please send a letter and CV to Anne Bronikowski at abroniko@iastate.edu. (For additional information see http://www.eeob.iastate.edu/faculty/-BronikoA/homepage.html)

JohnInnesCentre LongDistanceDispersal

A post-doc position in theoretical population biology is available in Norwich, England, to work on 'The Impact of Long-Distance Dispersal on Population Genetics'.

The aims are to investigate the effects of LDD on population structure, to study the interaction of LDD with

natural selection and to develop statistics to characterise population genetic structure when there is LDD. LDD is important in many biological situations and has a close connection with complexity theory. This is an excellent opportunity for a post-doc to apply current developments in maths and physics to an important biological problem. This project is a collaboration between me and Michael Shaw at the University of Reading.

For further information, go to www.jic.ac.uk/-staff/james-brown/job1439.htm or email me: mailto:james.brown@bbsrc.ac.uk.

James Brown

Dr James K M Brown Dept of Disease & Stress Biology, John Innes Centre, Colney Lane, Norwich, NR4 7UH, England Phone 01603 450615 Fax 01603 450045 http://www.jic.bbsrc.ac.uk/staff/james-brown

McMasterU Bioinformatics

Bioinformatics Scientists:

A bioinformatician with an excellent background in biology and specifically Systems Biology is required at McMaster University in Hamilton, Ontario to provide support to scientists involved in a large-scale Functional Genomics project. The incumbent should have a Ph.D or Masters degree in Biotechnology/Bioinformatics/Molecular Biology/Biochemistry with 3 or more years experience in research. Demonstrated knowledge in the design and development of database programs and skill in the use of Perl/Java/Unix systems is desired. Strong interpersonal and communications skills and the ability to work with a multi-disciplinary team are desired. Individuals with experience in biological networks and the integration of data from various platforms into a comprehensive database will be given priority. Closing date for applications is Nov 30 2004.

Dr. Peter Summers Asst. Professor of Biology and Project Mgr. McMaster University 1280 Main St. West HAMILTON, L8S 4K1 905-525-9140 Ext. 23267

summers@mcmaster.ca

SUNYStonyBrook DrosophilaMetabolomics

Please post the following:

Postdoc in metabolic genomics and molecular evolution in Drosophila

An NIH supported postdoctoral position is available to work on the molecular evolution, population genetics, physiology, and functional genomics of metabolic genes in Drosophila. The position is for two years and is available starting immediately, although there is flexibility in any start date.

Applicants could possess skills in any of several areas including Drosophila genetics, molecular evolution, population genetics, or physiological genetics.

If interested please contact Walt Eanes, Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY 11794 or e-mail walter@life.bio.sunysb.edu.

Walter F. Eanes Professor Dept. of Ecology and Evolution State University of New York Stony Brook, New York 11794 weanes@notes.cc.sunysb.edu

UAlaska Adaptation

POST-DOCTORAL POSITIONS. The University of Alaska (Anchorage-Fairbanks-Juneau) invites applications for Post-doctoral Fellowships supported by NSF's Alaska EPSCoR research focus area in Population Genetics of Adaptation to Arctic and Alpine Environments. Faculty in this focus area are using molecular population genetics to investigate adaptation to extreme conditions at high latitudes and elevations (e.g., cold, short growing seasons, low oxygen availability at high elevation).

Bert B. Boyer: obesity and diabetes genetics in Alaska Natives Serguei V. Drovetsky: population genetics and comparative phylogeography of high latitude and elevation taxa Pamela Groves: genetic responses to climate change using ancient DNA George M. Happ: genetic diversity in histocompatibility loci, bacteria, and prions Thomas G. Marr: serially subtracted cDNA li-

braries and cloning of rare tissue and environmental transcripts Kevin G. McCracken: population genetics/phylogeography of waterfowl; adaptive properties of Andean hemoglobins Link E. Olson: mammalian phylogenetics; phylogeography and body size variation in alpine mammals Matthew S. Olson: plant adaptation, biogeography, mating systems, speciation, and disease dynamics Naoki Takebayashi: theoretical population genetics, evolution of self-incompatibility and plant mating-systems D. Lee Taylor: ecology and molecular evolution of cold-adaptation in high-latitude fungi Kevin Winker: avian genetics Diana E. Wolf: plant evolutionary genetics, evolution of reproductive strategies

Fellowships are for two years and will provide annual salaries of $42,000 with excellent benefits and research funds of $24,000. We seek applications from scientists with backgrounds in evolutionary biology, ecology, genetics, molecular biology, or physiology. Priority will be given to applicants who demonstrate potential for research on the population genetics of adaptation that bridges multiple faculty. Review of applications will begin 3 December 2004 and continue until up to four positions are filled. Starting dates are flexible. Faculty research interests and application instructions can be found at www.alaska.edu/epscor/. We encourage potential applicants to contact relevant faculty members before applying. Alaska EPSCoR (Experimental Program to Stimulate Competitive Research) is funded by the National Science Foundation, grant number EPS-0346770.

Kevin G. McCracken Institute of Arctic Biology & Department of Biology and Wildlife University of Alaska Fairbanks Fairbanks, Alaska 99775 office (907) 474-6419 Rm. 228 WRRB fax (907) 474-6967 email: fnkgm@uaf.edu http://mercury.bio.uaf.edu/-˜kevin_mccracken/

UCanterbury EvolDiseaseResistance

UNIVERSITY OF CANTERBURY

School of Biological Sciences Christchurch, New Zealand

We are seeking to appoint a Post-Doctoral Fellow to conduct research on a two-year funded project on "Emerging Infectious Diseases and Amphibian Population Declines".

The Post-Doctoral Fellow will conduct research on diseases that contribute to amphibian population declines, immunological mechanisms that confer resistance to these diseases, and the consequences of the virulence of pathogens and host immunity on population viability. The research will interface with projects currently being conducted in our laboratory (1) on the role of the MHC in encoding social behaviours and disease resistance, (2) on the role of innate immunity in producing antimicrobial peptides that confer disease resistance, and (3) on genetic variability within and among populations of host species and their pathogens. One goal of the project is to investigate the hypotheses that infectivity and virulence decrease, or host immune defences increase, under conditions in which pathogens and their hosts have had an opportunity to co-evolve.

The research project takes an integrative, multidisciplinary approach and makes use of techniques of molecular genetics, microbiology, and immunology.

The successful candidate will be a member of a large interactive research group, and will have opportunities to become involved in a variety of related student projects. Experience in molecular biology, immunology, and/or biochemistry with a strong interest in evolution is desirable.

For more information on the School of Biological Sciences see the web page www.biol.canterbury.ac.nz . For more information on the project please contact Dr Bruce Waldman, Email: bruce.waldman@canterbury.ac.nz , Voice: +64 3 364 2066, FAX +64 3 364 2590.

Further details about the position are available at http://www.canterbury.ac.nz/hr/vacancies/science/-bs11353_1204.shtml .

Applications should include the application form, a curriculum vitae, names of three referees, university transcripts, and a brief statement of research interests and goals. The closing date is 17 December 2004. All application materials should be sent to the Human Resources Administrator, College of Science, University of Canterbury, Private Bag 4800, Christchurch, New Zealand, Email: hr@science.canterbury.ac.nz .

Bruce Waldman <bruce.waldman@canterbury.ac.nz>

UEastAnglia ParasiteEvol

School of Biological Sciences UEA Norwich

Postdoctoral research associate

Gastrointestinal parasites, the MHC and parasite- mediated selection in the Seychelles warbler

A NERC funded postdoctoral position is available from February 2005 for a period of one year, in the first instance. The researcher will develop a non-invasive protocol, based on modern molecular PCR methods, to determine the type and intensity of gastrointestinal (GI) parasite infections in individual Seychelles warblers. This protocol will then be used, in conjunction with the fitness and MHC genotype data already available, to investigate the affect of GI parasites and their interaction with the MHC in the simple and isolated system provided by the Seychelles warbler.

Applicants should hold, or be about to obtain, a PhD in a relevant discipline such as evolutionary or molecular ecology or parasitology. Practical experience in modern molecular techniques such a PCR, primer development and DNA sequencing is essential. Field experience will also be a benefit (but not essential), as the researcher may then have the opportunity to assist with fieldwork.

The project will be undertaken in the Evolution and Conservation group which is within the School of Biological Sciences (RAE 5-rated), and is also part of the Centre for Ecology, Evolution and Conservation (CEEC). The school and research centre provide excellent research facilities and a stimulating and dynamic research environment. As part of the Norwich Research Park, the School also has access to the molecular genetics facilities provided by the John Innes Centre. Further information about the school and research park can be found at http://www.uea.ac.uk/bio/ and at http:/-/www.uea.ac.uk/bio/ Salary is on the RA1A pay scale. Salary range £19,460 - £24,820

Informal enquiries to Dr David S Richardson Email: david.richardson@uea.ac.uk Further particulars including full project details and an application form should be obtained from the Personnel Office, University of East Anglia, Norwich, NR4 7TJ (e-mail: personnel@uea.ac.uk or answer phone: 01603 593493). Closing date is 22nd October 2004. Please quote reference number XXXX. If you have not heard from us by 8 November you can assume that you have been unsuccessful on this occasion Dr. David S. Richardson School of Biological Sciences, University of East Anglia, Norwich NR4 7TJ England

Telephone 01603 591496 email david.richardson@uea.ac.uk FAX 01603 592250

"David. S. Richardson" <david.richardson@uea.ac.uk>

UIllinoisUrbanaChampaign Recombination

Postdoctoral research position at the University of Illinois at Urbana-Champaign.

Applications are invited for a postdoctoral research fellow to work collaboratively on research funded by NSF FIBR grant "Causes and consequences of recombination". The successful applicant will participate in field and laboratory research that focuses on the evolutionary ecology of Daphnia in both the water column and the dormant egg bank. Skills in at least one, and ideally more, of the following areas: evolutionary ecology, field ecology, laboratory culture of zooplankton, molecular markers. The postdoctoral associate will spend several weeks each year in residence at Michigan State's Kellogg Biological Station. At least two years of funding are available. The successful applicant will have completed all requirements for the Ph.D. by the start date. The position is available immediately, but could start as late as 1 May 2005 if a suitable candidate is not found sooner.

To apply, submit a letter of interest that describes your research background, a C.V., and the names and email contacts of three references to: Carla Cáceres (caceres@life.uiuc.edu). Review of applications will begin November 22, 2004 and continue until a suitable candidate is found.

– Dr. Kimberly Hughes School of Integrative Biology Program in Ecology and Evolutionary Biology 515 Morrill Hall (mailing address) or 465B Morrill Hall (office) 505 S. Goodwin Ave. University of Illinois Urbana, IL 61801 Ph: 217-244-6632 FAX: 217-244-4565 http://www.life.uiuc.edu/kahughes/ Kim Hughes <kahughes@life.uiuc.edu>

ULeedsSheffield 4 Evol

The following posts were advertised in Nature on 7 October 2004:

The Universities of Leeds and Sheffield

Four postdoctoral research associate positions are avail-

able to join a NERC-funded interdisciplinary team investigating the ecological and genetic responses to abiotic stress in wild populations of Arabidopsis lyrata ssp. petraea at its range margins. A. lyrata is a close relative of the model organism A. thaliana.

These posts are tenable from 1 January 2005 for 1 year, in the first instance. The project is funded for 3 years.

Closing date for all posts: 29 October 2004

Salary from UKP19,400 pa for all posts

Department of Animal & Plant Sciences, University of Sheffield

Post 1: The post holder will investigate the impacts of physiological, metabolomic and developmental characteristics on the fitness responses of Arabidopsis lyrata ssp. petraea populations to controlled environments typical of the northern and southern limits to the distribution of the species. Technical assistance will be provided. Applicants should have experience in the metabolomic or physiological analysis of plants, or alternatively be experienced in the use of mass spectrometry. A PhD in a relevant discipline is essential. Ref: R3455

Post 2: The post holder will be responsible for bioinformatic and evolutionary genetic analyses, and managing and analysing data from transcriptomic and array-based genomic experiments. The appointee will assist with the analysis of proteomics, sequence and population genomics data, in collaboration with other postdoctoral scientists on the project. Applicants should have expertise in management and analysis of data from genomic experiments, preferably in an evolutionary context. A PhD in bioinformatics, genetics or a related discipline is essential. Experience of plant systems is desirable. Ref: R3456

Post 3: The post holder will conduct population genetic screening and analyses. Specifically, the post holder will be responsible for developing and genotyping a mapping panel of microsatellite markers, and for the development and typing of neutral markers such as SNPs or AFLPs to conduct a population genomics survey to identify genomic regions under selection. Technical assistance will be provided. Analytical work will include QTL mapping and other population genetics. Applicants should have a PhD in molecular ecology, population genetics or a related discipline, and expertise in molecular genotyping and population genetics analysis. Experience of plant systems is desirable. Ref: R3457

For full post details / application pack for all the above posts visit:

www.sheffield.ac.uk/jobs or email: jobs@sheffield.ac.uk tel: 0114 222 1631 (24hr)

Please quote Ref. in all enquiries

Department of Biology, University of Leeds

Postdoctoral Research Associate: Population Biologist

A position is available for a plant population biologist interested in spatial and evolutionary aspects of demography. The work will involve extensive field work surveying populations of the focal species across its European distribution, and the collection of samples for analysis by other members of the project team. Ref: 310084

Informal enquiries are welcome and should be directed to Dr. William Kunin, School of Biology, University of Leeds (0113 343 2857; w.e.kunin@leeds.ac.uk).

Application forms and further particulars for this position only may be obtained from www.notes2.leeds.ac.uk/jobs/unijob.nsf/Jobs or Ms Pamela Hardie Tel 0113 343 7493, (email: fbsjobs@leeds.ac.uk),

Faculty Staff Recruitment Office, Room 10.118, Level 10, Worsley Building, University of Leeds, LS2 9JT

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T A Burke (Professor of Molecular Ecology) Dept of Animal & Plant Sciences - Univ of Sheffield - Sheffield - S10 2TN - UK Tel +44 (0)114 222 0096 - Sec +44 (0)114 222 4374 (Helen Davies) Fax +44 (0)114 222 0002 - Email t.a.burke@sheffield.ac.uk http://www.shef.ac.uk/misc/groups/molecol/ http://-www.shef.ac.uk/misc/groups/molecol/

UMaryland InsectEusociality

Postdoctoral Position at the University of Maryland to study the Evolution of Insect Societies and Eusociality

Postdoctoral research opportunity to study the evolution of eusociality using termites as a model system. The focus of the work will be study of reproductive dynamics, caste polyphenism, and social evolution using lab manipulations, field studies, molecular genetic techniques, and theoretical models. Comparative investigation of basal termite groups will help infer selective influences that contributed to eusocial evolution in Isoptera. Reproductive soldiers, an unusual fertile caste that may have been the precursor to modern sterile soldiers, could be another novel area of re-

search. A combination of independent and collaborative research options involving experimental and theoretical work are available. Experience with molecular genetic techniques, population genetics, and data analysis required. Three years of NSF support with preferred start date February or March 2005. Please see our lab webpage at www.thornelab.umd.edu <http:/-/www.thornelab.umd.edu/> Applicants should send a cover letter describing research interests and career goals, a CV, publications, and names, addresses and phone numbers of three references to: Barbara Thorne, Department of Entomology, University of Maryland, College Park, MD 20742 or bthorne@umd.edu <mailto:rd12@umail.umd.edu>.

UNotreDame RhagoletisSpeciation

Postdoctoral Research Associate

Ecological and Molecular Genetics of Sympatric Host Race Formation and Speciation in Rhagoletis

A postdoctoral research position is available to investigate the genetics of host fruit odor discrimination and diapause variation in the apple maggot fly, Rhagoletis pomonella, in the laboratory of Dr. Jeffrey L. Feder at the Department of Biological Sciences, University of Notre Dame, and South Bend, Indiana, 46556-0369. Research: The main objective of the study is to resolve the genetics of key plant-related adaptations responsible for sympatric host shifts, reproductive isolation and speciation in these flies. Research will involve QTL mapping of fruit odor discrimination and diapause traits using developed microsatellite, cDNA, and candidate gene markers, as well as population surveys of R. pomonella attempting to trace the genetic origins of these traits. Qualifications: Dissertation or postdoctoral work in molecular population genetics and evolution is required, with candidates possessing gene mapping data acquisition and analysis skills preferred. Salary: Salary will depend on experience. Benefits are included. Position is for up to 24 months. Closing date: Position will remain open until filled. Contact: Send curriculum vitae, description of research experience, and names, addresses, phone numbers, and e-mail of three references to: Dr. Jeffrey L. Feder, Department of Biological Sciences, University of Notre Dame, and South Bend, Indiana, 46556-0369. Electronic submissions are acceptable: jfeder@nd.edu. Telephone contact: (574)-631-4159. The University of Notre Dame is an Equal Opportunity/Affirmative Action/Equal Access Employer.

jfeder@nd.edu jfeder@nd.edu

UOklahoma EvolBiol

POSTDOCTORAL FELLOW - THE UNIVERSITY OF OKLAHOMA BIOLOGICAL STATION (UOBS). The University of Oklahoma (OU), Norman, Oklahoma, invites applications for a Postdoctoral Fellowship in Ecology or Evolutionary Biology to be a resident research scientist based at the university's Biological Station (UOBS) on Lake Texoma (Texas-Oklahoma border; 2-hr drive from campus). This is a 12-month (0.75 FTE; equivalent to 9 mo) appointment with benefits (i.e. medical, dental), renewable on an annual basis for up to three years. The fellow will be responsible for developing a research program in conjunction with UOBS faculty and assisting with the educational outreach program at the station via occasional talks/demos to visiting groups. Previous correspondence with UOBS faculty, though not necessary, is recommended. In addition, the fellow will be given the opportunity to teach a two-week long (3 cr. hr.) course at the Station during summer for extra compensation. The targeted starting date is April 1, 2005, but is flexible. More information on UOBS can be found at http://www.ou.edu/-uobs. Applicants should include a curriculum vitae, reprints of representative publications, a statement of the research to be conducted at UOBS and arrange to have three letters of recommendation sent on the applicant's behalf. All materials can be sent either electronically to Lawrence J. Weider, Director, UOBS (ljweider@ou.edu) or sent to: Postdoctoral Search Committee, The University of Oklahoma Biological Station, HC-71, Box 205, Kingston, Oklahoma 73439. Applicant review will begin 15 December 2004 and continue until the position is filled. The University of Oklahoma encourages diversity in the workplace. The University of Oklahoma is an Affirmative Action/Equal Opportunity employer.

Lawrence J. Weider Director, The University of Oklahoma Biological Station HC-71, Box 205 Kingston, OK 73439 phone: 1-405-325-7438 FAX: 1-580-564-2479 ljweider@ou.edu

and

Associate Professor Department of Zoology University of Oklahoma Norman, OK 73019-6121 phone: 1-405-

325-4766 FAX: 1-405-325-0835

"Weider, Lawrence J." <ljweider@ou.edu>

UOtago EvolParasites

Postdoc:

UNIVERSITY OF OTAGO Te Whare Wananga o Otago

Dunedin, New Zealand

Postdoctoral Research Fellow Molecular Ecology of Parasites (Fixed Term)

DEPARTMENT OF ZOOLOGY

Applications are invited from suitably qualified persons for the position of Research Fellow in the Department of Zoology. This position, in the laboratory of Professor Robert Poulin, is funded by the Marsden Fund and is available for three years.

The appointee will have expertise in molecular ecology, particularly with microsatellite markers; experience in experimental parasitology, especially with trematodes, would be an important asset but is not essential.

The research project aims to investigate the influence of relatedness among parasites sharing the same host on the parasites' strategies of development and host exploitation. The research will involve three local trematode species, parasitic in freshwater or intertidal ecosystems, all amenable to both field and laboratory investigations. The work involves (1) characterising microsatellite loci and genotyping individual parasites at multiple loci to estimate levels of relatedness in field-infected hosts, and (2) in laboratory experiments, using single- and multiple-genotype infections to quantify the growth of parasites in their host, their ability to alter host behaviour, and their likelihood to abbreviate their life cycle.

Applicants must have completed a PhD and previous scientific publications in a relevant field. We wish to fill this position by February 2005 or soon thereafter.

Specific enquiries may be directed to Professor Robert Poulin, Department of Zoology, Tel 03 479 7983, Fax 03 479 7584, Email robert.poulin@stonebow.otago.ac.nz

Reference Number: A04/163. Closing Date: Wednesday 1 December 2004.

APPLICATION INFORMATION

For application information and a full job description go to: www.otago.ac.nz/jobs Alternatively, contact the Human Resources Division, Tel 64 3 479 8269, Fax 64 3 474 1607, Email sharon.pine@stonebow.otago.ac.nz

Equal opportunity in employment is University policy.

E tautoko ana Te Whare Wananga o Otago i te kaupapa whakaorite whiwhinga mahi. –

Prof. Robert Poulin, FRSNZ Department of Zoology University of Otago P.O. Box 56 Dunedin New Zealand

Courier: 340 Great King Street, Dunedin, New Zealand

phone +64 3 479-7983 fax +64 3 479-7584 http://-www.otago.ac.nz/Zoology/staff/academic/poulin.html (home email: poulin@xtra.co.nz) (home email: poulin@xtra.co.nz)

URochester Wolbachia

POSTDOCTORAL POSITIONS, Biology of Wolbachia -Insect Associations, University of Rochester.

Two postdoctoral positions are available immediately at the University of Rochester. The positions are funded through a broadly integrative, cross-disciplinary Frontiers in Biological Research (FIBR) grant to investigate Wolbachia and its effects on insects. One opening is in Jack Werren's lab, where the research will focus on evolutionary genomics of Wolbachia and their Nasonia hosts. The work will involve collaborations with The Institute of Genomics Research (TIGR) and the Indiana University Center for Genomics and Bioinformatics (CBG). The other opening is in John Jaenike's lab, where the research focus is on the ecology and evolution of Wolbachia - host associations in natural communities of mycophagous insects and on the population genetics of resistance to male-killing Wolbachia. For further information, please contact either Jack Werren (585-275-3694; werr@mail.rochester.edu); or John Jaenike (585-275-0009; joja@mail.rochester.edu).

The Department of Biology at Rochester has an active and collegial group of labs in the general area of evolutionary genetics. The faculty currently includes (or will be arriving soon) Jack Werren, John Jaenike, Allen Orr, Tom Eickbush, Jim Fry, Daven Presgraves, and Justin Ramsey. In addition, the research involves active collaborations with other Wolbachia research groups, particularly those in the Wolbachia Frontiers in Biological Research Project (DeSalle at American Museum of Natural History, Windsor at the Smithso-

nian Tropical Research Institute, Sullivan at UC Santa Cruz, Stouthamer, Heraty and Hayashi at UC Riverside, Wernegreen at the Marine Biological Laboratory, and Tettelin at The Institute of Genomic Research). Interactions and collaborations with these other labs will be encouraged.

Preference will be given to individuals that have experience with molecular techniques such as PCR and DNA sequencing and analysis. Experience in entomology or insect ecology (Jaenike), or molecular evolution, bioinformatics and/or microarray analysis (Werren) is also desired.

Applicants should send a cover letter describing your research interests and skills, CV, relevant reprints, and the names of three references to: Jack Werren, Department of Biology, University of Rochester, Rochester, NY 14627. Screening of applications will begin November 1, 2004.

The University of Rochester is an Equal Opportunity/Affirmative Action employer.

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USDA OysterGeneExpression

Please pass on the announcement below to any qualified candidates.

USDA/Agricultural Research Service, Shellfish Genetics Program Job Title: Postdoctoral Position in Animal Genetics Posting Number: 303567 Date Posted: 09/29/2004

Job Description:

The USDA, Agricultural Research Service, Shellfish Genetics Program is seeking a POSTDOCTORAL RESEARCH ASSOCIATE, (Animal Research Geneticist) for a TWO YEAR APPOINTMENT at the Hatfield Marine Science Center in Newport, OR. Ph.D. is required. Salary is commensurate with experience ($48,947 -$76,261) plus benefits. The incumbent is expected to work independently to develop and apply methods for examining the responses of oysters to environmental stress at the level of gene transcription using serial analysis of gene expression (SAGE), suppressive subtractive hybridization (SSH), and quantitative PCR, and to examine the relationship between gene expression and resistance to summer mortality in the field in order to identify candidate loci for marker-assisted selection. Recent Ph.D. in genetics or closely related field required. Knowledge of nucleic acid extraction, PCR, molecular cloning, and DNA sequencing essential. Familiarity with bioinformatics databases, SAGE, SSH, and quantitative PCR desirable. Refer to www.ars.usda.gov/careers for further information on Postdoctoral Research Associate Jobs, for complete application instructions, and the full text announcement (RA-05-008H). Send application materials and references to the contact listed below.

Citizenship Restrictions Apply. If you are not a U.S. citizen, please refer to the website listed below that provides detailed information on the circumstances under which noncitizens may be employed. Additionally, this website provides information on countries whose nationals may be hired by ARS. These countries are nations that have treaties with the United States or are nations specifically authorized by Congress. http://-/www.opm.gov/employ/html/Citizen.htm Details on application procedures are available at: http://-www.afm.ars.usda.gov/divisions/hrd/hrdhomepage/-vacancy/pd962.html The official USDA website ad is at: http://www.afm.ars.usda.gov/divisions/hrd/-hrdhomepage/vacancy/05008.htm The advert above is available online at: http://www.postdocjobs.com/-jobs/303567.shtml The website for the Hatfield Center is: http://hmsc.oregonstate.edu/ A little information on the ARS Shellfish Genetics Program is at: http://-nfsprc.usda-ars.orst.edu/aquaculture/aquaculture.htm USDA/ARS is an equal opportunity provider and employer.

Contact: Dr. Mark Camara Hatfield Marine Science Center USDA/Agricultural Research Service 2030 SE Marine Science Dr. Newport, OR 97365 U.S.A.

Email: Mark.Camara@oregonstate.edu Phone: 541 867-0296 Fax: 541 867-0138 Website: http://-www.ars.usda.gov Mark D. Camara USDA/ARS Aquaculture Genetics OSU - Hatfield Marine Science Center 2030 SE Marine Science Dr. Newport, OR 97365

Office: 541-867-0296 Fax: 541-867-0138 Mailto: Mark.Camara@oregonstate.edu

Mark Camara <mark.camara@oregonstate.edu>

UTennessee EvolTheory

Postdoc in Evolutionary Theory University of Tennessee, Knoxville

I am looking for a postdoctoral researcher interested in using mathematical models for studying one or more of the following topics: speciation, adaptive radiation, coevolution, macroevolution, and cultural evolution. For the first three topics the emphasis will be on multilocus genetics, spatial structure, and interactions of ecological and evolutionary processes. An ideal candidate will be using a combination of simple analytical models and intensive numerical simulations and will be motivated by biological questions and data. I expect to have funding for 2 years.

Send curriculum vitae, description of research interests and experience, and names, addresses, phone numbers, and e-mail of three references. Informal inquiries are welcome.

Sergey Gavrilets Department of Ecology and Evolutionary Biology Department of Mathematics University of Tennessee, Knoxville TN 37996 phone: (865) 974-3065 e-mail: gavrila@tiem.utk.edu web: www.tiem.utk.edu/ ~ gavrila gavrila <gavrila@tiem.utk.edu>

UWales MolEvolEcol

UNIVERSITY OF WALES, BANGOR

SCHOOL OF BIOLOGICAL SCIENCES

Postdoctoral Researcher in Molecular Ecology

R&A Grade 1A: £19,460 - £29,128 p.a. Applications are invited for a Postdoctoral University-funded three-year post in the School of Biological Sciences, University of Wales, Bangor (http://biology.bangor.ac.uk/-school/), working with Professor G. R. Carvalho and members of a newly established Group focusing on the molecular ecology of aquatic animals and fisheries genetics. The appointee will join a team using molecular markers to investigate the origins and significance of population and species biodiversity. In 2006 the Group will transfer to the new Environment Centre whose remit will be to provide a high-profile hub for coordinating strategic research and training in the environmental sciences sector in Wales. In addition to independent research, the appointee will assist in the development of the new Group including submission of research grant applications and the management of projects and research students.

Applicants should possess a PhD in molecular ecology or associated areas, with some postdoctoral experience, together with a strong commitment to timely publication and collaborative research. Although applications are welcomed from those working in any area of molecular ecology, research interests and experience in environmental genomics and/or quantitative genetics within an evolutionary context are especially encouraged.

The appointee will join a thriving Evolutionary Ecology Group, which in addition to a focus on the evolution of population differentiation, detection of selection in the wild, fisheries genetics and analysis of ancient DNA in aquatic animals, includes interests in the molecular evolution of fragmented populations, the evolution of marine mating systems, the molecular ecology of island reptiles, behavioural ecology, molecular phylogeny of venomous snakes and studies on the impacts of GMOs. The School is well equipped with dedicated sequencing facilities, many PCR blocks, microbiology and genomic facilities etc.

Application forms and further particulars should be obtained by contacting Human Resources, University of Wales, Bangor, Gwynedd LL57 2DG; tel: (01248) 382926/388132; e-mail: personnel@bangor.ac.uk

Please quote reference number 04-4/69 when applying.

Closing date for applications: Friday 26th November, 2004. Interviews will be held week commencing 13th December, 2004.

Informal enquiries can be made by contacting Professor Gary Carvalho, e-mail: g.r.carvalho@hull.ac.uk or tel: +44 (0)1482 465540 (office) / tel: +44 (0)1482 465536 (laboratory).

Committed To Equal Opportunities

Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to Golding@McMaster.CA. At this time provide a binary six letter code that determines which messages will be mailed to you. These are listed in the same order as presented here — Conferences; Graduate Student Positions; Jobs; Other; Post-doctoral positions; WorkshopsCourses. For example to receive the listings that concern conferences and post-doctoral positions this would be 100010. Messages are categorized on the basis of their subject headings. If this subject heading is not successfully parsed, the message will be sent to me at Golding@McMaster.CA. In addition, if it originates from 'blackballed' addresses it will be sent to me at Golding@McMaster.CA. These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notifcation of the availability of a monthly review pdf file.

To be removed from the EvolDir mailing list please send an email message to Golding@McMaster.CA. Note that 'on vacation', etc, style messages are automatically filtered and should not be transmitted to the list (I hope), but should you wish to avoid the e-mail's your code can be temporarily changed to 000000.

To send messages to the EvolDir direct them to the email evoldir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as LaTeX files, Excel files, etc. ... plain old ASCII will work great and can be read by everyone. Add a subject header that contains one of the keywords "Conference, Grad, Job, Other:, Postdoc, Workshop" and then the message stands a better chance of being correctly parsed.

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. So 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.