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# E v o l D i r

March 1, 2010

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

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## Foreword

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

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

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



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### Asilomar Wolbachia Jun9-14

Conference: 6th International Wolbachia Conference  
 Asilomar Conference Center, June 9-14, 2010 <http://wolbachia2010.neb.com/>  
 From cell biology, genomics and proteomics, to behavior, ecology and biogeography, this conference brings together leading investigators from a diversity of disciplines to focus on Wolbachia and other bacterial endosymbionts.

Confirmed speakers include:

S. Bordenstein, Vanderbilt University, USA K. Bourtzis, University of Ioannina, Greece S. Charlat, University of Lyon, France S. Dobson, University of Kentucky, USA T. Fukatsu, University of Tokyo, Japan P. Hammerstein, Humboldt University, Germany J. Jaenike, Univ. of Rochester, USA T. Kurtti, University of Minnesota, USA B. McGraw, University of Queensland, Australia T. Miller, UC Riverside, USA W. Miller, University of Vienna, Austria S. O'Neill, University of Queensland, Australia J. Rasgon, Johns Hopkins University, USA S. Sinkins, Oxford University, UK R. Stouthamer, UC Riverside, USA W. Taylor, Liverpool School of Tropical Medicine, UK M. Turelli, UC

Davis, USA F. Vavre, University of Lyon, France J. Werren, University of Rochester, USA E. Zchori-Fein, Volcani Center, Israel

Deadlines:

March 1, 2010: Applications for NSF-sponsored student/postdoctoral travel support  
 March 14, 2010: Meeting attendance and housing registration  
 March 15, 2010: Abstract submission

We look forward to seeing you at Asilomar!

The Organizing Committee:

Molly Hunter Catharina Lindley Barton Slatko Bill Sullivan

[mhunter@Ag.arizona.edu](mailto:mhunter@Ag.arizona.edu) [mhunter@Ag.arizona.edu](mailto:mhunter@Ag.arizona.edu)

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### Atlanta SEEC Mar26-28

2010 STUDENT Southeastern Ecology and Evolution Conference (SEEC)! [www.seec.biology.gatech.edu](http://www.seec.biology.gatech.edu)  
 Register by March 5th and get a FREE stainless steel coffee MUG and T-SHIRT!

Georgia Institute of Technology in ATLANTA, GA.  
March 26-28.

Dear Biologists,

The Behavior, Ecology and Evolution Research Society (BEERS) of Georgia Tech invites you to attend the 7th annual SEEC conference, held Friday March 26 to Sunday the 28th, 2010.

Organized by and geared toward students, this conference brings together young scientists from around the Southeast to present their research in oral and poster presentations in a fun and relaxed atmosphere. The conference will also include an opening mixer, a BBQ Saturday evening, and keynote addresses from leading researchers in ecology and evolution, including Dr. Joshua Weitz < <http://ecothery.biology.gatech.edu/> > and Dr. Meghan Duffy < <http://www.duffylab.com/> > from Georgia Tech.

At the end of the conference, field trip opportunities on Sunday include an excursion down the street to the Georgia Aquarium < <http://www.georgiaaquarium.org/> >, the world's largest aquarium!

- OR -

A trip down the street to the Atlanta Botanical Garden < <http://www.atlantabotanicalgarden.org> >, where the Orchid Daze: Tower of Flowers exhibit is happening!

For more conference information, please visit SEEC 2010 online at [www.seec.biology.gatech.edu](http://www.seec.biology.gatech.edu) Join SEEC on Facebook: <http://www.facebook.com/#!/event.php?eid=254711534535> Student Poster or Oral Abstract Submissions:

\*The deadline for Abstract Submission is March 19, 2010\*

In keeping with SEEC and other regional EEC tradition, posters and oral presentations are limited to undergraduate and graduate students. Faculty and post-docs are welcome and encouraged to attend in support.

Hope to see you in the warm Atlanta springtime,

Nicholas Parnell Ph.D. candidate Dept. of Biology Ecology, Evolution and Behavior Program Georgia Institute of Technology Atlanta, GA

Nick Parnell <nfpfish@aol.com>

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## Budapest Evolution Cooperation Apr18-20

The evolution of cooperation is a hot topic at the moment and this conference will certainly be of interest to others in the field.

CONFERENCE: "Cooperation: an interdisciplinary dialogue," Budapest, 18-20th April 2010. <http://incore2010.elte.hu> Registration open and call for abstracts

This will be a short but wide-ranging conference on the evolutionary and organismic bases of cooperative behaviour, with perspectives from the fields of behavioural ecology, economic game theory, theoretical biology, neurobiology and experimental evolution.

Confirmed speakers include the following people:

Robert Boyd (UCLA) Samuel Bowles (Santa Fe/University of Sienna) Redouan Bshary (University of Neuchâtel) Angus Buckling (University of Oxford) Sue Carter (University of Illinois at Chicago) Terry Deacon (UC Berkeley) Simon Gächter (University of Nottingham) Ronald Noë (University of Strasbourg) Andy Radford (University of Bristol) Andrew Russell (University of Sheffield) Karl Sigmund (University of Vienna) Tania Singer (Max Planck Institute, Leipzig) Douglas Yu (University of East Anglia)

Registration is now open (150/100 for students) and we are accepting abstracts for oral and poster presentations via the conference website at <http://incore2010.elte.hu>. There will be a small number of travel bursaries available for students - if you would like more information about these once it becomes available, please contact Freya Harrison ([freya.harrison@zoo.ox.ac.uk](mailto:freya.harrison@zoo.ox.ac.uk))

Dr Freya Harrison Department of Zoology University of Oxford OX1 3PS Tel. +44 (0) 1865 281189

<https://sessrummir.wikidot.com> Freya Harrison  
<[freya.andersdottir@gmail.com](mailto:freya.andersdottir@gmail.com)>

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## e-conference EvolutionBiodiversity Mar1-19

Electronic conference announcement: “Evolution and Biodiversity: The evolutionary basis of biodiversity and its potential for adaptation to global change” <http://www.nbu.ac.uk/biota/e-conference.htm> 1st - 19th March 2010 The organisers of the Spanish meeting of the European Platform for Biodiversity Research Strategy (EPBRS) and the BioStrat project coordinators invite you to participate in the electronic conference “Evolution and Biodiversity: The evolutionary basis of biodiversity and its potential for adaptation to global change”. The results of the e-conference will be presented and discussed at the EPBRS delegates meeting in Mallorca, Spain on the 12th - 15th April 2010.

Evolutionary processes are ultimately responsible for the generation and maintenance of biodiversity. However, they are rarely considered in management actions and policies aimed at preserving it and making use of the resources and services it provides. Forthcoming policies aimed at reducing the current loss of biodiversity and facing the challenges posed by its interaction with climate change, food security or health security would benefit considerably from an explicit incorporation of current knowledge on evolutionary processes. From a proactive stand, the identification of existing knowledge gaps and sources of uncertainty that limit the incorporation of evolutionary knowledge to biodiversity and global change policies, and addressing them through targeted research programs, would enhance the potential success of such policies.

This carbon dioxide-neutral e-conference will address three topics, one per week of the conference:

1. The evolutionary basis of biodiversity: strategies to manage and preserve evolutionary processes, and their likely impact on biodiversity
2. Evolutionary responses to anthropogenic pressures, including global change
3. Evolution in complex systems and co-evolutionary networks: managing complexity in the face of uncertainty

Keynote contributors include Andrew Hendry (McGill Univ.), Joop Ouborg (Radboud Univ.), Michael Hochberg (Univ. Montpellier II), John N Thompson (Univ. California), Rick Shine (Univ. Sydney), Pedro

Jordano (CSIC), etc.

You are kindly invited to subscribe to the electronic conference by filling in the subscription form available at: <http://www.nbu.ac.uk/biota/e-conference.htm> or directly on the WebBoard on: <http://forums.ceh.ac.uk:8080/~BioStrat/login>. In case of any difficulty subscribing, please e-mail Fiona Grant on [fian@ceh.ac.uk](mailto:fian@ceh.ac.uk).

Information on BioStrat e-conferences and how they function can be found by following the 'e-conference' link on the BioStrat website (<http://www.biostrat.org/>).

We would greatly appreciate your help in forwarding this announcement to anyone who might be interested.

Best regards, Joachim Mergeay, E-conference chair, INBO, Belgium, [joachim.mergeay@inbo.be](mailto:joachim.mergeay@inbo.be) Luis Santamaria, Spanish EPBRS meeting organiser, CSIC-UIB Fiona Grant, Juliette Young and Allan Watt, E-conference management, CEH Edinburgh, UK.

Additional information: - BIOTA Cluster: <http://www.nbu.ac.uk/biota/e-conference.htm> - EPBRS: <http://www.epbrs.org/> - BioStrat: <http://www.biostrat.org/> [joachim.mergeay@bio.kuleuven.be](mailto:joachim.mergeay@bio.kuleuven.be)

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## Ghent AlgalGenomics Apr7-9

\*ESIL2010: A decade of algal genomics (April 7-9, Ghent)\*

Dear colleagues and friends,

If you haven't already registered for the ESIL2010 “A decade of algal genomics” meeting, do so by March 7. in order to receive the early registration discount. After March 7, the registration fees increase from 140 to 220 for full delegates and from 90 to 150 for students. <http://www.phycology.ugent.be/ectocarpus/-index.html> If you have not yet booked your accommodation, it may be interesting to know that the IBIS hotels (Kathedraal and Opera both in the centre of Ghent) offer a discount to the delegates of the ESIL meeting. Do state explicitly that you are part of the Ectocarpus meeting when you make a reservation.

The complete preliminary program, with platform sessions and posters included, will be available online shortly after the closure of early registration.

See you in Ghent!

Olivier De Clerck

Olivier De Clerck Onderzoeksgroep Algologie, UGent. Krijgslaan 281, S8, 9000 Gent; Belgium  
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<http://www.phycology.ugent.be/> Olivier De Clerck  
<odclerck@gmail.com>

CA 95616

phone 530-752-2939 fax 530-752-1449 Website <http://www2.eve.ucdavis.edu/shafferlab> Note: I will be on sabbatical at Harvard through March 2010. While there, my phone number is 617-384-8437

AGAJOH@oregonstate.edu

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## Hilo Hawaii Conservation Genomics Jul26-28

The American Genetics Association (publisher of the Journal of Heredity) will hold its annual meeting in Hilo, Hawaii from 26-28 July, 2010.

AGA meetings focus on a single topic and last for 2.5 days. This year's topic is Conservation Genomics, and will include talks by a series of genomicists and conservation biologists, including those who are already shaping this emerging discipline. Our goal is to provide a focused forum for discussion, brainstorming, and development of collaborative efforts that leverage emerging genomic resources for applications in conservation biology.

The full speaker list is being completed. Currently, the list includes:

\* Mark Schwartz \* David Haussler \* Stephen O'Brien \* Scott Edwards \* Brad Shaffer \* Fred Allendorf \* Brian Bowen

To encourage broad attendance, we have kept registration low (\$150), which includes an opening mixer and evening luau. We have negotiated very reasonable hotel accommodation in Hilo as well as dormitory space at UH. Funds will be available, on a competitive basis, to help defray costs of student attendance.

More details and registration are available at the meeting website: <http://www.theaga.org/2010> Please join us- Hilo is an amazing setting, and we look forward to an engaging, enlightening three days.

Conference organized by Brad Shaffer and Oliver Ryder  
Any questions, contact

Brad Shaffer (hbshaffer@ucdavis.edu), President of the AGA, or

Anjanette Baker (agajoh@oregonstate.edu), Managing Editor, Journal of Heredity

H. Bradley Shaffer Department of Evolution and Ecology University of California One Shields Ave. Davis,

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## IowaStateU MEEC2010 Mar26-28 3 Registration

STUDENT CONFERENCE! Midwest Ecology and Evolution Conference (MEEC) 2010

Dear Evolutionists,

Just a reminder that the registration deadline for The Midwest Ecology and Evolution Conference (MEEC) is Monday February 15th 2010.

MEEC will be held Friday, March 26 to Sunday, March 28 2010, on the campus of Iowa State University, in Ames, Iowa. MEEC is a conference organized by and geared toward undergraduate and graduate students to present research and make connections. The heart of this event is composed of oral and poster presentations contributed by participating undergraduate and graduate students. The conference will also include an opening mixer, a banquet Saturday evening, and keynote addresses from three leading researchers in ecology and evolution, including Dr. Jeff Feder from the University of Notre Dame, Dr. Alan K. Knapp from Colorado State University, and Dr. Ellen Damschen from Washington University.

In addition, field trips opportunities on Sunday March 28th include an excursion to the Floyd County Fossil and Prairie < <http://www.fossilcenter.com/> > Center and Park Preserve located just west of Rockford, Iowa and approximately 90 miles from Ames [http://www.midwesteec.org/field\\_trips.html](http://www.midwesteec.org/field_trips.html) .

- Or -

Primates watching primates! If digging for fossils is not your thing, why not visit with some of our closest living relatives. This activity will entail a trip to the campus of the GREAT APE TRUST of Iowa <http://www.greatapetrust.org/> in Des Moines (Iowa's capital city!). We will spend an hour and a half touring their state-of-the-art facilities, and observing their resident bonobos and orangutans in their respective enclosures. This excursion presents interested attendees with

a wonderful opportunity to become acquainted with one of the more fascinating research organizations in the Midwest. Attendance is limited to 15, so register early.

For field trip Information please e-mail David Green [dgreen1@iastate.edu](mailto:dgreen1@iastate.edu)

For more conference information, please visit MEEC 2010 online at <http://www.midwesteec.org/> Join MEEC on Facebook: <http://www.facebook.com/-group.php?gid=3D205770509839> Abstract Submission: <http://www.midwesteec.org/guide.html> \*The deadline for Abstract Submission is February 15, 2010\*

In keeping with MEEC tradition, posters and oral presentations are limited to students - undergraduate and graduate. Faculty and post-docs are encouraged to attend in support of the students. Students interested in submitting poster/paper abstracts or in putting together a special session should visit <http://www.midwesteec.org/guide.html> . Hope to see you in March,

Erik Otárola-Castillo

Erik Otárola-Castillo Ecology and Evolutionary Biology Graduate Program 253 Bessey Hall Iowa State University Ames, IA 50011-1050 Phone 631-796-7331 < <http://www.public.iastate.edu/~eotarola/-homepage.html> > <http://www.public.iastate.edu/~eotarola/homepage.html>

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

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### IowaStateU MEEC2010 Mar26-28 TravelGrants

Dear Evolutionists,

Good news! The Midwest Ecology and Evolution Conference (MEEC) has recently received funding for limited travel grants to help defray conference costs. \*\_Grant awards consist of \$200\_\*. Travel grant applications are open to all conference attendees. Interested applicants please submit a current CV, alongside a one page letter including a statement of need, and a brief research synopsis. In general, application letters should detail reasons why applicants feel they should receive the award. Awards will be based on need and merit. \*\_Deadline for submission is March 1st 2010\_\*. Award recipients will be notified shortly thereafter and will receive travel awards at the conference. Grant applicants unable to attend MEEC without this award will be al-

lowed to submit research abstracts and register for the conference following the award decision.

For further inquiries and to submit your application, please e-mail Erik Otárola-Castillo at [eotarola@iastate.edu](mailto:eotarola@iastate.edu) .

Cheers,

Erik

As a reminder registration and abstract submission deadline for The Midwest Ecology and Evolution Conference (MEEC) is \*\_Monday February 15th 2010\_\*

For more conference information, please visit MEEC 2010 online at <http://www.midwesteec.org/> Join MEEC on FACEBOOK: <http://www.facebook.com/-group.php?gid=205770509839> Abstract Submission: <http://www.midwesteec.org/guide.html>

Erik Otárola-Castillo Ecology and Evolutionary Biology Graduate Program 253 Bessey Hall Iowa State University Ames, IA 50011-1050 Phone 631-796-7331 < <http://www.public.iastate.edu/~eotarola/-homepage.html> > <http://www.public.iastate.edu/~eotarola/homepage.html>

Erik Otárola-Castillo <[eotarola@iastate.edu](mailto:eotarola@iastate.edu)>

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### London MEE Launch Symposium Apr22

Dear colleague,

We would like to inform you of “Methods in Ecology and Evolution Launch Symposium”, a one-day symposium to mark the launch of MEE, the new journal of the British Ecological Society. The symposium will take place on April 22 2010 at Charles Darwin House, the new BES office. We have an excellent line-up of speakers, please see the website below.

Registration is available online at <http://www.methodsinecologyandevolution.org> Register soon as we are restricted to 120 delegates.

We look forward to meeting you there, Graziella Iossa and Rob Freckleton

Dr Graziella Iossa

Journal Coordinator, Methods in Ecology and Evolution

Charles Darwin House 12 Roger Street London WC1N 2JU Tel: +44(0)207 685 2518 Fax: +44(0)207 685 2501



Email [mee@britishecologicalsociety.org](mailto:mee@britishecologicalsociety.org) Web <http://www.methodsinecologyandevolution.org/>

A date for your diaries: Methods in Ecology and Evolution Launch Symposium - 22 April 2010

Think before you print...

Graziella Iossa <[graziella@britishecologicalsociety.org](mailto:graziella@britishecologicalsociety.org)>

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### London MolecularClocks Jun28-Jul3

IPC3 will be held in London from June 28 to July 3, 2010. Further details of the series of symposia, workshops plenary lectures and fieldtrips can be found at <[www.ipc3.org](http://www.ipc3.org)>.

As part of this congress we are organising the symposium 'Molecular clocks, evolutionary rates and geological dates'. <<http://www.ipc3.org/symposia/S14>>. Our keynote speakers will be Profs Bruce Runnegar (UCLA), Sam Bowring (MIT), Davide Pisani (NUI Maynooth) and Brian Moore (UC Davis); the symposium was convened by Dan Condon, Phil Donoghue, Kevin Peterson and Davide Pisani.

The aim of the symposium is to address the challenges of integrating evolutionary and geological timescales in attempts to establish an integrated understanding of the evolutionary history of Earth and Life. Focal issues include the development of molecular clock methodology, the refinement of the geological timescale, and the development of methods for assessing the correlation between biological events such as lineage divergence, the establishment of key innovations, shifts in diversity, and extrinsic environmental events.

We invite you to submit a contribution for consideration within this symposium. Please pass this e-mail on to those who you feel might be interested. The deadline for both abstract submission and early bird registration is 28th February 2010.

with best wishes, Dan, Phil, Kevin and Davide.

Dr. Davide Pisani The National University of Ireland, Maynooth Maynooth, Co. Kildare, Ireland. Email: [Davide.Pisani@nuim.ie](mailto:Davide.Pisani@nuim.ie) Tel: 00353-1-7086368 Fax: 00353-1-7083845 <http://bioinf.may.ie/index.html> <http://bioinf.may.ie/index.html>

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### Ottawa Biodiversity May31-Jun5

BIODIVERSITY 2010 AND BEYOND: SCIENCE AND COLLECTIONS

From: The 2010 SPNHC & CBA-ABC Joint Conference Local Organizing Committee, Canadian Museum of Nature, Ottawa, Ontario, Canada

For the first time, the Canadian Botanical Association (CBA/ABC) and the international Society for the Preservation of Natural History Collections (SPNHC) are holding a joint annual conference in Ottawa (May 31 to June 5, 2010), hosted by the Canadian Museum of Nature. Fully synchronized programs will allow participants from both organizations to attend any of the concurrent sessions and participate in many joint conference activities.

With 2010 declared The International Year of Biodiversity by the United Nations, this gathering of botany specialists and natural history collection professionals will offer many exciting opportunities for "cross-fertilization" of ideas and transfer of knowledge between participants.

Detailed information, including invited speakers and scientific symposia, can be found on the conference website:

<http://www.spnhc-cba2010.org/> We invite you to visit the site and register for the conference.

Come and join us!

Jeffery M. Saarela, PhD Research Scientist, Botany | Chercheur scientifique, Botanique Canadian Museum of Nature | Musée canadien de la Nature PO Box 3443 Station D | CP 3443 Succ <<D>> Ottawa, Ontario K1P 6P4 CANADA

Jeff Saarela <[jssaarela@mus-nature.ca](mailto:jssaarela@mus-nature.ca)>

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### Paris Archaeozoology Aug23-28

The 11th International Council for Archaeozoology will take place in Paris from 23 to 28 August 2010. 725 oral/poster presentations have already been accepted

and spread over the 30 thematic sessions. Therefore we now require final registration and the last proposals for the general session

You will find the online third circular at: <http://www.alexandriaarchive.org/icaz/index.htm>: - a registration form (either online or through pdf files which can be printed and sent by post) for the conference, the different optional events, for the excursions and for hotel bookings, with indications for payment (which will be increased after the 30<sup>th</sup> April; - call for presentations in the general session, the only one for which it is still possible to propose a poster/oral presentation (deadline 31<sup>st</sup> March) - complete program of the seven parallel sessions, - list of oral and poster presentations accepted in each of the 30 thematic sessions, - information about the venue, the hotels and other accommodation - information about the dates, duration, programme and cost of the excursions - information regarding the final version of your abstract (deadline 30<sup>th</sup> April) - a guide for the preparation of oral and poster presentations - information regarding the management of the sessions (for session organisers only).

Please note that the accepted poster presentations in the thematic sessions, cannot now be transferred to the general session.

A fourth circular will be sent at the beginning of summer with final information.

For any further information: [icaz2010@mnhn.fr](mailto:icaz2010@mnhn.fr) <<mailto:icaz2010@mnhn.fr>>

Regards

For the Organizing Committee

Jean-Denis Vigne

Jean-Denis Vigne <[vigne@mnhn.fr](mailto:vigne@mnhn.fr)>

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### Perth Behavioural Evolution Sep26-Oct1 Abstract Call

CALL FOR ABSTRACTS

CLOSES 1 MARCH 2010

The Organising Committee for the 13th International Behavioural Ecology Congress 2010 invites you to submit abstracts for your chance to be a part of ISBE 2010 in Perth, Western Australia from 26 September - 1 October 2010.

The ISBE 2010 Call for abstract guidelines and online submission are available via the <http://www.isbep Perth2010.com/abstracts.html>. The abstract submission closing date is Monday 1 March 2010.

Abstract result will be notified via email before the end of April 2010. Registration will be open following the Call for Abstracts closing date.

For more information about the ISBE conference visit the website at <http://www.isbep Perth2010.com/> Please pass this information onto your colleagues so that they can submit an abstract or register their interest online and join our database to receive future notifications.

Kind Regards

Boris Baer CIBER: The Collaborative Initiative for Bee Research MCS Building M 310 The University of Western Australia Crawley WA 6009 Australia phone: +61 8 6488 4495 fax: +61 8 6488 4401 E-mail: [bcbaer@cyllene.uwa.edu.au](mailto:bcbaer@cyllene.uwa.edu.au) Website: [www.ciber.science.uwa.edu.au](http://www.ciber.science.uwa.edu.au) Boris Baer <[bcbaer@bi.ku.dk](mailto:bcbaer@bi.ku.dk)>

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### Perth Evolution Symbiotic Behaviour Oct2

ISBE Satellite Symposium on the Impact of Symbiosis on Behaviour

- in combination with the ISBE 2010 (Perth, Western Australia).

CALL FOR ABSTRACTS

CLOSES 1 March, 2010

In association with the 13th International Behavioural Ecology Congress 2010 we invite submission of abstracts for your chance to be a part of the ISBE Satellite - Symposium "Impact of Symbiosis on Behaviour" which will be held 8:30am-12:30pm of October 2, just following the 13th ISBE Conference in Perth, Western Australia from 26 September - 1 October 2010.

Please submit abstracts for oral presentations to [wolfgang.miller@meduniwien.ac.at](mailto:wolfgang.miller@meduniwien.ac.at).

The abstract submission closing date is Monday 1 March 2010.

Speakers will be notified via email before the end of April 2010. Registration for ISBE includes this satellite symposium and will be open following the Abstracts submission closing date.



For more information about the ISBE conference visit the website at <http://www.isbepert2010.com/> Please distribute this information widely to interested colleagues so that they can submit an abstract or register their interest online and join our database to receive future notifications.

Kind Regards

Wolfgang J. Miller, Medical University of Vienna

Elisabeth Mc Graw, University of Queensland

Markus Riegler, University of Western Sydney

Miller Wolfgang <wolfgang.miller@meduniwien.ac.at>

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### Perth ISBE 2010 TravelGrantsAvailable

#### ISBE 2010 GRANT APPLICATIONS NOW OPEN

ISBE is offering partial travel support to worthy candidates in order to facilitate attending the congress. Priority for funding will be given to those who:

1) are giving a presentation (oral or poster) at the meeting; 2) are Ph.D. students or early-career researchers (Ph.D. completion within the last 3 years); and 3) have limited or no access to institutional or external funding that can be used to attend the meeting.

Recipients must be members of the ISBE, must have registered for the congress, and must be able to handle either a check (in US \$) or a wire transfer of funds.

We particularly encourage potential attendees from developing countries to apply. We expect awards to average US\$2,000 with the amount varying according to origin and need.

The following documents must be submitted, and can only be uploaded as either .doc or .pdf files: 1) a cover letter; 2) a 1-2 page curriculum vitae; 3) the abstract of the work you have on submitted for consideration to the ISBE 2010 program including title and coauthors (abstracts must also be submitted via the abstract submission site (<http://www.isbepert2010.com/abstracts.html>) and must be received by Tuesday 2 March 2010); 4) a proposed budget, including any additional sources of travel support available; and 5) have two letters of reference sent separately via email to:

Dr. Walter D. Koenig Lab of Ornithology 159 Sapsucker Woods Rd. Ithaca, NY 14850 USA email:

wdk4@cornell.edu

Applications must be received by 1 April 2010. We will notify successful applicants by 15 May 2010. For additional information, please contact Walt Koenig or Rob Magrath (robert.magrath@anu.edu.au).

Application is available online only via the ISBE2010 website (<http://www.isbepert2010.com/grants.php>) ISBE 2010 website.

Looking forward to welcoming you in Perth

The ISBE organizing committee

A/ Prof. Boris Baer CIBER: The Collaborative Initiative for Bee Research Website: [www.ciber.science.uwa.edu.au](http://www.ciber.science.uwa.edu.au) MCS Building M 310 The University of Western Australia Crawley WA 6009 Australia phone: +61 8 6488 4495 fax: +61 8 6488 4401 E-mail: bcbaer@cyllene.uwa.edu.au

Boris Baer <bcbaer@bi.ku.dk>

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### Portland Oregon EvolutionInformatics Jun29-30

Registration is now open for the inaugural conference on Informatics for Phylogenetics, Evolution, and Biodiversity (iEvoBio), at <http://www.evolutionsociety.org/SSE2010/Register.html>.

iEvoBio aims to bring together biologists working in evolution, systematics, and biodiversity, with software developers, and mathematicians, both to develop new tools, and to increase awareness of existing technologies (ranging from standards and reusable toolkits to mega-scale data analysis to rich visualization).

The 2-day meeting will take place June 29-30, 2010, in Portland, OR, jointly with the Evolution Meetings as a satellite conference. The event will feature traditional elements, including a keynote presentation at the beginning of each day and contributed talks, as well as more dynamic and interactive elements, including a challenge, lightning talk-style sessions, a software bazaar, and Birds-of-a-Feather gatherings.

Attendees can register jointly for Evolution and iEvoBio at a discount, or only for the iEvoBio conference. For more information about registration, venue, travel, or accommodations visit the Evolution 2010 website at <http://www.evolutionsociety.org/SSE2010/>. More details about the program and guidelines for contributing content are available at <http://ievobio.org>. You

can also find continuous updates on the conference's Twitter feed at <http://twitter.com/iEvoBio>. iEvoBio is sponsored by the US National Evolutionary Synthesis Center (NESCent) in partnership with the Society of Systematic Biologists (SSB). Additional support has been provided by the Encyclopedia of Life (EOL).

The iEvoBio 2010 Organizing Committee: Rod Page (University of Glasgow) Cecile Ane (University of Wisconsin at Madison) Rob Guralnick (University of Colorado at Boulder) Hilmar Lapp (NESCent) Cynthia Parr (Encyclopedia of Life) Michael Sanderson (University of Arizona)

hlapp@nescent.org

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### Portland Oregon Evolution June25-29

Evolution 2010 conference in Portland, Oregon, USA will be held from June 25 - 29, 2010.

Registration is now open: <http://www.evolutionsociety.org/SSE2010/> Deadline for talk and poster title submission is 19 April 2010. Deadline for early registration rates is 19 April 2010.

Happy Darwin Day and Evolution Weekend!

See you in Portland!

cruzan@pdx.edu cruzan@pdx.edu

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### Seattle SNP III Mar22-24

The call for papers for the SNP III workshop is still open, and the organisers are particularly keen to attract additional talks that focus on non-fish species. The workshop will concentrate on SNP discovery and applications in non-model organisms, and is to be held near Seattle, Washington, USA, March 22-24, 2010. A subset of the abstracts will be invited for publication in a Special Issue of Molecular Ecology Resources to appear in early 2011.

The deadline for abstracts is February 15th.

Please see the web site for more details <http://www.snpworkshop.org/> -

Dr. Sarah Helyar Molecular Ecology and Fisheries Genetics Laboratory(MEFGL) School of Biological Sciences University of Bangor Environment Centre Wales Deiniol Road Bangor Gwynedd LL57 2UW

email: [s.helyar@bangor.ac.uk](mailto:s.helyar@bangor.ac.uk) tel: +44 (0)1248 382318  
web: <http://biology.bangor.ac.uk/%7Ebss809/> "Helyar,Sarah" <[s.helyar@bangor.ac.uk](mailto:s.helyar@bangor.ac.uk)>

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### SilwoodPark Populations under Pressure Jun9-11

Dear colleagues,

We are pleased to announce that the Populations under Pressure symposium will run again between June 9th-11th at Imperial College London, Silwood Park, UK.

The symposium is aimed at convening PhD students and early stage post-docs for interdisciplinary discussions within the broad field of applied population biology and conservation. This year's themes are Range Limits and Global Change and Uncertainty in Models.

Participants will gather in a friendly setting where they will have the opportunity to present their own work and participate in workshops with an international group of researchers from different backgrounds. The workshops will be complemented by plenary presentations from leading researchers in applied population biology and a number of transferrable skills sessions, alongside evening social events.

We ask you to forward this invitation to students and colleagues in your lab and department as well as other interested parties.

Full details of the invited speakers, the workshop topics, contact email addresses and application procedures can be found on our website: <http://www.iccs.org.uk/-PuP10.htm>. Deadline for applications is 30th April 2010.

With thanks,

Lynsey & the rest of the PuP 2010 organising committee

Lynsey McInnes PhD Student Imperial College London Silwood Park Campus

<http://www.bio.ic.ac.uk/research/apurvis/-lynsey.htm> <http://www.justgiving.com/-offset-silwood-carbon> "McInnes, Lynsey" <[lynsey.mcinnnes01@imperial.ac.uk](mailto:lynsey.mcinnnes01@imperial.ac.uk)>

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## StirlingU EvolutionaryGenetics Apr6-8 Programme

Dear all,

The provisional programme of the 54th Ecological Genetics Group Meeting is now available online :

<http://www.sbes.stir.ac.uk/egg/programme.html> A reminder that registration closes on Monday 22nd February 2010. There are a few places left that will be allocated on a first come first served basis.

Kind regards,

Cecile

Cecile FE Bacles Ph.D. Lecturer in Ecological Genetics School of Biological and Environmental Sciences University of Stirling Stirling FK9 4LA Tel: +44 (0) 1786 46 ext 6897 Email:c.f.bacles@stir.ac.uk

– The Sunday Times Scottish University of the Year 2009/2010 The University of Stirling is a charity registered in Scotland, number SC 011159.

Cecile Bacles <c.f.bacles@stir.ac.uk>

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## UBath SexualSelection Sep

Dear Friends and colleagues

Conference announcement: New directions in sexual selection research: unifying behavioural and genomic approaches.

Conference aims: Sexual selection is a central theme for contemporary evolutionary and behavioural research. Work in this area is focused either on: (i) whole-organism behavioural, life history and physiological studies, or (ii) the use of genomic techniques to understand drivers and mechanisms. These two approaches reflect a paradigm split across the discipline. The aim of the conference is to develop a 'conceptual framework' to demonstrate how the two approaches can be used together, and identify priorities and opportunities for future research.

Venue and date: the conference will take place at the

University of Bath (southwest England) in September 2010.

I would be extremely grateful if you could display the attached conference poster within your department, and forward this message to colleagues who you think might be interested in attending.

Further information can be found on the conference website: [http://www.ert-conservation.co.uk/-Conference\\_home.htm](http://www.ert-conservation.co.uk/-Conference_home.htm) We very much hope you will be able to join us in September and look forward to welcoming you to Bath.

With best wishes

Dr Mark O'Connell, on behalf of the conference science committee.

Dr Mark O'Connell Director, Ecological Research & Training (ERT) Mobile 0776 0102173 Landline 01453 763153

Ecological Research & Training <mark@ert-conservation.co.uk>

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## UOttawa ComparativeGenomics Oct9-11

CALL FOR PAPERS

Eighth Annual RECOMB Satellite Meeting on Comparative Genomics

October 9-11, 2010

University of Ottawa

<http://recombcg.uottawa.ca/recombcg2010> Comparison of related genomes offers enormous inferential power, revealing a wealth of knowledge about genome evolution itself and about genetic function and cellular processes. As the number of fully sequenced genomes grows, so do the opportunities and challenges for computational comparative genomics. This workshop brings together leading researchers in the mathematical, computational and life sciences to discuss cutting edge research in comparative genomics, with an emphasis on computational approaches and novel experimental results. The program will include both invited speakers and contributed talks.

KEYNOTE SPEAKERS

Brenda J. Andrews (University of Toronto) Nicolas Corradi (University of British Columbia) Jan Dvorak

(University of California at Davis) Aoife McLysaght (University of Dublin) Nicholas Putnam (Rice University)

Contributions to this computationally-oriented workshop are welcomed on any theoretical and/or empirical approach to genome-wide comparison such as genome evolution, algorithms for genome rearrangement, comparative tools for assembly, gene identification or annotation, comparison of functional networks, genomic variation in humans and model organisms, cancer genomics, duplication patterns of genes, segments and whole genomes, and comparative epigenetics. To compete for a place in the program, papers should be submitted electronically at

<https://www.easychair.org/login.cgi?conf=3Drecombcg10> in order to be rated by a distinguished program committee.

The workshop will be held on the campus of the University of Ottawa beside the downtown area. Ottawa is served by direct flights from New York, Philadelphia, Chicago, Washington, Detroit, London, Frankfurt and many Canadian cities. The dates of the workshop coincide with the three-day Canadian Thanksgiving weekend, around the peak time for autumn foliage colour.

#### KEY DATES

Paper submission deadline June 7, 2010

Notification of paper acceptance June 28, 2010

Final manuscript due July 16, 2010

Poster submission deadline September 17, 2010

Notification of poster acceptance September 21

#### STEERING COMMITTEE

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

#### CONFERENCE CHAIR

David Sankoff (University of Ottawa)

#### PROGRAM COMMITTEE CHAIR

Eric Tannier (INRIA Rhône-Alpes, France)

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PROGRAM COMMITTEE Lars Arvestad (Royal Institute of Technology, Sweden) Anne Bergeron (Université du Québec à Montréal) Mathieu Blanchette (McGill University) Guillaume Blin (Université Paris-Est, France) Guillaume Bourque (Genome Institute of Singapore) Marilia Braga (University of Bielefeld, Germany) Michael Brudno (University of Toronto) Jeremy Buhler (Washington University) Sèverine Bérard (INRA Toulouse, France) Cedric Chauve (Simon Fraser University) Aaron Darling (University of Queensland, Australia) Niklas Eriksen (Göteborg University, Sweden) Patricia Evans (University of New Brunswick) Guillaume Fertin (Université de Nantes, France) Matthew Hahn (Indiana University) Joao Meidanis (UNICAMP, Brazil) Bernard Moret (Ecole Polytechnique Fédérale de Lausanne, Switzerland) Craig Nelson (University of Connecticut) Aida Ouangraoua (Simon Fraser University) Michal Ozery-Flato (University of Tel-Aviv, Israel) Teresa Przytycka (NCBI) Eric Rivals (LIRMM & CNRS) Eduardo Rocha (Université Paris 6 et Institut Pasteur, France) Hugues Roest Crollius (Ecole Normale Supérieure, France) Jens Stoye (Universität Bielefeld, Germany) Krister Swenson (University of Ottawa) Glenn Tesler (UC San Diego) Elisabeth Tillier (University of Toronto) Stéphane Vialette (Université Paris-Est, France) Sophia Yancopoulos (The Feinstein Institute for Medical Research, New York) Louxin Zhang (National University of Singapore)

#### CALL FOR PAPERS

Papers should be submitted via the EasyChair system. Submissions must be received in electronic form by 11:59pm (any time zone), June 7, 2010.

Submissions should be no longer than 12 single-spaced 8.5"x 11" pages with 1.25-inch margins all around, everything included (title, authors, addresses, abstract, references, figures, tables), in at least a 10-point font. An optional short appendix may contain details

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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>

**UOttawa ComparativeGenomics**  
**Oct9-11 2**

CALL FOR PAPERS

Eighth Annual RECOMB Satellite Meeting on Comparative Genomics

October 9-11, 2010

University of Ottawa

<http://recombcg.uottawa.ca/recombcg2010/> Comparison of related genomes offers enormous inferential power, revealing a wealth of knowledge about genome evolution itself and about genetic function and cellular processes. As the number of fully sequenced genomes grows, so do the opportunities and challenges for computational comparative genomics. This workshop brings together leading researchers in the mathematical, computational and life sciences to discuss cutting edge research in comparative genomics, with an emphasis on computational approaches and novel experimental results. The program will include both invited speakers and contributed talks.

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#### CALL FOR PAPERS

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**Vancouver**  
**Parallelism Evolutionary Theory**  
**May 17-21**

The Comparative Morphology & Development (CMD) and Ecology, Ethology & Evolution (EEE) sections of the Canadian Society of Zoologists (CSZ) invite you to attend the following symposia at the annual CSZ meeting:

May 17-21, 2010, in beautiful Vancouver, British Columbia, Canada

SYMPOSIUM: The Importance of Parallelism for Evolutionary Theory (May 18, 2010)

Confirmed speakers:

Greg Wray (Duke) "The genetic and molecular basis for parallel evolution"

Dolph Schluter (UBC) "Dynamical patterning modules in the evolution and development of animal form"

Brian Hall (Dalhousie) "The inside story on parallelism illustrated by the multiple origins of cartilage"

Marvalee Wake (Berkeley) "Parallel evolution of derived modes of reproduction in amphibians"

[organized by Ehab Abouheif, McGill (CMD) and Joe Rasmussen, Lethbridge (EEE)]

In addition, the CMD section, together with the American Association of Anatomists, is also sponsoring a student-organized Satellite Symposium:

STUDENT SATELLITE SYMPOSIUM: Phenotypic Plasticity and its Role in Evolution (Date TBA)

Keynote speaker:

Fred Nijhout (Duke) "The evolution of polyphenism by

genetic accommodation"

Additional speakers:

Chris Neufeld (Alberta) "Learning, inducible defenses, and adaptation to novel predators"

Erika Crispo (McGill) "Interplay among phenotypic plasticity, local adaptation, and gene flow"

Justin Golub (Clark) "Learning and predator-avoidance in stickleback" (tentative)

Emily Grason (Western Washington) "Adaptation of introduced prey to native predators" (tentative)

Kurtis Hayne (Alberta) "Variation in tenacity and tube foot morphology among sea stars from different wave exposure regimes"

[organized by Chris Neufeld, Alberta]

FOR MORE DETAILS ABOUT THESE SYMPOSIA, SEE:

<http://www.biology.ualberta.ca/CMD/home.htm> TO REGISTER, or to learn more about the CSZ annual meeting, see:

<http://www.zoology.ubc.ca/csz/> EARLY REGISTRATION DEADLINE: Feb. 15, 2010

CONTRIBUTED PAPERS: Spaces are also available for contributed papers in sessions organized by the CMD or EEE sections. The deadline for submitting abstracts is barely one week away, so don't delay:

ABSTRACT SUBMISSION DEADLINE: Feb. 15, 2010

FINAL REGISTRATION DEADLINE: April 16, 2010

A. Richard Palmer, FRSC Systematics and Evolution Group Department of Biological Sciences University of Alberta Edmonton, Alberta T6G 2E9 CANADA phone: (780) 492-3633 message: (780) 492-3308 FAX: (780) 492-9234 <http://www.biology.ualberta.ca/-palmer/palmer.html> Secretary-General Comparative Morphology & Development section Canadian Society of Zoologists: <http://www.biology.ualberta.ca/CMD/-home.htm> rich.palmer@ualberta.ca

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**Wierzba Poland EMPSEB**  
**May 23-28 Registration Open 2**

Third Announcement of 16th European Meeting of PhD Students in Evolutionary Biology



Dear All,

Registration to EMPSEB is still open until the end of February.

More information can be found at [www.empseb2010.pl](http://www.empseb2010.pl)  
You can contact us at: [empseb2010@uw.edu.pl](mailto:empseb2010@uw.edu.pl)

We are looking forward to seeing you in Poland!

EMPSEB 2010 organising committee: Barbara Pietrzak, Anna Bednarska, Łukasz Dziewit, Ma<sup>3</sup>gorzata Grzeziuk, Anna Karnkowska, Magdalena Szuplewska (University of Warsaw) and Agata Jakubowska, Agnieszka Marek (Jagiellonian Univeristy)

[empseb2010@uw.edu.pl](mailto:empseb2010@uw.edu.pl)

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## GradStudentPositions

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### BangorU AnimalFormEvolution

Genomes, development and the evolution of animal form

In the past 25 years, there have been astounding advances in our understanding of the genes involved in developmental processes across the animal kingdom. In many cases, the functions of these genes are conserved over vast evolutionary distances and are therefore likely to reflect an ancient function in the ancestor of all complex animals. This finding has been at the heart of the field of evolutionary developmental biology (“Evo-Devo”) since its earliest days in the 1980’s. More recently however, attention has turned away from studies of laboratory-derived variation towards the effects of

the environment on animal development and evolutionary adaptation. This has resulted in the creation of a new field of research, working towards a unification of natural selection, ecological genetics, evolutionary biology and developmental biology “Eco-Devo”. The PhD student will be able to develop a research project in this field, incorporating elements of genome biology, evolutionary biology and development.

For further information please contact Dr John Mulley ([j.mulley@bangor.ac.uk](mailto:j.mulley@bangor.ac.uk)).

Bangor University Anniversary Research Studentships Each holder of a PhD studentship receives an annual maintenance grant of pounds 13,000 (for 2010/11). For the following two years (2011/12; 2012/13) the core grant will rise in line with inflation. PhD studentship holders also receive an annual research allowance of up to pounds 1,500 (for approved expenditure). Studentship holders do not pay fees. No additional al-

lowances are payable. Successful studentship applicants will be expected to supply around 100 hours per year of teaching/research assistance focused on a supervisor / research team as part of their development as an academic of the future.

Anniversary Scholarships Application Procedure The application deadline is 1 March, 2010 and we expect to inform applicants of the outcome of their applications by early April.

To apply, please complete an on-line University Postgraduate Application Form.

You should include the following with your application form:

-a curriculum vitae (including the name and contact details of TWO referees); -a covering letter. \* Please make clear that you are applying for a Bangor University Anniversary Scholarship by noting that fact in answer to Question 3, under Check list Item 5 'Are you applying for a Bangor University advertised research project / studentship? If so, please write the full project title here:'

General Application Enquiries should be directed to: Dr Michelle Jones College of Natural Sciences Bangor University Tel: 01248 383738 E-mail: michelle.jones@bangor.ac.uk

John Mulley <j.mulley@bangor.ac.uk>

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## BodoUCollege Norway FucusAdaptation

PhD in Molecular Ecology / Ecological Genomics - Bodø University College (Norway)

The Faculty of Bioscience and Aquaculture at the Bodø University College (Norway) seeks applicants for a PhD position in Molecular Ecology / Ecological genomics. The position is a three year employment. The candidate will be a member of our Marine Ecology Research group, and the candidates work will be attached to the NFR project, Ecological & Evolutionary responses to global warming in the seaweed *Fucus serratus*.

Bodø University College (BUC) is the main institution for higher education and research in Nordland County (Norway). BUC is a medium-sized institution and the academic profile of BUC is organised into four faculties; School of Business, School of Professional Studies, Faculty of Social Sciences, and Faculty of Bioscience and

Aquaculture. The Faculty of Bioscience and Aquaculture areas of expertise include marine ecology, molecular ecology, molecular biology and genomics, reproductive and developmental biology, nutrition, cell biology, immunology, pathology. The Faculty has excellent facilities and the molecular laboratory has been recently upgraded (qPCR, Solid, capillary sequencer etc). For more information check our website [http://www.hibo.no/fba\\_english](http://www.hibo.no/fba_english) The main goal of the project is to address how the fucoid *Fucus serratus*, an important intertidal ecosystem engineer in the North Atlantic, responds to global warming through its ability to: 1) move, 2) be plastic, or 3) evolve. The approach will integrate spatial modeling (Ecological Niche Modeling), transcriptomics (qPCR) and genomics (genome scans, AFLPs & microsatellites) to disentangle the ecological (range shift and phenotypic plasticity or modulating gene expression) and evolutionary response (selection for the most adaptive genotypes).

The project will be run in collaboration with the Universities of Bergen, Groningen (NL) and Gent (BE).

We search for a motivated, systematic and independent candidate with an MSc (or equivalent) in molecular ecology, ecological genomics, population genetics or related disciplines. Applicants with practical experience in molecular biology and population genetics will be preferred. Knowledge and experience in algal DNA and/or GIS is desirable but not required

The candidate also must be accepted into an accredited Phd program at Bodø University College, or in special cases, at a partner institution. The final plan for the doctoral work shall be formally accepted no later than 3 months after entry into the position. Termination of the contract can be considered if the candidate is not accepted into an accredited PhD program within the stated deadline, fails to produce mandatory progress reports, does not display sufficient progress, and fails to perform mandatory duties.

The application must include a cover letter, a complete CV including a listing of educational background and all scientific works accomplished, and names and e-mail addresses of two references. Other activities relevant for the position should be documented (e.g., field work experience, etc). Applications are to be submitted electronically (<http://www.hibo.no/-index.php?ID=3D14308>) (the position will be on the website in the coming days).

The salary is regulated through governmental standards, Lpl 17.515, code 1017, wage level 45 (355.600 NOK, circa 38 500 EUR per annum before taxes). A legally established deposit to The Norwegian Public Service Pension is automatically deducted from the

salary. The successful candidate must follow all legislations, agreements, and directives of the position at any time.

Based on the institutions goals for our employment policies, our staff should reflect the population in general, both based on gender and cultural diversity. We therefore appeal women and candidates with minority background to apply for the position.

For further information and/or details of the project, please contact Professor Galice Hoarau, phone. +47 75 51 74 97 (galice.hoarau@hibo.no) or Professor Kurt Tande (kurt.tande@hibo.no), phone +47 75 51 73 61. The application deadline is 15 March 2010 and interviews will be conducted in April 2010.

Galice.Hoarau@hibo.no

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## DurhamU Human Migration Indian Ocean

PhD studentship (funded by the NERC) starting Oct. 2010

Closing date for applications: March 29 2010

Using domestic and commensal animals to understand patterns of human migration across the Indian Ocean

Reference âStudentship A â Project 1â

UK students are eligible for fees, stipend and research costs EU students are eligible for fees but not stipend or research costs Non-EU students are unfortunately not eligible to apply

To apply for this studentship please send:

- 1) Your Curriculum Vitae
- 2) A covering letter explaining why you are well qualified for the project (s) for which you wish to be considered;

People are encouraged to apply for both Studentship A and B; however, please note that if you are applying for both studentships, please provide a covering letter for each

- 3) Two letters of recommendation in support of your application.

To Helen Wood, postgraduate secretary (Helen.wood@durham.ac.uk) by Monday 29th March

A Natural Environment Research Council (NERC)

PhD studentship is available to investigate distributions of modern and (where possible) ancient domestic (pigs, dogs, chickens, etc.) and selected commensal animals (e.g. geckos) to infer ancient patterns of human seafaring, trade, migration and colonization.

Despite the fact that linguistic and archaeological evidence supports a colonization of Madagascar about 1,500 years ago by Austronesians travelled west from Island Southeast Asia, comparatively little is known about the links between Southeast Asia and East Africa. This project seeks to fill the gaps across the Indian Ocean by using a phylogeographic approach, a methodology that uses molecular (DNA sequence) analysis of modern and (where possible) ancient domestic and selected commensal animals to infer ancient patterns of human seafaring, trade, migration and colonization. The student will collect samples from museums, field trips, and from other collaborators and compare the patterns of genetic variability across the region. By analysing the patterns of each animal, and by comparing them in a larger framework, the timing and direction of human colonisation can be inferred and layered on top of evidence from other disciplines.

This studentship forms a part of much larger series of projects including SEALINKS hosted at Oxford University and funded by the ERC, Crossing the Green Sea, a project based at ANU, Australia and funded by the ARC, and a newly emerging project on the same theme based in Aberdeen University. All three of these projects are undertaking multi-disciplinary studies on the prehistoric emergence of long-distance maritime voyaging across the Indian Ocean, and the student will work closely with these collaborators.

The project will be based in the newly launched DNA labs in the department of archaeology at Durham University (UK) and the student will work alongside other PhD and Post Docs, including those employed as part of a recently awarded NERC funded project entitled: Reconsidering Austronesian Homeland and Dispersal Models using Genetic and Morphological Signatures of Domestic Animals (Studentship B).

Applicants are expected to hold a good first degree and an MSc or MA in Bioarchaeology, Anatomy, Biological Anthropology, Bioengineering, Zoology or other relevant subject, and ideally, to have experience of generic biological lab techniques such as PCR. Although training and hands-on supervision will be provided, it is essential that the candidate can operate independently and take initiative to direct the research. The student will be primarily supervised by Dr. Greger Larson.

The studentship will cover the full cost of tuition fees for UK students, and will pay an annual tax-free stipend

of £13,490 for three years. There are additional funds available for related laboratory consumables and travel for conferences and sample procurement (though see above for eligibility).

For informal enquiries please contact Dr Greger Larson on +44 191 334 1574 (email greger.larson@durham.ac.uk).

Related web links: <http://sealinks.arch.ox.ac.uk>  
<http://www.dur.ac.uk/greger.larson> <http://www.dur.ac.uk/archaeology/staff/?mode=staff&id=5502>  
<http://www.dur.ac.uk/archaeology/> Greger Larson <greger.larson@durham.ac.uk>

---

## DurhamU HumanMigrationPacific

PhD studentship (funded by the NERC) starting Oct. 2010

Closing date for applications: March 29 2010

Using ancient and modern DNA to understand chicken and dog distributions in Island Southeast Asia

Reference Studentship

UK students are eligible for fees, stipend and research costs EU students are eligible for fees but not stipend or research costs Non-EU students are unfortunately not eligible to apply

To apply for this studentship please send:

- 1) Your Curriculum Vitae
- 2) A covering letter explaining why you are well qualified for the project (s) for which you wish to be considered;
- 3) Two letters of recommendation in support of your application.

To Helen Wood, postgraduate secretary (Helen.wood@durham.ac.uk) by Monday 29th March

This PhD studentship forms part of a Natural Environment Research Council (NERC) funded project entitled: Reconsidering Austronesian Homeland and Dispersal Models using Genetic and Morphological Signatures of Domestic Animals. The project includes a Post Doc and a PhD studentship and will be based in

the newly launched DNA labs in the department of archaeology at Durham University (UK). The PhD and Post Doc will work within a larger team that includes the department of anthropology at Durham, Aberdeen University, and the CNRS in Paris, along with collaborators based in many other international colleagues and universities. The project itself is the most recent within a broad collaborative and multi-disciplinary research effort at Durham University (funded by the Leverhulme Trust, and NERC), which uses a wide variety of archaeological, anthropological, and genetic methods to understand the origins and spread of early farmers around the world.

The PhD studentship will be focused primarily (though not exclusively) on the extraction and amplification of DNA from modern and ancient chickens and dogs in Island Southeast Asia. Animal distributions make an excellent proxy for human movement and by employing them here, this project seeks to better understand when, and along what routes early migrating farmers travelled to eventually reach the remote Pacific. The chicken and dog results will be combined with similar data generated from pig samples, and with morphological shape analyses on the bones themselves.

Applicants are expected to hold a good first degree and an MSc or MA in Bioarchaeology, Anatomy, Biological Anthropology, Bioengineering, Zoology or other relevant subject, and ideally, to have experience of generic biological lab techniques such as PCR. Although training and hands-on supervision will be provided, it is essential that the candidate can operate independently and take initiative to direct the research. The student will be primarily supervised by Dr. Greger Larson, and the chosen candidate will work closely with Dr Anna Linderholm, the projects postdoctoral researcher.

The studentship will cover the full cost of tuition fees for UK students, and will pay an annual tax-free stipend of 13,490 for three years. There are additional funds available for related laboratory consumables and travel for conferences and sample procurement (though see above for eligibility).

For informal enquiries please contact Dr Greger Larson on +44 191 334 1574 (email greger.larson@durham.ac.uk).

Related web links: <http://www.dur.ac.uk/greger.larson> <http://www.dur.ac.uk/archaeology/staff/?mode=staff&id=5502>  
<http://www.dur.ac.uk/archaeology/> Greger Larson <greger.larson@durham.ac.uk>

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## Edinburgh Computational Biology

### MRC PhD Studentships in Computational Biology

We are now recruiting bright, ambitious and numerate graduates for studentships within the prestigious Medical Research Council (MRC) Human Genetics Unit in Edinburgh to begin in September 2010. These studentships are funded at a high level with high quality training, designed to fulfill national requirements for expertise in mathematical biology and statistics. Applications are encouraged from those combining a biological background with experience in computational analysis or from those with a mathematical/computer science background and a keen interest in biology. Possible projects span diverse areas of computational biology including systems biology, statistical genetics, bioinformatics and molecular evolution. However, there will be opportunities for enthusiastic students to develop their own project ideas in conjunction with prospective supervisors. Full details are available at the following URL: [http://www.hgu.mrc.ac.uk/vacancies\\_studentships\\_section/-studentships-in\\_comp\\_bio\\_and\\_med.html](http://www.hgu.mrc.ac.uk/vacancies_studentships_section/-studentships-in_comp_bio_and_med.html)

We are seeking applications from numerate graduates who have or expect a degree at honours level 2.1 or higher, who want a career in computational biology or medicine, and who have the ambition to succeed at the highest levels in research. Applications should include a letter explaining why you are interested in this particular postgraduate programme, a full up-to-date CV (including a vacation address), and names and addresses of two academic referees. We ask potential applicants to note that there are eligibility criteria for these studentships relating to nationality, period and purpose of residency in the UK, see: <http://www.hgu.mrc.ac.uk/>. Recruitment will continue until all places are filled but we encourage all interested candidates to apply as soon as possible. General Enquiries: [p.mcdonald@hgu.mrc.ac.uk](mailto:p.mcdonald@hgu.mrc.ac.uk). Academic enquiries: [colin.semple@hgu.mrc.ac.uk](mailto:colin.semple@hgu.mrc.ac.uk).

– Dr Colin A. M. Semple Head of Bioinformatics MRC Human Genetics Unit Institute of Genetics and Molecular Medicine Edinburgh EH4 2XU, UK Tel: +44 (0)131 332 2471 x4034 Fax: +44 (0)131 467 8456 Email: [Colin.Semple@hgu.mrc.ac.uk](mailto:Colin.Semple@hgu.mrc.ac.uk) Web: <http://www.hgu.mrc.ac.uk/Users/Colin.Semple/> [colins@hgu.mrc.ac.uk](mailto:colins@hgu.mrc.ac.uk)

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## Imperial College EcolInteractionsCoevolution

A NERC funded PhD studentship is available to study the effects of environmental change on ecological and evolutionary interactions using a bird-moth-tree system at Imperial College London, in the Ecology and Evolution group at Silwood Park.

Project: Effect of climate change on ecological networks

Supervisor: Professor Ian Owens

Project:

It has been predicted that environmental change will lead to the collapse of ecological networks because of its idiosyncratic effects on the phenology of different species. There is, however, little detailed information on the effect on mis-matches in phenology among interaction species on the fitness of those species, or the way in which they interact. The project aims to address this shortfall using a combination of experiments on an established field system based on a bird-moth-tree network and comparative analyses on long-term data on changes in ecological phenologies.

The specific aims of this project are likely to include:

- (i) Quantifying the effect of mist-matches in phenology on each species in a network;
- (ii) Estimating the extent of local co-adaptation between the different species involved in a network
- (iii) Predicting the extent to which phenotypic plasticity and evolutionary change can prevent disruption of ecological networks.

The project would suit either an ecologist or evolutionary biology with good field skills and an interest in the effects of climate change. The student will receive training in field ecology, molecular methods and statistical analysis.

Applications:

This fully funded studentship is available to home' (UK) and EU students with the appropriate residence qualifications. Applicants should normally have at least an upper second class (2i) honours degree or its equivalent, and have, or be in the process of obtaining, a Masters degree in an appropriate discipline.

For further information and queries regarding eligibility



please see the following websites or contact the Campus Administrator at Silwood Park, Mrs Diana Anderson ([d.anderson@imperial.ac.uk](mailto:d.anderson@imperial.ac.uk)). Applications for PhDs at Imperial College must be completed online (see link below). Once you have submitted your formal application please send an application letter and a copy of your CV via email to Diana Anderson so that we can process your application.

Deadline: 15 February, 2010

Web links:

Ecology and Evolution Group at Silwood Park: <http://www3.imperial.ac.uk/biology/research/-ecologyandevolution> Imperial College PhD application process: <http://www3.imperial.ac.uk/pgprospectus/-howtoapply> NERC Studentship information: <http://www.nerc.ac.uk/funding/available/postgrad/> – Prof. Ian P. F. Owens Head, Department of Life Sciences Imperial College London

<http://www3.imperial.ac.uk/lifesciences> <http://www3.imperial.ac.uk/people/i.owens> Ian Owens <[i.owens@imperial.ac.uk](mailto:i.owens@imperial.ac.uk)>

or habitat filtering. The aim of the project is to get a better understanding of the forces driving species assemblages in nature, using an unusual but very suitable model: rotifers. They are tiny common animals living in any wet habitat, where they can be very rich and abundant. Such high diversity will enhance the power of the tests. The project will involve sampling different communities in different habitats in different countries, obtaining a molecular phylogeny directly from the animals sampled in the field, and performing analyses of community structure.

Contact details: Diego Fontaneto, [diego.fontaneto@gmail.com](mailto:diego.fontaneto@gmail.com)

For further information please contact Mrs Diana Anderson at Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berks SL5 7PY ([d.anderson@imperial.ac.uk](mailto:d.anderson@imperial.ac.uk)). All applicants are required to make an on-line application and should follow this link: <http://www3.imperial.ac.uk/pgprospectus/howtoapply> Diego Fontaneto <[diego.fontaneto@gmail.com](mailto:diego.fontaneto@gmail.com)>

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## ImperialCollege PhylogeneticsCommunityRotifers

A Ph.D. studentship is available to study phylogenetic structuring of communities in rotifers, at Imperial College London, Silwood Park Campus, in the laboratory of Diego Fontaneto. The scholarship will cover tuition fees, and provide a monthly stipend for the duration of the PhD (3.5 years).

Deadline: February 19th Interview: February 22nd and 23rd

Studentships open to UK citizens and EU citizens who meet eligibility criteria. Please note applicants for PhD positions should normally have at least an upper second class (2i) honours degree or its equivalent (for four-year programmes), AND have, or be in the process of obtaining, a MRes or MSc degree in an appropriate discipline for three-year programmes.

Aims of the project:

How can similar species survive together? Which are the forces driving and allowing species coexistence? Only recently, phylogenetic investigations of community structure have become possible, testing the effect of potential drivers, like competition between species

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## InstZoology London AntEvolution

PhD on the Evolution and Diversification of Ants

Ants (Hymenoptera: Formicidae) are amongst the most ecologically successful organisms with over 11,000 known species in 20 subfamilies originating 115-170 million years ago. Recent work has advanced our understanding of the evolutionary relationships of this group, giving us a greater appreciation of the evolution of ant social structures, life histories and threats. Despite this research, fundamental questions about ant evolution remain.

The aim of this NERC CASE PhD studentship is to use phylogenetic comparative methods to address fundamental macroevolutionary and macroecological questions within this group. The student will collate data on ant phylogenetic histories to produce the first ant 'supertree', along with data on social structures, life histories, geographic distributions and threats. These data will be used to reconstruct diversification patterns, to determine the factors responsible for diversification shifts (e.g. caste differentiation), and to identify determinants of ant spatial biodiversity with a view to prioritizing conservation. The student will therefore receive a broad training in phylogenetic comparative techniques, eusocial evolution, ant ecology and conservation.



The PhD studentship is for 3 years starting in October 2010, based jointly at the Institute of Zoology, Zoological Society of London (Dr Kate Jones and Dr Seirian Sumner) and the University of East Anglia (Prof. Andrew Bourke). Candidates should have a first class or upper second class honours degree in a relevant biological subject.

Closing date: 12th March 2010. Interviews will be held in mid March.

Please apply through the online form on the UEA website <http://ueasciweb.uea.ac.uk/Resproject/show.aspx?ID=209>. Informal enquiries to Dr Kate Jones ([kate.jones@ioz.ac.uk](mailto:kate.jones@ioz.ac.uk)).

Dr. Kate Jones Senior Research Fellow - Institute of Zoology Zoological Society of London Regent's Park London NW1 4RY tel: +44 (0)20 7449 6627 fax: +44 (0)20 7586 2870 [www.zsl.org/katejones](http://www.zsl.org/katejones) <<http://www.zsl.org/katejones>> <<http://www.zsl.org/science/about-ioz/ioz-staff-students/jones,1087,AR.html>>

#### ZOOLOGICAL SOCIETY OF LONDON LIVING CONSERVATION

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Kate Jones <[Kate.Jones@ioz.ac.uk](mailto:Kate.Jones@ioz.ac.uk)>

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### Kiel Germany Nematode Evolution

PhD position: nematode evolutionary ecology in Kiel

Topic: Natural ecology and evolution of the nematode *C. elegans*

The PhD project aims at a characterization of the evolutionary ecology of the nematode *Caenorhabditis elegans*. This nematode is one of the best studied organisms under laboratory conditions; yet we still lack understanding of the conditions under which it lives in nature. Such information is essential for full understanding of the biology of this organism, including the exact function of its generally well characterized genes. The project is part of the European ESF Eurocores initiative on Ecological and Evolutionary Functional Genomics and it involves direct collaboration with research groups

in The Netherlands, Belgium, and France.

This specific PhD position (payment through the DFG according to 13 TV-L/2) will be based in the recently founded Department of Evolutionary Ecology and Genetics at the University of Kiel (Northern Germany), headed by Prof. Dr. Hinrich Schulenburg. The department itself provides an international and interactive atmosphere, while Kiel University and connected institutes (e.g., Max Planck Institute in Ploen) offer a stimulating research environment with a particular focus on evolutionary biology and also *C. elegans* genetics. The city of Kiel is a medium-sized pleasant town located at the coast of the Baltic Sea. It is the capital of the most Northern state of Germany, Schleswig-Holstein. It offers many opportunities for leisure activities, including theatres, an opera, the Schleswig-Holstein classical music festival, the heavy metal festival in Wacken, sailing, surfing, cycling, and the famous festivities of the "Kieler Woche" V one of the largest sailing events in Europe.

Requirements for the position: Master or Diploma in Biology, high motivation, excellent background in ecology and/or evolutionary biology, good knowledge of statistics, handling of complex experimental set-up, teamwork, ideally some experience with *C. elegans* or bacteria, fluency in English.

Please send applications with CV, one-page statement of research interests, and the names and addresses of two referees as a single pdf-file by email to [hschulenburg@zoologie.uni-kiel.de](mailto:hschulenburg@zoologie.uni-kiel.de). Deadline for applications: 5th March 2010. Start of position: May 2010 or soon afterwards. Women are especially encouraged to apply. Severely handicapped people will be preferentially considered in case of equivalent qualifications. For further details + questions, send an email to [hschulenburg@zoologie.uni-kiel.de](mailto:hschulenburg@zoologie.uni-kiel.de). Otherwise see: <http://www.uni-kiel.de/zoologie/evoecogen/> Hinrich Schulenburg <[hschulenburg@zoologie.uni-kiel.de](mailto:hschulenburg@zoologie.uni-kiel.de)>

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### Oxford Bacterial Genome Evolution

We are recruiting a PhD student to join the group of Dr. Daniel Wilson. The group is principally engaged in the activities of the UKCRC Consortium Modernising Medical Microbiology ([www.modmedmicro.ac.uk](http://www.modmedmicro.ac.uk)), an ambitious project with the goal of revolutionising approaches to tracing and tracking clinically important micro-organisms in near-to-real time using whole genome sequencing technologies. The aim is to eluci-

date the evolution and epidemiology of four medically important pathogens, namely *Mycobacterium tuberculosis*, *Staphylococcus aureus*, *Clostridium difficile* and norovirus through the application and development of statistical analyses.

PhD Student £15,000 p.a. stipend A DPhil (PhD) studentship in conjunction with Prof. Peter Donnelly, fully funded to the Home/EU rate, is available for a candidate with good quantitative skills, an interest in evolution and evidence of excellent performance in a science or maths degree, particularly Biology or Statistics. Acquiring skills from the fields of population genetics, epidemiology, statistics and computing, you will apply and develop tools that deepen our knowledge and understanding of pathogens. Please direct informal enquiries by email to [daniel.wilson@ndm.ox.ac.uk](mailto:daniel.wilson@ndm.ox.ac.uk). Please quote reference HB-10-009-DW.

The closing date for applications is Friday, 2 April 2010.

Daniel Wilson <[daniel.wilson@ndm.ox.ac.uk](mailto:daniel.wilson@ndm.ox.ac.uk)>

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### RoyalHolloway SocialEvolutionTheory

Hi Evoldir,

We are advertising a Ph D position at Royal Holloway that will explore the sociality of antibiotic resistance and novel ways of limiting the fitness of bacterial plasmids that carry genes for antibiotic resistance. This studentship will test up to date social evolution theory in a novel context and link in to planned high throughput plasmid sequencing projects at the Veterinary Laboratories Agency. For further details go to <http://www.rhul.ac.uk/Biological-Sciences/Vacancies/index.html> or contact [Ben.Raymond@rhul.ac.uk](mailto:Ben.Raymond@rhul.ac.uk)

Funding is available for EU and UK citizens.

Ben Raymond.

[Ben.Raymond@rhul.ac.uk](mailto:Ben.Raymond@rhul.ac.uk) [Ben.Raymond@rhul.ac.uk](mailto:Ben.Raymond@rhul.ac.uk)

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### SoutheasternLouisianaU PlantEvolEcol

Masters in Plant Evolutionary Ecology Department of Biological Sciences Southeastern Louisiana University Hammond, LA

We are working on a research project examining the evolution of life history traits and flower production in the Japanese morning glory, *Ipomoea nil*. *I. nil* is a morning glory common in Mexico and adjoining regions and has spread via anthropogenic dispersal throughout the world. It is a highly variable species and exhibits interesting patterns of variation in life history traits. We are carrying out greenhouse experiments to evaluate variation among these traits and evaluate hypotheses related to why these traits vary. We are inviting a graduate student to join our lab to participate in these investigations, working towards a masters degree in plant evolutionary ecology. Teaching assistantships in our graduate program are available for support.

Other ongoing research in our lab includes the systematics of morning glories and the evolution of regulatory genes of the anthocyanin biosynthetic pathway. Our lab includes masters students, but also active groups of undergraduate research assistants.

Hammond is located (on solid ground) about 50 miles north of New Orleans and east of Baton Rouge. Southeastern is primarily an undergraduate institution, but the Department of Biological Sciences has a strong group of research-oriented faculty. Our master's degree is an excellent stepping stone towards a Ph.D. or also is a good terminal degree, depending on your career considerations.

If you are interested in a masters degree in plant evolutionary ecology,

Please contact: Dr. Rick E. Miller Department of Biological Sciences Southeastern Louisiana University Hammond, LA 70401 985 549-5556 Email: [rickmiller@selu.edu](mailto:rickmiller@selu.edu)

For additional details.

[rickmiller@selu.edu](mailto:rickmiller@selu.edu)

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### StockholmU FucusSpeciation

PhD position/scholarship in Plant Ecology

Ecological mechanisms behind speciation, adaptation and distribution patterns in *Fucus radicans* and its ancestral species *F. vesiculosus* in the Baltic Sea.

at the Department of Botany, Stockholm University,

ref. no. 3/2010

Project description: A recent and very rapid speciation event inside the Baltic Sea offers an outstanding occasion to study speciation mechanisms, dispersal and establishment processes in a changing environment. The new macroalgae, *Fucus radicans* was formed from populations of *F. vesiculosus* inside the Baltic Sea a few thousand years ago. Both species are biotope-forming with partly overlapping distributions and contribute with important ecosystem properties for associated species. In this PhD-project experimental work in the field and in the laboratory will be used to investigate the ecological mechanisms behind speciation, adaptation and distribution patterns, especially in areas where the two species co-exist. A key issue to investigate will be possible reproductive barriers and factors regulating the reproductive period. One particularly interesting feature to investigate is the evolution of asexual reproduction in the northernmost, marginal Baltic populations of *Fucus vesiculosus* as well as in some, but not all, populations of *F. radicans*, and how this may affect population structure and resistance to environmental stress and change.

This PhD position is part of a Formas funded project (PIs: K. Johannesson, Marine Ecology, University of Gothenburg and L. Kautsky) and an accompanying PhD position in evolutionary genetics of Baltic fucoids will be announced at University of Gothenburg. A close collaboration is expected between the two PhD students and their supervisors.

Further information: Professor Lena Kautsky (+46 (0)8-162859, lena.kautsky@botan.su.se)

The application should include a letter of intent, a certified curriculum vitae that includes information on previous education, two copies of the masters thesis (or *äxamensarbete*), other documents supporting the applicants competence and suitability for the position, and address and phone number to two reference persons. The application can be written in English or Swedish.

The minimum requirements are completed undergraduate studies (corresponding to at least 3 years education, or 120 credits) that includes at least 2 years biological education (80 credits) including 10 credits in ecology or a corresponding course, and a completed 20 credits master's thesis (or *äxamensarbete*) in ecology or in a corresponding field.

Applications will be evaluated based on the applicant's knowledge of ecological theory and applications, field-work experience, written and spoken English, creativity, power of initiative, independence and ability to col-

laborate. Evaluations will be based on results on University courses, quality of master's thesis, references, interviews and the letter of intent. The successful candidate must possess a driving license in order to carry out the field work.

The minimum requirements are completed exam on advanced level, or studies corresponding to at least 4 years education, or 240 credit points, including 60 credit points at advanced courses. Previous studies should include at least 15 credit points in ecology, or corresponding courses, and a completed master thesis (or *äxamensarbete*) of at least 30 credit points, in ecology or in a related field.

A PhD education is 4 years (48 months). During the first two years the student receives a scholarship (Sw: *åttbildningsbidrag*) and during the last two years the student has a PhD position (Sw: *å doktorandanställning*). Up to 20% of teaching may be included in the position.

The application should be labeled with the reference number 3/2010, and should be received at the following address no later than February 25, 2010:

Registrar Mirska von Kraskowski, Department of Botany, Stockholm University, SE-10691 Stockholm, Sweden

Union representatives: Bo Ekengren, SACO (saco@saco.su.se), Lisbeth Häggberg, ST (lisbeth@st.su.se) +46 8 162000, Gunnar Stenberg, SEKO, +46 70-316 43 41, and PhD student representative (do@sus.su.se).

Peter Hamback <Peter.Hamback@botan.su.se>

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## UBern 2 SocialEvolution

2 PhD positions in Evolutionary Biology are available at the Institute of Ecology and Evolution, University Bern (Switzerland) under the supervision of Michael Griesser to study the effect of life-history on family lifestyle in birds. The positions are fully funded for 4 years (fulltime employment with salary) by the SNF (Swiss National Science Foundation), starting March 2010.

I seek 2 highly motivated PhD students to work on the effect of parental investment patterns (life-history) on the family lifestyle (pair breeding, family living, cooperative breeding) in a variety of bird species. The broader aim of the project is to understand the eco-

logical and life-history factors that drive family living and cooperation. Research has so far mainly focused on investigating cooperative breeding, however, it has not separated the evolution of families from cooperative breeding societies, hampering our understanding of the factors that select for these separate steps.

We will use a combination of observations and experiments in the field, along with a more theoretical approach to test the predictions of the adaptive delayed dispersal framework (Covas & Griesser 2007). The PhD students are highly motivated to develop own questions within this general framework. One of the two positions will benefit from a strong interest in life-history theory.

The Institute of Ecology and Evolution in Bern offers a stimulating, international work environment with researchers working in related, relevant topics (cooperative breeding, life-history evolution). The working language at the Institute is English. The project is a collaboration with Prof. Manuel Soler, University Granada, Spain, and will involve each year 4-5 months of field work in southern Spain.

Required qualifications: 1) MSc (or equivalent) in evolutionary biology, ecology, behavioural ecology or similar 2) A strong interest in evolution of sociality and cooperation 3) Ample field experience of behavioural observations and experimental work 4) Solid bird handling and banding experience (including mist-netting) 5) Highly motivated and sociable personality 6) Project management skills and ability to work independently 7) Willing to work in field with basic facilities 8) Drivers licence 9) Fluent spoken and written English 10) Conversational Spanish is a plus.

Applications received before 21st February 2010 will be given full consideration. Job interviews will be held in the last week of February.

If you wish to apply, send a motivation letter, CV, publication list, two contacts for references and short summary of your current research (preferable as a single PDF) to: michael.griesser@gmail.com

Do not hesitate contacting me if you have further questions regarding the project.

Michael Griesser Department of Ecology and Evolution, University of Bern, Wohlenstrasse 50a, 3032 Hinterkapelen, Switzerland michael.griesser@gmail.com [http://www.ekol.slu.se/ShowPage.cfm?OrgenhetSida\\_ID=-3D3D10914](http://www.ekol.slu.se/ShowPage.cfm?OrgenhetSida_ID=-3D3D10914)  
Michael.Griesser@ekol.slu.se  
Michael.Griesser@ekol.slu.se

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## UCoimbra Portugal MycorrhizalAdaptation

We are looking for candidates that want to apply for an FCT (Portuguese Foundation for Science and Technology) doctoral fellowship to join us at the Centre for Functional Ecology (<http://ecology.uc.pt>) of the Department of Life Sciences of the University of Coimbra (Portugal).

The successful candidate will be expected to develop his/her research within the framework of the CENECOGEN project (a collaboration between Ludo Muller at the Department of Botany of the Free University of Berlin (Germany) and Susana Gonçalves at the Department of Life Sciences of the University of Coimbra), which will apply next-generation sequencing technology to study the genetic basis of the local adaptation to serpentine soil of the ectomycorrhizal ascomycete *Cenococcum geophilum*.

Candidates should have a background in biology, with a good knowledge of evolutionary genetics and ecology, and an interest in fungal biology. Experience with basic molecular biology techniques and computer literacy is highly desirable. The doctoral fellowship is open for all nationalities, starts at 980 euros per month (tax-free) and is renewable for up to four years. A call for fellowship applications will open in May 2010, with deadlines for submission in June and September. Earliest starting date will be October 1st, 2010.

Interested candidates should send a covering letter describing their research interests, a CV and the contact information for three professional referees to Ludo Muller (ludo.muller@fu-berlin.de) or Susana Gonçalves (sconcal@ci.uc.pt) before April 30, 2010. Informal inquiries are welcome.

Dr. Ludo A.H. Muller Freie Universität Berlin Institut für Biologie - Botanik Altensteinstraße 6 14195 Berlin Germany Tel. +49 (0)30 838 56539 Fax +49 (0)30 838 55434 E-mail: ludo.muller@fu-berlin.de

Ludo Muller <ludo.muller@fu-berlin.de>

MSc Degree/Postgraduate Diploma in the Biodiversity and Taxonomy of Plants

Royal Botanic Gardens Edinburgh/ University of Edinburgh

Programme Philosophy The MSc in Biodiversity and Taxonomy of Plants was established by the University of Edinburgh and the Royal Botanic Garden Edinburgh (RBGE) to address the growing worldwide demand for trained plant taxonomists and whole-plant scientists. A detailed knowledge of plants and habitats is fundamental to their effective conservation. To communicate such knowledge accurately and effectively, training is required in plant taxonomy ' the discipline devoted to plant diversity and evolution, relationships, and nomenclature. The MSc is perfect for those wishing to develop a career in many areas of plant science: Survey and conservation work in threatened ecosystems Assessment of plant resources and genetic diversity Taxonomic research Management of institutes and curation of collections A stepping stone to PhD research and academic careers

Edinburgh is a unique place to study plant taxonomy and diversity. The programme and students benefit widely from a close partnership between RBGE and the University of Edinburgh (UoE). RBGE has one of the world's best living collections (15,000 species across our four specialist gardens ' 5% of world species), an herbarium of three million specimens and one of the UK's most comprehensive botanical libraries. The School of Biological Sciences at UoE is a centre of excellence for research in Plant Sciences and Evolutionary Biology. Recognised experts from RBGE, UoE, and from different institutions in the UK deliver lectures across the whole spectrum of plant diversity. Most course work is based at RBGE, close to major collections of plants, but students have full access to the extensive learning facilities of the university.

Aims and Scope The MSc provides biologists, conservationists, horticulturists and ecologists with a wide knowledge of plant biodiversity, as well as a thorough understanding of traditional and modern approaches to pure and applied taxonomy. Apart from learning about the latest research techniques for classification, students should acquire a broad knowledge of plant structure, ecology, and identification.

Programme Structure This is an intensive twelve-month programme and involves lectures, practicals, workshops and essay writing, with examinations at the end of the first and second semesters. The course starts in September of each year and the application deadline is normally 31 March. Topics covered include: Functions and philosophy of taxonomy Evolution and biodiver-

sity of the major plant groups, fungi and lichens Plant geography Ecology of plants and ecosystems Conservation and sustainability Production and use of floras and monographs Biodiversity databases Phylogenetic analysis Population and conservation genetics Tropical field course, plant collecting and ecology Curation of living collections, herbaria and libraries Plant morphology, anatomy and development Molecular systematics

Fieldwork and visits to other institutes are an integral part of the course. There is a two-week field course to Belize in which students are taught field collection and identification of tropical plants ecological survey techniques. The summer is devoted to four months of a major scientific research project of the student's choice or a topic proposed by a supervisor. These research projects link in directly with active research programmes at RBGE.

Entry Requirements Applicants should ideally hold a university degree, or its equivalent, in a biological, horticultural, or environmental science, and above all have a genuine interest in plants. Relevant work experience is desirable but not required. Evidence of proficiency in English must be provided if this is not an applicant's first language.

Funding The course is currently supported by eight Natural Environment Research Council studentships that are open to EU students only. Other international funding bodies have supported overseas students in the past.

Further Information For further details on the programme, including a course handbook please visit the RBGE website: <http://www.rbge.org.uk/education/professional-courses/msc-in-biodiversity-and-taxonomy-of-plants> < <http://www.rbge.org.uk/education/professional-courses> > You can also contact the Course director or Education Department at RBGE, or the Postgraduate Secretary of the University of Edinburgh:

MSc course Director, Dr Louis Ronse De Craene Royal Botanic Garden Edinburgh

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PhD Studentship in Human Evolutionary Genetics  
 Supervisor: Prof Mark A Jobling, Department of Genetics, University of Leicester, UK  
 Application Deadline: 28 February 2010 or as soon as a qualified candidate is found  
 Available for 3 years from: October 2010  
 Funding: UoL College of Medicine, Biological Sciences & Psychology - home and EU students only  
 Contact: Mark Jobling, email [maj4@le.ac.uk](mailto:maj4@le.ac.uk)  
 We are interested in patterns of human genetic diversity, and how these are influenced by population-level processes including migration, social organisation, language and culture, as well as fundamental genome-level processes of mutation, copy number variation, gene conversion and recombination. We have focused on the diversity of the non-recombining region of the paternally inherited Y chromosome. Comparisons with maternally inherited mitochondrial DNA provide information about sex-biased population processes, and we are also studying the haplotype block structure of the autosomal and X- chromosomal genome, which provides phylogeographically informative markers. Our current population studies focus on Western Europe and the British Isles in particular, including patrilineal surnames as cultural markers of male coancestry. We collaborate with colleagues in History, Archaeology and English in a multidisciplinary approach to understanding the human past. A project will be available in one of these areas. The ideal candidate will have a B.Sc. or M.Sc. in genetics, or a related biological subject. An interest in bioinformatics or computational biology would be an advantage. For further details, see: [www.findaphd.com](http://www.findaphd.com) and <http://www2.le.ac.uk/departments/gradschool/finance/-funding/scholarships/human-genetics> To apply: <http://www2.le.ac.uk/departments/gradschool/-prospective/apply> Informal enquiries welcome: [maj4@le.ac.uk](mailto:maj4@le.ac.uk)

Prof Mark A. Jobling Wellcome Trust Senior Research Fellow in Basic Biomedical Science Department of Genetics Room G5, Adrian Building University of Leicester University Road Leicester LE1 7RH UK

tel.: +44 (0)116 252 3427 fax: +44 (0)116 252 3378 email: [maj4@le.ac.uk](mailto:maj4@le.ac.uk) web: <http://www.le.ac.uk/genetics/maj4/maj4.html> Times Higher Education University of the Year 2008-9

[maj4@leicester.ac.uk](mailto:maj4@leicester.ac.uk) [maj4@leicester.ac.uk](mailto:maj4@leicester.ac.uk)

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## U Liverpool Evolution Climate Change

NERC UK Ocean Acidification fully-funded PhD studentship, University of Liverpool, School of Biological Sciences

Title: Evolutionary responses to ocean acidification in free-living protists

Supervisors: Dr Mike Brockhurst, Dr Phill Watts, Dr David Montagnes

It is now widely accepted that anthropogenic climate change is occurring, and at a faster rate in the world's oceans than anywhere else. An important open question is to what extent organisms will be able to evolve in response to climate change.

Some of the gross consequences for survival in an increasingly acidified ocean have attracted much attention, with particular focus on survival of calcifying species for example. However, the effects of acidification will extend more widely than the immediate physiological consequences of calcification. In particular, we have failed to appreciate the long-term evolutionary response to this selective pressure and the concomitant effect on intraspecific biodiversity, which can have a critical impact on persistence and thus ecosystem function.

To address the issue of pH-shift on evolution, we propose an experimental approach on a model system: we will use long-term selection experiments on standing genetic variation to determine the evolutionary response to acidification by the model marine protist *Oxyrrhis marina* - a common flagellate that demonstrates high levels of genetic, morphological and ecophysiological variation (Lowe et al. 2005, 2010). These experiments will reveal not simply the immediate impact of ocean acidification (i.e. the focus previous studies) but the potential consequences of this well accepted climate-change pressure on the evolution of life in the oceans, and thus the adaptability of our oceans to inevitable change.

This multidisciplinary PhD studentship will run alongside a larger NERC funded project ([http://pcwww.liv.ac.uk/~pelagic/-current\\_research.htm#Oxyrrhis\\_marina](http://pcwww.liv.ac.uk/~pelagic/-current_research.htm#Oxyrrhis_marina)), and the student will benefit from training in: experimental evolution, molecular-genetic and genomic techniques,



experimental design, statistics, and bioinformatics.

Informal enquiries to: Mike Brockhurst <brock@liv.ac.uk> or to Phill Watts <phill@liverpool.ac.uk>

Positions available to UK citizens and EU nationals that have been resident in the UK for at least 3-years, and have at least a 2:1 Honours degree (or EU equivalent). Application details and further details on department and staff are available at: <http://www.liv.ac.uk/biolsci> Enquiries about application procedure to: [biolres@liv.ac.uk](mailto:biolres@liv.ac.uk) For more information on the experimental evolution lab and our research: <http://sites.google.com/site/-brockhurstlabliverpool/Home> References: Lowe CD, Montagnes DJS, Martin L, Watts PC (2010) Patterns of genetic diversity in the marine heterotrophic flagellate *Oxyrrhis marina* (Alveolata: Dinophyceae). Pro-tist, in press.

Lowe CD, Day A, Kemp SJ, Montagnes DJS (2005) There are high level of functional and genetic diversity in *Oxyrrhis marina*. *J Eukaryot Microbiol* 52:250-257.

Buckling A, MacLean RC, Brockhurst MA, Colegrave N (2009) The Beagle in a bottle. *Nature* 457:824-829.

Michael.Brockhurst@liverpool.ac.uk  
Michael.Brockhurst@liverpool.ac.uk

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## UMontreal SalixGeneticDiversity

Master's research project: Genetic diversity of the genus *Salix* in Quebec

Problematic: Short rotation intensive culture (SRIC) of willows is increasingly becoming popular in Quebec, both for the production of biofuel and bioethanol and for environmental applications. Genus *Salix* encompasses a huge diversity and opportunities exist for selection and genetic improvement among the indigenous species of Quebec.

Objectives 1) Study the genetic diversity of willow species indigenous to the province of Quebec and potentially having commercial interest. 2) Establish a common garden experiment to compare different ecotypes sampled on a latitudinal gradient. This project implies several field trips to sample populations of *Salix* in the province of Quebec, as well as genetic analyses in the laboratory. Scholarship : 15 000\$/year (2 years), a candidate with a FQRNT or NSERC postgraduate

scholarship would receive a top up.

Eligibility : (i) Bsc in biology, agronomy, forestry, or similar fields of study; (ii) be motivated by both field works and laboratory experiments; (iii) be reliable, autonomous, and meticulous (iv) a good team spirit, (v) holding a valid driver's licence.

Start: May 2010 in order to sample during the summer of 2010 Advisors: Michel Labrecque and Luc Brouillet (IRBV, Université de Montréal)

[michel.labrecque@umontreal.ca](mailto:michel.labrecque@umontreal.ca) <http://www.irbv.umontreal.ca/labrecque.htm>

Frederic Pitre <[frederic.pitre@umontreal.ca](mailto:frederic.pitre@umontreal.ca)>

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## UNewBrunswick AmphipodPopulationGenetics

University of New Brunswick Fredericton

MSc graduate project opportunity: population genetics

I am seeking a graduate student to join a collaborative research program (funded by an NSERC Strategic Grant) on the ecology of the Bay of Fundy mudflats. These mudflats are densely inhabited by amphipods (*Corophium volutator*), which are the major prey of migrating shorebirds and fish. The successful candidate will join a multi-disciplinary collaboration between researchers at UNB, Carleton University, and Mount Allison University. Our aim is to model the environmental interactions between climate driven processes and the population dynamics of *C. volutator* throughout the mudflats in the Bay of Fundy.

The project will use DNA sequence variation to assess the level of genetic subdivision and patterns of gene flow among populations of *C. volutator*. This research will enhance our ability to model this system by providing indirect estimates of the scale to which mudflats are demographically independent. By extending the analysis to include populations of *C. volutator* throughout its geographic range (east and west Atlantic), this research will also provide deep insights into the evolutionary history of this species during the major glacial events of the Pleistocene.

The research will combine fieldwork with molecular data generation (mtDNA and nuclear DNA sequencing). Successful candidates should have a strong background in ecology and evolution, interests in population genetics and statistics, and preferably some experience

with molecular techniques (but not required).

Applications will be accepted until a suitable candidate is found. The anticipated start date is May or September 2010.

For enquires, or to apply, email a CV or resume, a letter of interest, unofficial transcripts and contact information for 2 references to Dr. Jason Addison (jaddison@unb.ca)

For more information about the Biology Department and Graduate Studies, see: <http://www.unb.ca/fredericton/science/biology/> <http://www.unb.ca/gradschl/> Jason Addison <jaddison@unb.ca>

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## UNorthCarolina Wilmington MarineMolecularEvol

Ph.D. assistantship in marine molecular evolution

A Ph.D. assistantship in marine molecular evolution is available at the University of North Carolina, Wilmington, to begin Fall 2010. The position is part of a funded collaborative project with colleagues at the University of New England, which examines the role of larval dispersal and physiological tolerance in establishing range limits of the northern blue mussel, *Mytilus trossulus*, in the Gulf of Maine. The selected candidate will work closely with a molecular ecologist, a benthic ecologist, and a physical oceanographer. The position is interdisciplinary and will involve intensive field and laboratory studies of patterns of dispersal, recruitment, and postsettlement mortality in relation to the Eastern Maine Coastal Current. The successful candidate should be highly motivated, work well in a team, and have solid molecular laboratory skills. Desired qualifications include an excellent academic record in marine biology and oceanography and a strong background in molecular ecology and evolution; an interest in the genetics of hybrid zones is also a plus. Candidates should email Dr. Michael McCartney a letter of interest and a C.V. (mccartneym@uncw.edu <mailto:mccartneym@uncw.edu> ; [http://www.uncw.edu/bio/faculty\\_mccartney.htm](http://www.uncw.edu/bio/faculty_mccartney.htm) <[http://www.uncw.edu/bio/faculty\\_mccartney.htm](http://www.uncw.edu/bio/faculty_mccartney.htm)> ) and are encouraged to visit <http://24.97.224.81/-research/msc/faculty.cfm> <<http://24.97.224.81/-research/msc/faculty.cfm>> for information on PIs Dr. Phil Yund and Dr. Charles Tilburg. For details on applying to the Ph.D. in Marine Biology, visit <http://www.uncw.edu/bio/grad-phd.html> (deadline is

April 15, 2010).

Michael A. McCartney Associate Professor Center for Marine Science UNC Wilmington 5600 Marvin Moss Lane Wilmington NC 28409 (910)962-2391 voice (910)962-2410 fax

"McCartney, Michael" <mccartneym@uncw.edu>

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## UStirling EvolutionaryBiolGenetics

The School of Biological and Environmental Sciences at the University of Stirling has several research groups focussing on diverse topics in evolution and genetics, and is offering a number of studentships for 2010 based on internal competitions according to three schemes: 1) one fully funded NERC studentship; 2) five research apprenticeships, featuring a PhD position and research experience over 5 years; and 3) fifty studentships fully funded by the University, offered on a competitive basis across all University departments. We note that the latter two schemes are open to international applicants as well as those from the European Union. The internal deadline for the first two schemes is March 3, and for the third scheme is May 1, but prospective candidates should contact their supervisor as soon as possible, and well in advance of these deadlines to ensure all applications can be completed on time.

Some of the projects in evolution and genetics that are being advertised include: Ageing and the *Drosophila* immune system (supervisor Dr. Matthew Tinsley) Conservation genetics and hybridisation in bumblebees (supervisor Prof. Dave Goulson) Experimental evolution in response to multiple coincident anthropogenic stressors (supervisor Dr. Luc Bussière) Modelling sexually antagonistic co-evolution (supervisors Dr. Andre Gilburn and Dr. Andrew Hoyle) Rapid evolution of invasive plant species (supervisor Dr. Mario Vallejo-Marin) Sustaining Biodiversity in an Urban Environment: Assessing the Landscape Connectivity of Isolated City Trees (supervisor Dr. Cecile Bacles)

A complete listing of projects with detailed descriptions of the research and studentship schemes is available at the following link: [http://www.sbes.stir.ac.uk/-info\\_students/postgrad/projects.html](http://www.sbes.stir.ac.uk/-info_students/postgrad/projects.html) With arguably the most scenic campus in the United Kingdom, the School of Biological and Environmental Sciences at the University of Stirling features a young and research active group of scientists. Stirling is conveniently situated within easy commuting distance from Glasgow

and Edinburgh but is also moments away from the stunning natural environments of the Scottish Highlands. The collegial and intellectual atmosphere combined with nearby and easy access to fantastic natural areas makes for an ideal working environment. Furthermore, the opportunities for scientific interactions with other Scottish Universities are numerous.

The successful candidates will be expected to contribute actively to the intellectual climate of the School of Biological and Environmental Sciences, where the program includes participation in School seminars and training in presentation skills, experimental design and advanced statistical techniques. The anticipated starting date for these studentships is Oct 1, 2010.

Candidates should contact the appropriate research supervisor to express interest and for further instructions on applying for a position. Any general questions can be directed to me (luc.bussiere@stir.ac.uk).

Luc Bussiere – School of Biological and Environmental Sciences, University of Stirling, Stirling FK9 4LA United Kingdom

Voice: +44 (0)1786 467758 Fax: +44 (0)1786 467843 Mobile: +44 (0)79 1384 9238 <http://www.sbes.stir.ac.uk/people/bussiere/> – The Sunday Times Scottish University of the Year 2009/2010 The University of Stirling is a charity registered in Scotland, number SC 011159.

luc.bussiere@stir.ac.uk luc.bussiere@stir.ac.uk

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## UStirling EvolutionPlantSex

Ph.D. scholarship available to study the Ecology and Evolution of Plant Sex Deadline: 1 March 2010

A Ph.D. scholarship is available to study the ecology and evolution of plant reproductive strategies and the plant-pollinator's interactions at the University of Stirling, Scotland, in the laboratory of Dr. Mario Vallejo-Marin. The scholarship will cover tuition fees, and provide a monthly stipend for the duration of the PhD (3 years).

My lab is broadly interested in the evolutionary and ecological processes shaping the amazing diversity of plant reproductive strategies. Specific areas of research in my lab include the evolution of flower form and its relationship to pollination success in the family Solanaceae, the evolutionary consequences of variation in sexual forms within individuals for plant fitness, and

the potential for rapid evolutionary change in invasive species. Work in my lab utilizes molecular and phylogenetic analyses, as well as extensive field work and experimental studies of plant-pollinator interactions. Ongoing research projects include experimental work in the U.K., Mexico and China, and the successful candidate is expected to actively participate in the field work component of our projects. Further details of my lines of research and potential PhD projects available can be found at <http://www.sbes.stir.ac.uk/people/vallejo-marin> and <http://www.findaphd.com/>. However, the PhD student is expected to actively participate developing a project proposal that suits our common interests.

**Requirements** The candidate should have a good command of ecological and evolutionary principles, be familiar with statistical analysis and basic math skills, like to travel, and be comfortable with working outdoors. Previous experience in an ecology or evolution lab at either the undergraduate or Master's level will be considered a strong asset. Having an excellent grasp of statistics, basic programming skills, or experience in a molecular lab will set you apart from other candidates. The entry qualification for postgraduate studentships is a first class or upper second class honours undergraduate degree in a relevant biological subject, or an appropriate Masters degree.

**About the University of Stirling** The University of Stirling (<http://www.stir.ac.uk>) is located in central Scotland, 45 minutes by train from both Edinburgh and Glasgow. Surrounded by the beautiful Ochil Hills, it has recently been recognized by the Sunday Times as the Scottish University of the year. The School of Biological and Environmental Sciences is a vibrant and rapidly growing department where you will have the opportunity to pursue your research in a professional and supportive environment.

**How to apply** To apply please email Dr. Mario Vallejo-Marin (mv9@stir.ac.uk) and attach a cover letter, your CV (Résumé) and the name and contact information of two references. Your cover letter should briefly explain why you are well suited for this position.

**Funding Notes** The studentship will be assigned on a competitive basis following an internal selection process at the School of Biological and Environmental Sciences. Candidates will compete for one of 5 apprenticeships and 1 NERC-quota studentship available within the School. In addition, candidates will have the option to compete for one of several University-wide studentships available for the academic year starting in the Fall 2010.

The call is open for students of all nationalities. Non-

UK or European Union students may apply for a University ORSAS award to cover the cost of overseas fees.

Dr. Mario Vallejo-Marin Lecturer in Evolutionary Biology School of Biological and Environmental Sciences University of Stirling Stirling, FK9 4LA Scotland

Tel. (+44) 01786 467822

<http://www.sbes.stir.ac.uk/people/vallejo-marin>

Mario Vallejo-Marin <mario.vallejo@stir.ac.uk>

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## USussex SocialBeesWasps

NERC-funded PhD studentship based in the UK

Understanding sociality: an automatic advantage from probability theory?

Understanding the evolution of sociality is one of the central problems in evolutionary biology. Wasps and bees are ideal study systems because there are extant social, non-social and facultatively social species. The studentship would focus on a neglected yet fundamental potential advantage of sociality that stems from statistical first principles. Individuals in most social groups forage independently. As the sample size (number of foragers) increases, the expected variation in their total foraging success should be reduced. This suggests that larger groups will have an automatic advantage compared with smaller groups or lone individuals. The difference should be largest when comparing lone individuals with small groups, i.e. those present at the origin of sociality. More reliable foraging rewards should allow groups to 'plan ahead' more successfully than lone individuals. For example, groups should be able to more closely match the number of offspring initiated to their more predictable future food supply. Lone individuals, in contrast, should face larger fluctuations in expected foraging rewards. Lone individuals may be forced to abort offspring if foraging success is unexpectedly low; or waste excess food if foraging is unexpectedly successful. Both effects should reduce their reproductive efficiency compared with groups.

The studentship will initially involve testing these ideas using a mixture of experimental work on wasps and bees and stochastic modelling, the mixture determined partly by the developing interests of the student. It is straightforward to record successful foraging events by observing or videoing social insect nests, and to carry out experimental manipulations. Experiments are likely to involve fieldwork trips abroad in Spain

(Polistes paper wasps) and/or Malaysia (Liostenogaster hover wasps), as well as in the UK (halictine sweat bees). Note: the insects studied very rarely sting humans!!

**REQUIREMENTS:** a numerate student, with an interest in behavioural/evolutionary ecology, who has or expects to receive at least a 2:1 degree and is a UK citizen. If you are a citizen of another European Union (EU) member state you will not generally be eligible for a stipend, unless you have spent the previous three years in the UK undertaking education (undergraduate study or masters) (see <http://www.nerc.ac.uk/funding/available/postgrad/eligibility.asp> for further eligibility details). The successful applicant will have a fitness level suitable for work in the field. A driving license would be useful. Because the work involves recording colour marks on individual animals, it would not be suitable for someone who is colour-blind.

**SUPERVISION:** the studentship will be co-supervised by Professor Jeremy Field and Professor David Waxman, both members of the School of Life Sciences, Sussex University, UK. Prof Field's research focusses on the behavioural and evolutionary ecology of social systems, using wasps and bees as models (see <http://www.sussex.ac.uk/biology/profile115853.html>). Prof Waxman uses mathematics, statistics and computer simulations to understand complex phenomena exhibited by populations of living organisms (see <http://www.sussex.ac.uk/biology/profile2846.html>). Together, they will provide complementary expertise to help the student develop his/her research in an interdisciplinary way.

Sussex University is one of the leading research-led universities in the UK, with an international reputation for innovation and interdisciplinarity in research. The School of Life Sciences is a well-equipped and truly international research environment, providing excellent opportunities to interact with leading researchers and their groups. The School is probably the top UK centre for research using social insects. Jeremy Field, Tom Collett and Francis Ratnieks are well-established specialists with international reputations. There is also a strong interest in theoretical biology, including David Waxman, Joel Peck and Larissa Conradt. Related research areas in the School include behaviour, ecology, evolution, neuroscience, genetics and genomics, and developmental biology.

### APPLICATIONS

Applicants should complete the online application form at <http://www.sussex.ac.uk/lifesci/1-2-2.html>, and email a covering letter and CV to Jeremy Field (j.field@sussex.ac.uk). The CV should include: 1. Con-

tact details (including e-mail addresses) for the applicant and 2-3 referees who would be available to provide references during February/March 2009.

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## York VirusEvolution

York.VirusEvolution

Evolutionary biology of mammalian retroviruses

The human genome is littered with the remnants of ancient retroviral infections, which make up approximately 5% of our genomes, a substantially larger proportion than is occupied by protein coding genes. This pattern holds throughout the vertebrates, with vertebrate genomes constituting a rich 'fossil record' of ancient viral infections. The vast quantities of data made

available as a result of genome scale sequencing projects has greatly facilitated progress in a field that is becoming known as paleovirology. This project will use genome scale sequence data to study the evolutionary biology of retroviruses and address questions such as, for example, why are certain viruses more prone to crossing species boundaries causing novel emergent infections. The project will primarily involve the use of computational and evolutionary analysis of genome sequence data, but there is scope for both development of analytical methods and also the use of laboratory techniques for obtaining relevant data.

Funding: this research project is one of a number of projects in the department. It is in competition for funding with the other projects. Usually the project which receives the best applicant will be awarded the funding. The funding is available to citizens of a number of European countries (including the UK). In most cases this will include all EU nationals. However full funding may not be available to all applicants. Please get in touch with [a.katzourakis@googlemail.com](mailto:a.katzourakis@googlemail.com) as soon as possible if you are interested in applying. The deadline for applying for this year is the 12th of March. For application materials see <http://www.york.ac.uk/graduatestudy/applying/>  
[a.katzourakis@googlemail.com](mailto:a.katzourakis@googlemail.com)

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## Berlin ResTech Sequencing

Laboratory Research Technician

The Berlin Center for Genomics in Biodiversity Research (GenDiv) seeks to fill a full-time (initially limited to two years) technician position (salary level Vc/Vb BAT-O bzw. Vb BAT-O) in support of a next-generation sequencing facility. The Center is jointly operated by the Berlin Botanical Garden - Botanical Museum (BGBM), the Freie Universität Berlin (FU), the Leibniz-Institute for Freshwater Ecology and Inland Fisheries (IGB), the Leibniz-Institute for Zoo & Wildlife Research (IZW), the Museum für Naturkunde Berlin (MfN), and the University of Potsdam. S/he will be employed by the Museum für Naturkunde, but work at the core facility at BGBM.

The successful candidate will have successfully completed an apprenticeship, preferably as a laboratory technician (BTA, MTA, CTA), or will have a Bachelor's degree in the life sciences. Knowledge of molecular genetics in the field of genome sequencing is desirable. The ideal candidate will have experience with next generation sequencing, the ability to work in a team, and demonstrated reliable performance.

The successful candidate must be willing to work closely with a diverse team of senior scientists, postdocs, and students. The working language of the laboratories is English and we value diversity in backgrounds and nationalities.

Applications comprising a cover letter indicating your experience, CV, certificates, and the names and contact details of three referees should be submitted by 03.03.2010 citing job reference number 60/2009 to: Museum für Naturkunde / Leibniz-Institut für Evolutions- und Biodiversitätsforschung an der Humboldt-Universität zu Berlin, c/o Frau Heilmann, Invalidenstr. 43, 10115 Berlin. The Consortium is determined to increase the proportion of women in successful scientific careers and particularly encourages female applicants. Severely disabled applicants with equal qualification will be given preference.

Dr. Thomas von Rintelen

Museum für Naturkunde Leibniz-Institut für Evolutions- und Biodiversitätsforschung an der Humboldt-Universität zu Berlin Invalidenstraße 43 10115 Berlin Germany

Tel.: +49-(0)30-2093 8404 Fax: +49-(0)30-2093 8565

E-mail: [thomas.rintelen@mfn-berlin.de](mailto:thomas.rintelen@mfn-berlin.de)

Internet: <http://www.naturkundemuseum-berlin.de>  
 "Rintelen, Thomas von" <[Thomas.Rintelen@mfn-berlin.de](mailto:Thomas.Rintelen@mfn-berlin.de)>

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## CaliforniaStateUChico Evolutionary Anthro

Assistant Professor Position Anthropology Department  
 (Recruitment # 10-ANTHRO-01)

The Position: Assistant Professor, Biological/Physical Anthropology, Tenure Track, beginning Fall 2010. Position contingent on funding.

As a university that educates students of various ethnic and cultural backgrounds, we value a diverse faculty and staff. CSU, Chico welcomes applicants who are knowledgeable about and interested in working within a cross-cultural learning environment. We also welcome those who share a passion and commitment to the University's 6th Strategic Priority that focuses on sustainability, stewardship, and the environment. <http://www.csuchico.edu/sustainablefuture/> Minimum Qualifications: PhD (by time of appointment) in biological/physical anthropology is required with an emphasis in forensic anthropology research and/or applications. The successful candidate will demonstrate potential for excellence in college teaching and professional and scholarly activities, and an ability to teach quantitative methods. Capability to contribute to the forensic anthropology identification program is essential.

Preferred Qualifications: Broad-based anthropological training and interests that complement the academic interests of current faculty are preferred. Backgrounds in teaching and research related to forensic anthropology, forensic sciences, molecular anthropology, human variation and/or bioarchaeology are desirable. In addition, candidates should demonstrate potential for successful grant and contract activities that support scholarly and/or applied research, and involve advanced undergraduates and graduate students. The candidate should have the ability to work with students in the Certificate in Forensic Identification and graduate-level biological anthropology students.

Responsibilities: This tenure-track position carries responsibilities in teaching, scholarship and service. The successful candidate is expected to teach courses in the candidate's area of expertise as well as General Ed-



ucation courses in Anthropology at the undergraduate level, teach graduate level courses, and serve on MA thesis committees of graduate students in the Department. Teaching assignments are dependent on the background of the individual and the needs of the Department. The individual will also engage in scholarly and creative activities as a part of the expected duties for retention, tenure, and promotion. Candidates should be knowledgeable about and interested in working with California's diverse population. Faculty are expected to maintain a productive research program and to participate in service to the program, University and community.

Salary: Assistant Professor Level, pay commensurate with education and experience.

The Department: The Department of Anthropology enrolls approximately 125 majors. It is committed to the four-field approach and offers certificate programs in Cultural Anthropology, Cultural Resources Management, Forensic Anthropology, and Museum Studies. The Department also supports a respected MA program producing graduates that have gone on to distinguished doctoral programs or obtained relevant employment. The Department is noted on campus for its excellence in teaching and as a student-centered learning environment.

Closing Date: Review of applications will begin March 15, 2010. Applications received after that date may be considered. International candidates will be considered.

How to Apply: All applicants must complete the Application for Academic Employment Form, which is available on-line at <http://www.csuchico.edu/vpaa/FA/Forms/FacultyEmplApp.doc> and are requested to complete an Applicant Information Questionnaire (Tenure Track) form, which is available on-line at <http://www.csuchico.edu/vpaa/FA/recruitment.shtml>. In addition, applicants must submit a complete and current curriculum vitae, as well as names, addresses and telephone numbers of at least 3 references. A letter of interest should indicate how the applicant's qualifications relate to the job opening and articulate the applicant's philosophy of education. Samples of written and published material may accompany the application with any additional supporting materials the candidate desires.

Submit to: Chair, Biological Anthropologist Search Committee Department of Anthropology CSU, Chico Chico, CA 95929-0400 Phone: 530-898-6192, TDD 530-898-5870 Materials can be submitted by e-mail attachment to: <anth@csuchico.edu>

An annual security report disclosing crime statistics for

California State University, Chico, can be obtained by Kristina A. Schierenbeck Professor of Botany California State University, Chico Department of Biological Sciences Chico, CA 95929-0515

w: 530-898-6099 c: 530-591-9907

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## ElmhurstCollege InvertebrateSystematics

VISITING ASSISTANT PROFESSOR, ONE YEAR POSITION V BIOLOGY/INVERTEBRATE ZOOLOGY. Elmhurst College, a 2700- student comprehensive college, invites applications for a one-year position for an Assistant Professor of Biology in the area of invertebrate zoology commencing August, 2010. The successful candidate will have a Ph.D. in Biology with a strong background in invertebrate zoology and systematics, and outstanding potential as a teacher in a liberal arts setting. Primary teaching responsibilities will include teaching lectures and laboratories in majors level courses, general education courses, as well as the possibility for development of a specialized undergraduate course in the area of expertise. Prior teaching experience is required. The well-equipped Biology Department serves 160 majors and minors, and supports nursing and allied health students. Send letter of interest electronically with CV, statement of teaching philosophy, copies of undergraduate and graduate transcripts (unofficial transcripts acceptable with initial application), and three letters of reference to Dr. Tamara Marsh (marsht@elmhurst.edu), Department of Biology, Elmhurst College, 190 Prospect Ave., Elmhurst, IL 60126. Review of credentials will begin March 31, 2010. Further information about the Biology Department is available at <http://www.elmhurst.edu/~bio/index.html> < <http://www.elmhurst.edu/%7Ebio/index.html> >/. Elmhurst College, an Equal Opportunity Employer, seeks candidates with demonstrated ability to contribute positively to a multicultural campus community./

Paul Arriola <paula@elmhurst.edu>

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## HopkinsMarineStation PopulationGeneticsTech

Research technician at Stanford University's Hopkins Marine Station, in Pacific Grove, CA. Under the direction of the Principal Investigator the technician will assist with research related to genetic characterization of populations of marine vertebrates and invertebrates in the context of ongoing research into marine conservation and management. Duties include:

- â Collecting larvae and adult specimens of marine species. This may involve some travel in California, Oregon, Washington, and Alaska.
- â Extracting DNA and documenting genetic variation. This will include processing samples in the lab for DNA extraction and sequencing as well as entering, managing, and analyzing the resulting data. This will require the use (or development) of many research skills using a variety of molecular genetic tools. These include, but are not limited to DNA extraction, PCR, gel electrophoresis, and DNA sequencing.
- â Field monitoring of multiple sites in central California.
- â Animal care including aquarium maintenance and routine care and feeding of marine species (primarily invertebrates).
- â Laboratory maintenance including maintaining the lab and taking responsibility for ordering some of the general supplies.

There is potential for extension of the technician position to other research projects as well as the possibility of co-authorship of a resulting publication.

**QUALIFICATIONS:** The successful applicant will be highly organized, have attention to detail, be able to work as an independent part of a team, have a basic understanding of and facility with standard computer software programs, and have practical experience with a variety of standard molecular tools (for example, DNA extraction, PCR, gel electrophoresis, DNA sequencing, etc). In addition to these basic requirements, we desire an applicant with an interest in marine ecosystems and their ecological functioning.

Please submit a C/V and a few words on why you are interested in the position to [krbarr AT Stanford.edu](mailto:krbarr@stanford.edu) and [spalumbi AT Stanford.edu](mailto:spalumbi@stanford.edu).

Kelly R Barr <[krbarr@stanford.edu](mailto:krbarr@stanford.edu)>

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## INRA France Diversity in vegetables

Permanent position of scientist (CR2) in INRA Avignon Diversity and association genetics in vegetable species

Contact person : Mathilde Causse  
([mathilde.causse@avignon.inra.fr](mailto:mathilde.causse@avignon.inra.fr); Tel : +33 432722710)

**Description of the position** The research unit on Genetics and Breeding of Fruit and Vegetable of Avignon maintains, characterises and valorises several large size collections of cultivated and wild relative accessions of melon, tomato, pepper and eggplant. The molecular analysis of the structure of these collections has started since a few years. Their use for association studies has allowed the identification of candidate genes and polymorphisms responsible for the variations of agronomic traits (potyvirus resistance, sex control in melon) and traits related to domestication (locule number, fruit size of tomato) in the frame of several PhDs. With theoretical skills in population genetics and molecular genomics, the scientist will continue these approaches for the optimisation of core collections for SNP discovery and association studies. He (she) will have to use the relevant genotyping tools according to their fast evolution and valorise the data of genome sequences available in tomato and soon in melon.

**Context** The research unit maintains collections of more than 8500 accessions of melon, tomato, pepper and eggplant. The structure of these collections is partly known, and will be analysed by the scientist. The scientist will be part of the team âResources, Genome knowledge and Innovationâ and will interact with the scientists and technicians in charge of the management of the collections. He (she) will participate to the programs of SNP discovery in these species and to association studies (through genome wide association or through candidate gene approaches) for traits of interest in the station (disease resistances, fruit quality, adaptation traits). He (she) will thus have to interact with researchers of the other teams, working on fruit quality and disease resistance. The scientist will also interact with the genotyping platforms of the Plant Genetics Division and with the Bioinformaticians of the research station and the Division for the data management. During the first period, the research will focus in the frame of running projects on the structure and

diversity of the collections of the four species, and on association genetics in tomato. schlotc@gmail.com

Skills requested - Population and Quantitative genetics  
- Genomics

Details for application (Deadline : 26 february 2010)  
[http://www.inra.fr/les\\_hommes\\_et\\_les\\_femmes/-l\\_inra\\_recrute.62\\_chercheurs](http://www.inra.fr/les_hommes_et_les_femmes/-l_inra_recrute.62_chercheurs) Francois Lefevre  
<francois.lefevre@avignon.inra.fr>

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## LeesMcRaeCollege EvolutionaryBiology

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### InstPopGenet Vienna GroupLeader

#### Tenure Track Group Leader Position

The Institute of Population Genetics at the Vetmeduni Vienna ( <http://i122server.vu-wien.ac.at/pop> ) is searching for an enthusiastic young group leader with the background experience and research interests that complement the research profile of our recently established institute. Research in our institute combines functional genetics, life history evolution, population genetics, bioinformatics and evolutionary developmental biology to investigate the evolutionary impact of variation in natural populations. The Institute of Population Genetics is home to the Vienna Graduate School in Population Genetics and is embedded in the wider evolutionary research community in Vienna ([www.evolvienna.at](http://www.evolvienna.at)).

The selected candidate will apply for a WWTF Young Investigator Position ( [www.wwtf.at](http://www.wwtf.at) ) to be hosted at the Vetmeduni Vienna. Successful application for this position provides up to 1.5 M Euro for six to eight years. Contingent upon successful performance during this period, the Vetmeduni Vienna will offer an associate professor position.

To apply, please submit a cover letter, CV, statement of research interests, and the names and contact details of three academic references as a single PDF by e-mail to christian.schloetterer@vetmeduni.ac.at. Informal inquiries are welcome and should be sent to the same e-mail address. Only applications submitted before 26.2.2010 will be fully considered.

Christian Schlötterer Institut für Populationsgenetik  
Veterinärmedizinische Universität Wien Josef Bau-  
mann Gasse 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390  
<http://i122server.vu-wien.ac.at/pop><  
<http://i122server.vu-wien.ac.at/pop/index.html> >

The Department of Biology at Lees-McRae College has a full-time, permanent teaching faculty position for an assistant professor of Biology, beginning in August 2010. Job description: Teaching duties include microbiology, cell biology, molecular biology, and introductory courses, with the opportunity to design additional upper division courses to augment offerings in the pre-professional biology program that complement current expertise in A&P and Veterinary medicine. Faculty-advised undergraduate research is required of all majors, and preference will be given to candidates with a desire to conduct faculty/student research projects. Other responsibilities include serving as Coordinator of the Pre-Professional Biology Program and advising program majors, scholarship, and service to the College and profession. The annual contract covers 9 months, with the summer months off for professional or personal development. Preference will be given to candidates with an interest in service learning and interdisciplinary curricula.

Lees-McRae is a small, four-year, co-educational liberal arts college serving Appalachia and the Southeastern United States. Through membership in the Appalachian College Association, Lees-McRae has access to academic libraries at 26 colleges, Sakai on-line course materials site, and teaching and learning workshops and opportunities. The college is located in the scenic Blue Ridge Mountains of northwestern North Carolina. Banner Elk is nestled between two popular ski areas and is within a short drive of the Blue Ridge Parkway, the Appalachian Trail, and area cycling, hiking, and climbing. Please visit our website at [www.lmc.edu](http://www.lmc.edu) . Qualifications: Potential candidates must possess a doctorate in biology, though ABD candidates will be considered for an instructor's position. All qualified candidates, including women and minorities, are encouraged to apply. If not US citizens, applicants should indicate eligibility to work in the U.S. AA/EOE.

Submission: Review of applications will begin March 15, 2010. Submit the following with a cover letter: statement of teaching experience and philosophy (or teaching dossier), one page research statement, curriculum vitae, unofficial transcripts, and the names of three

references with contact information to Dr. Gene Spears by e-mail at [spears@lmc.edu](mailto:spears@lmc.edu) or by post to:

Biology Faculty Search Committee c/o Tammy Franklin Office of Academic Affairs Lees-McRae College P.O. Box 128 Banner Elk, North Carolina, USA 28604

Chrissy Spencer <[chrissy.c.spencer@gmail.com](mailto:chrissy.c.spencer@gmail.com)>

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## MNHN Paris Population Genetics

Job announcement

A permanent position as assistant professor in “Molecular population genetics and coalescent theory” is offered in Paris. The position is mostly for research, teaching duties - in population genetics - are low and can be given in English. A description of the position and links to application forms are given at : <http://www.mnhn.fr/oseb/Veuille-Notes> Michel Veuille e-mails : [veuille@mnhn.fr](mailto:veuille@mnhn.fr) /or/ [mveuille@ephe.sorbonne.fr](mailto:mveuille@ephe.sorbonne.fr)

[veuille@mnhn.fr](mailto:veuille@mnhn.fr)

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## MNH Trondheim biosystematics

A one-year researcher/post doctoral position in biosystematics (systematics and taxonomy) is available at the Museum of Natural History and Archaeology in Trondheim, Norway (Section of Natural History, Norwegian University of Science and Technology). The successful candidate will be expected to do 50% research, in addition to working on the development of a Norwegian PhD school in biosystematics, as well as teaching at courses given at the PhD school. Successful candidates must have a strong research background within the field, as well as significant administrative and teaching experience. The monthly salary for this position equals approximately NOK 36,500 before tax (approximately 4,500).

Please find the full announcement of the position here: <http://jobbnorge.no/job.aspx?jobid=64792> (in Norwegian), and information about Trondheim at this link: <http://www.trondheim.no/engelsk/>. Application

deadline is March 5, 2010, and the successful candidate is expected to start in the position on July 1, 2010.

Hans K. Stenoién

Systematics & Evolution Group Section of Natural History Museum of Natural History and Archaeology Norwegian University of Science and Technology N-7491 Trondheim, Norway

Phone: +47 735 92284 Mobile: +47 918 97592 Fax: +47 735 92249 E-mail: [stenoién@ntnu.no](mailto:stenoién@ntnu.no)

Blog: <http://www.vm.ntnu.no/evolusjon> Home: <http://www.ntnu.no/nathist> ColdGene: <http://commonweb.ntnu.no/coldgene> [stenoién@ntnu.no](mailto:stenoién@ntnu.no)

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## MPI Leipzig 5yr Hominin Subsistence

The Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, offers the position of Leader of a Max Planck Research Group on “Hominin subsistence”

Over the last several million years, hominins have developed diverse dietary strategies to survive and expand in changing environments. From the origin of meat consumption to the intensification of resource use by Late Palaeolithic hunter-gatherers, we have seen that diet, and the more general term “subsistence,” clearly involves the continuous interaction between environment, biology, and culture. New questions and models have arisen that address the relationship between this dietary evolution and the broader questions of the evolution of life histories, technological adaptations, and the social organization of hominins.

We are seeking a Max Planck Research Group Leader who can design a novel and well structured 5-year research project to explore hominin subsistence strategies. The call for research proposals is intentionally broad. We seek a group leader with an expertise in one of the related areas of research but who is encouraged to take a multidisciplinary approach to addressing the research question that they propose. This may include, for example, methods such as zooarchaeology, isotopic studies, or modelling, as well as related disciplines.

The Max Planck Institute for Evolutionary Anthropology has five departments, including the Department of Human Evolution (Director: Jean-Jacques Hublin), with which the Max Planck Research Group will be

associated. Therefore, although this is an independent Research Group we would expect that the proposed project and team would interact with the Department of Human Evolution, and can use the extensive research facilities available (Further information may be obtained at <http://www.eva.mpg.de/> and <http://www.eva.mpg.de/evolution/>.)

This is a fulltime research position. The salary will be at the W2 level on the German university scale, equivalent to an assistant/associate professor. There are associated funds for research scientists to work in the group, specifically funding for one post-doctoral scientist (13/14 TVöD) and two PhD students, as well as two technicians. Start-up funds for equipment are available, and a substantial yearly budget for operating costs will be provided. The appointment will be for a term of 5 years. Further information on the Max Planck Research Groups may be obtained at <http://www.mpg.de/english/institutesProjectsFacilities/-juniorResearchGroups/aboutJrg/index.html>

The Max Planck Society is committed to employing more handicapped individuals and to increasing the share of women in areas where they are underrepresented, and therefore expressly encourages applications from such qualified individuals. Applications should include a CV, a detailed research plan (max. 8 pages), and the names of three referees and must be received at the address below by May 15, 2010.

Max Planck Institute for Evolutionary Anthropology  
Personnel Department Deutscher Platz 6 04103 Leipzig  
Germany

Carolyn Rowney <[rowney@eva.mpg.de](mailto:rowney@eva.mpg.de)>

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## NorthCarolinaStateU Programmer Hymenoptera

The Hymenoptera Anatomy Ontology project (HAO; <http://hymao.org/>) at North Carolina State University seeks an innovative and creative programmer to help build a foundational resource for a broad range of disciplines, including biodiversity research, systematics, genomics, and evolutionary biology. The programmer will work with a small but dynamic team of researchers to develop the informatics infrastructure for the HAO. All HAO products will be open source and we encourage active involvement in open source based communities. As a vertex of North Carolina's Research Triangle NCSU benefits from close proximity to a large community of

programmers and biologists, including the communities at NCSU's Centennial Campus, Duke University, and the University of North Carolina at Chapel Hill, as well as our affiliation with the National Evolutionary Synthesis Center (NESCent; <http://nescent.org/>).

This is a full time position for one year, with possibility of a second year. The position is on-site. Salary is \$52,000. \* \*For more information see our blog post at <http://hymao.blogspot.com>, or visit the NCSU jobs list at <http://jobs.ncsu.edu> and search for position 101506.

[andy\\_deans@ncsu.edu](mailto:andy_deans@ncsu.edu) [andy\\_deans@ncsu.edu](mailto:andy_deans@ncsu.edu)

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## QueensU AvianSummerFieldAssist

AVIAN FIELD RESEARCH ASSISTANT needed for continuation of a long-term study of breeding American redstarts in southeastern Ontario. Project runs from May 1 to mid-July. Primary responsibilities include netting, banding, bleeding, and nest searching, and supervising a small team of field assistants. Prior field experience in these techniques is essential. The ability to re-sight small, active, color-banded birds and to quickly learn and recognize American redstart song are assets. Work schedule involves long hours in the field, typically six days per week. We offer a competitive salary and include room and board at a premier biological field station. The position will be filled as soon as a suitable candidate is found. Send cover letter, CV, and contact information for 3 references to Ann McKellar at [ann.mckellar@queensu.ca](mailto:ann.mckellar@queensu.ca). Please include "Avian Field Assistant" as the subject line.

[ann.mckellar@queensu.ca](mailto:ann.mckellar@queensu.ca) [ann.mckellar@queensu.ca](mailto:ann.mckellar@queensu.ca)

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## SeoulNatIU EvolutionaryBiology

Faculty Positions Open for International Scholars Seoul National University School of Biological Sciences, Korea

Tenure track faculty positions are open for foreign scientists in the areas of 1) Molecular and Cellular Biology, 2) Integrative Organismic Biology, and 3) Systematics and Ecology. The openings are limited to non-Korean scientists. The responsibilities of these positions in-



clude both research and teaching. Teaching will be conducted in English. The applicants should have a Ph.D. degree and postdoctoral experience with strong research backgrounds and achievements. Competitive set-up expenses and stipends for 70% of graduate students are provided. Also, governmental research grants are available for faculty research. The school offers an excellent environment for research and is equipped with high performance research facilities. The salary starts from approximately 60 million KRW per year and is competitive depending on experience. Faculty housing (2 to 4 bed rooms upon family size) is also available. For more information, visit <http://biosci.snu.ac.kr> or email Dr. Kwangseog Ahn ([ksahn@snu.ac.kr](mailto:ksahn@snu.ac.kr)). The application including CV, three references, and a research plan (3-4 pages) should be submitted to Chair, Prof. Jung-Hye Roe, by email ([ckm81@snu.ac.kr](mailto:ckm81@snu.ac.kr)).

[waldman@snu.ac.kr](mailto:waldman@snu.ac.kr)

Bruce Waldman <[waldman@snu.ac.kr](mailto:waldman@snu.ac.kr)>

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### UArizona LabTech OriginMulticellularity

Dear colleagues, Please note the following advertisement for a laboratory / research technician:

A Laboratory Technician position is available in the laboratory of Dr. Richard E. Michod (<http://www.eebweb.arizona.edu/Michod/>) in the Department of Ecology and Evolutionary Biology at the University of Arizona, Tucson (<http://www.eebweb.arizona.edu>). We are looking for a motivated, enthusiastic and independent individual with a biological science background (molecular / cell biology is preferable). Responsibilities will include: (1) Daily management of the laboratory, comprising tasks such as ordering materials, maintaining cell culture stocks, preparing reagents and glassware and providing a supportive role for researchers in the lab. (2) Contributing to research projects as required. The main project currently requiring an assistant involves the identification of genes implicated in the origin of multicellularity in the volvocine green algae.

Attributes deemed necessary for this position are good organizational and time management skills and a good work ethic. Although molecular biology skills are preferred, the necessary training will be provided.

We are flexible as to whether the position is part-time or full-time. Our desired salary range for full-time em-

ployment is between \$20,000 and \$26,000 p.a. depending on prior experience. A probationary period applies.

For further information please contact Dr. P. Durand ([pdurand@email.arizona.edu](mailto:pdurand@email.arizona.edu)) or to apply please provide a CV with details of two referees.

[pdurand@email.arizona.edu](mailto:pdurand@email.arizona.edu)

[pdurand@email.arizona.edu](mailto:pdurand@email.arizona.edu)

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### UExeter EvolutionarySystemsBiol

University of Exeter Investing in Science

The University of Exeter has ambitious plans for growth. Capital projects to the value of Â£275 million pounds will, by the end of 2012, transform our already beautiful Streatham campus into something that is truly world-class. And during the course of the next twelve months we will be building on our very considerable research strengths with over 100 new academic appointments. Central to our plans for growth is a major expansion of our capacity in science, engineering and medical research. Two years ago the University announced the investment of Â£80 million in new academic positions, infrastructure and laboratories. Building on the success of that initiative we now plan to appoint to 75 new academic posts in key areas of science. The first tranche of investment will focus on four interdisciplinary research themes identified by our science strategy and over the next twelve months we will be appointing up to 20 new staff in these areas. Exeter is one of the UK's leading research universities with 95% of all eligible staff submitted to the 2008 Research Assessment Exercise and almost 90% of our research recognised as internationally excellent. By combining quality profile and intensity the Times newspaper currently ranks Exeter 15th in the UK for research excellence and the Times Higher describes us as one of the 'rising stars among research-intensive institutions'. The people whom we are seeking to appoint will therefore be innovative researchers with a strong track record of research funding and international quality publications. Professors will, additionally, be leading international figures with the ability to attract world-class academics to their research groups.

Systems Biology Chair plus up to 4 additional posts We are particularly keen to receive applications from those with research interests in one of the following areas: the biology of infectious disease, plant-microbe interactions, evolutionary genomics, microbial biochemistry,

protein-protein interactions, systems analysis of signal transduction.

Climate Change Chair plus up to 4 additional posts Applications are invited from those with research interests in climate change prediction, modelling, climate change mitigation, atmospheric physics, coastal engineering, renewable energy generation or the effects of climate change on ecosystem services and biodiversity.

Functional Materials Chair plus up to 4 additional posts We would like to hear from individuals working in the areas of nanoscale materials, structured meta-materials, photonic materials, auxetic materials, graphene science or additive layer manufacturing.

Cell and Molecular Biology Chair plus up to 4 additional posts We seek individuals with interests in molecular motors, polarised cells, vesicle trafficking, organelle biology, autophagy or cellular differentiation. We also plan to build capacity in biomedical research, particularly in the areas of infectious disease caused by bacteria and fungi, the genetics of host susceptibility, evolutionary genomics of microbial pathogens and the cell biology of host-pathogen interactions. For further information and details of how to apply please visit our website [www.exeter.ac.uk/jobs](http://www.exeter.ac.uk/jobs) or contact:

Professor Richard French-Constant Email R.French-Constant@exeter.ac.uk Tel: +44(0) 1326 253729 Daphne du Maurier School of Biosciences University of Exeter, Cornwall Campus Penryn Cornwall TR10 9EZ UK

The University of Exeter is an equal opportunity employer and promotes diversity in its workforce and, whilst all applicants will be judged on merit alone, is particularly keen to consider applications from groups currently underrepresented in the workforce.

“Wilkinson, Paul” <P.A.Wilkinson@exeter.ac.uk>

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## UGeorgia DeptHead Genetics

Department Head Department of Genetics Franklin College of Arts & Sciences University of Georgia

The University of Georgia seeks an established scientist with creative vision to lead the Department of Genetics [<http://www.genetics.uga.edu>]. This search is coincident with a dramatic expansion campus-wide of interdisciplinary research programs in the life sciences. With twenty-five faculty members, the Department has

internationally recognized strengths in several areas of research, including molecular and developmental genetics; population and ecological genetics; and genome evolution and structure.

Candidates should have an outstanding record of academic accomplishments and funding, proven leadership and administrative skills, and a vision for future investment in the Department. Send applications or nominations electronically to Dr. Stephen L. Hajduk, Chair of the Search Committee <shajduk@bmb.uga.edu>. Applicants should submit a cover letter summarizing their qualifications and vision, together with a complete curriculum vitae. For full consideration, applications must be received by March 15, 2010 but the search will remain open until the position is filled.

The Franklin College of Arts and Sciences, its many units, and the University of Georgia are committed to increasing the diversity of its faculty and students, and sustaining a work and learning environment that is inclusive. Women, minorities and people with disabilities are encouraged to apply. The University is an EEO/AA institution.

[promislow@uga.edu](mailto:promislow@uga.edu) [promislow@uga.edu](mailto:promislow@uga.edu)

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## UHull ChairBiology

Dear EvolDir members,

A Chair in Biological Sciences is currently being offered at the University of Hull, UK.

For more information, please see the following advert, which was recently posted in Nature.

<sup>3</sup>With its strong research culture and inspirational teaching, the Department of Biological Sciences is building a reputation for excellence. Our vision is to see this growing department achieve even greater things ' and for that we need a leader who shares our ambitions. You<sup>1</sup>ll build on our success in RAE 2008; raising the department<sup>1</sup>s profile and bringing it even wider recognition. It<sup>1</sup>s a chance to draw on your exceptional academic record, establish and lead a strong research programme in an area of Evolutionary Biology and/or Functional Ecology, and to support research staff and students alike. This is a role of tremendous visibility and potential. You can learn more about this position and apply online at: [www.hull.ac.uk/jobs](http://www.hull.ac.uk/jobs) (vacancy ref: FS0014)<sup>2</sup>

Closing date 4th March 2010

I am happy to respond to informal inquiries about this post (l.lawson-handley@hull.ac.uk). For more formal inquiries, please see the job description at the above web address or contact the Head of Department (Dr Graham Scott, G.Scott@hull.ac.uk) or Director of Research (Prof John Greenman, J.Greenman@hull.ac.uk).

Best regards,

Dr Lori Lawson Handley Evolutionary Biology Group  
Department of Biological Sciences Hardy Building,  
Room 222 University of Hull Cottingham Road Hull,  
HU6 7RX, United Kingdom

Email: L.Lawson-Handley@hull.ac.uk Tel: +44 (0)1482  
46 2061 Website: <http://www.hull.ac.uk/evolution/people/Lawson/index.html> –

L.Lawson-Handley@hull.ac.uk  
Handley@hull.ac.uk

L.Lawson-

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## UManchester EvolutionaryBiology

Chairs in the Faculty of Life Sciences

Closing date: 25/03/2010, Reference: LS/10115

The University of Manchester wishes to appoint Professors in the Faculty of Life Sciences to augment our current world leading expertise in Biology. We are seeking individuals of outstanding scientific quality who will further strengthen Biology across the University, contributing expertise complementary to, and synergising with, that already available. Candidates should be internationally recognised in Biology with an inspiring view of the future of that field and of science in general. They should have a broad vision for their chosen research field, have proven leadership abilities and considerable appreciation of the need to embrace interdisciplinary working. The successful applicant(s) will have held a senior position in academia or in industry, be respected widely internationally, boast a track record of innovative scientific concepts, producing world class publications and attracting major research funding. The new Professor(s) will be expected to further develop their research groups and drive collaborative research projects within the University. They should have a strong appreciation of the value of both experimental and theoretical approaches to the life sciences. The Faculty is advertising these positions as open chairs to attract the very best candidates. The Faculty has a

world leading profile in Biology and a strong ethos of interdisciplinary working at the interfaces with medicine, the physical sciences and humanities. This open call therefore extends also to exceptional candidates with world leading research profiles at these interfaces.

Of particular interest to evolutionary biologists will be joining the recently formed Computational and Evolutionary Biology (CEB) grouping, <http://www.manchester.ac.uk/ceb>, a department-sized grouping of researchers in Life Sciences who use a wide range of techniques from computational to whole organism experimental approaches in their pursuit of understanding biological systems. In particular, the CEB grouping seeks to understand biological function at different levels: molecular and genomic, organismal, population, ecosystem and environmental. A main theme of our research is the use of an evolutionary perspective to inform and predict the behaviour of biological systems. Research underway in CEB includes: comparative genomics (for example to identify probable non-coding RNAs, see the miRBase database, <http://www.mirbase.org/>), development of new bioinformatics software (e.g., phylogenetic methods), use of computer simulations to understand the movements of both living and fossil animals such as dinosaurs, the study of pathogen evolution (e.g., HIV) and the evolutionary genetics of social interactions and complex traits. We are also keenly interested in conservation and sustainability research. Please see the CEB website for further details on these and other current research projects: <http://www.manchester.ac.uk/ceb>.

We welcome enquires and applications from senior researchers in evolutionary biology. For details on how to apply see: <http://www.ls.manchester.ac.uk/about/jobs/> – David L. Robertson, PhD Michael Smith Bldg, Faculty of Life Sciences, Univ. of Manchester. Tel:+44 (0)161 275 5089, <http://www.manchester.ac.uk/ceb> david.robertson@manchester.ac.uk

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## UMassachusetts Amherst EvolutionaryMicrobiology

This is a broad search. Scientists with interests in evolution and genomics are encouraged to apply.

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The Department of Microbiology invites applications from Ph.D.-level scientists for a tenure-track position

at the level of ASSISTANT professor. We seek candidates taking innovative approaches related to basic and applied microbiology. We are particularly interested in candidates that complement ongoing programs within The Institute of Massachusetts Biofuels Research (TIMBR) and the Institute of Cellular Engineering (ICE), interdisciplinary groups of biologists, chemists and engineers focused on renewable energy. The successful candidate will have access to students from several interdepartmental graduate programs, training grants and will participate in teaching at both undergraduate and graduate levels. Applicants should send a curriculum vitae, a statement of research and teaching interests, reprints of recent publications, and at least three letters of recommendation to:

Chair of Microbiology Search Committee Department of Microbiology University of Massachusetts N203 Morrill IV North Amherst, MA 01003 [microbio-dept@microbio.umass.edu](mailto:microbio-dept@microbio.umass.edu)

The search committee will begin reviewing applications on March 1, 2010 and will continue until the position is filled. Hiring is contingent upon the availability of funds.

The Five College Consortium, comprised of Smith College, Amherst College, Mount Holyoke College, Hampshire College, and the University of Massachusetts Amherst, provides an intellectual environment committed to providing academic excellence and diversity including mentoring programs for faculty. The College and the Department are committed to increasing the diversity of the faculty, student body and the curriculum. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

Jeffrey Blanchard <[blanchard@microbio.umass.edu](mailto:blanchard@microbio.umass.edu)>

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### UMichigan ResLabTech PlantPopGenet

Full Time Research Technician Position University of Michigan, Ann Arbor Contact: Chris Dick [cwdick@umich.edu](mailto:cwdick@umich.edu)

Full time research technician needed to participate in plant population genetics and phylogeny research at the University of Michigan.

Research and responsibilities include development of genetic markers from genomic data, microsatellite geno-

typing, DNA sequencing, genetic analyses, lab management, and training of students. Information about the lab may be found at <http://sitemaker.umich.edu/cwdicklab/home> Available 15 March, 2010. First interviews on February 19. Applicants must apply through the University of Michigan at the following link:

<http://umjobs.org/> With reference to job posting number 37844 "Research Lab Specialist Intermediate"

Christopher W. Dick

Assistant Professor Dept of Ecology and Evolutionary Biology The University of Michigan 830 North University Ave Ann Arbor, MI 48109-1048

Assistant Curator University of Michigan Herbarium 600 Varsity Drive Ann Arbor, MI 48108-2287

Research Associate Smithsonian Tropical Research Institute P.O. Box 0843-03092 Balboa, Ancon, Republic of Panama

Office phone 734-764-9408 <http://sitemaker.umich.edu/cwdicklab/home> <http://www.lsa.umich.edu/eeb/people/cwdick/index.html>

Christopher Dick <[cwdick@umich.edu](mailto:cwdick@umich.edu)>

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### UStAndrews ResTech DrosophilaVariation

University of St Andrews, Scotland, UK

Research Technician; Behavioural analysis of *Drosophila*.

Salary - £14,550 - £16,629 per annum

This post is to work under the guidance of Professor Mike Ritchie at the School of Biology. The main duties will involve maintenance of stocks of *Drosophila melanogaster* and the analysis of behaviour from a range of lines. The aim of the work is to help understand the genetic influences on natural variation in a complex trait. Laboratory work will concentrate on obtaining the behavioural data, will be closely supervised and training given. The work is funded by the Natural Environment Research Council UK for around 12 months, starting on the 1 May 2010, or as soon as possible thereafter. The main tasks are to collect data on the courtship song of male fruit flies. Some knowledge of behavioural or evolutionary biology is required and basic statistics, analytical skills and experience are an advantage. This position will suit a recent graduate in

Biology or Genetics with an interest in behavioural or evolutionary genetics, perhaps one who is considering a PhD in this area.

Informal enquiries only to Mike Ritchie (e-mail: mgr@st-and.ac.uk).

Application forms and further particulars are available from Human Resources, University of St Andrews, The Old Burgh School, Abbey Walk, St Andrews, Fife KY16 9LB, tel: 01334 462571, by fax 01334 462570 or by e-mail Jobline@st-andrews.ac.uk. The advertisement, further particulars and a downloadable application form can be found at <http://www.st-andrews.ac.uk/employment/>. Please quote ref: JC138/10 Closing date: 2 March 2010

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mgr <mgr@st-andrews.ac.uk>

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## Vienna 4 FieldAssist Biodiversity

1st announcement:

Two field assistants in Reproductive Behaviour in birds (Great Tits) needed (April-July 2010)

Two field assistant positions are available in an international long-term research project on reproductive biology in response to predation, climate and altitudes. This study is part of the alpine biodiversity project run by Sabine Hille.

Fieldwork will be done from 10th of April to 20th of July 2010, at the Vienna forest in Austria.

We are looking for two field assistants, with catching, handling and ringing experience in small passerines. Candidates should preferably have a background in biological sciences. Field assistants will participate in systematic monitoring of breeding performance, individual growth patterns, parasite loads in fledglings in a nest box population. Field assistants will be responsible for the logistic organisation of the nest checks. Skills in leader climbing and creative thinking and planning to catch the adult Great Tits are expected. A European Driving license is required. Motivation will play a key role; the work is hard and demanding, takes place in changing weather and requires long hours at times. Timing of field work is fully to be adapted to the breed-

ing activity of the birds and requires all May full day working hours. Work includes also entering data in a database. Knowledge in oracle or at least access is required.

Field assistants will receive 1000-1500 euros per month, depending on qualification. Applicants are expected to stay for the entire field season. The language at the study sites will be English. Accommodation during fieldwork will be provided near the site.

The positions will be filled as soon as possible. Applications should be in English and should include, in one single pdf or word file, a curriculum vitae and a letter of motivation. Bird ringers should indicate their level of experience and include their ringing licences into the application. Please provide names and email addresses of two persons who are willing to write a letter of recommendation, and send applications by email to the following addresses:

Closing date: 1st March 2010

Dr. Sabine Marlene Hille Institute of Wildlife Biology and Game Management University of Natural Resources and Applied Life Sciences Gregor Mendel-Straße 33 1180 Vienna Austria Tel.: +431 47654 4463 Fax.: +431 47654 4459

Second announcement:

Two field assistants in small mammal biodiversity:

Two field assistant positions are available in an international long-term research project on reproductive biology of small mammals in the Alps. This study is part of the alpine biodiversity project run by Sabine Hille

Fieldwork will be done from 25th of June until 30th of September 2010 at the Alpine field site at the Ötscher mountain.

We are looking for two field assistants with intensive skills in trapping, identifying and handling small mammals. Both will work in a team to survey small mammal populations in different altitudes on 6ha at the Ötscher mountain. Candidates should preferably have a background in biological sciences. Field assistants will establish a trapping set of Sherman traps in a mountain forest, will handle, measure, mark and release the mammals. Work includes also entering data in a database. A background in oracle or at least in access is required. Field work will include intensive hiking through mountain forests and field assistants are expected to work in the mountain only in groups and in the early morning hours in all weathers.

Field assistants will receive 1000 - 1500 euros per month depending on qualification. Applicants are expected to stay for the entire field season. The language at



the study sites will be English. Accommodation during fieldwork is provided at the primitive field station hut at Ötscher mountain. Driving licence is required, car will be provided.

The positions will be filled as soon as possible. Applications should be in English and should include, in one single pdf or word file, a curriculum vitae and a letter of motivation. Please provide names and email addresses of two persons who are willing to write a letter of recommendation, and send applications by email to the following addresses:

Closing date: 1st March 2010

Dr. Sabine Marlene Hille Institute of Wildlife Bi-

ology and Game Management University of Natural Resources and Applied Life Sciences Gregor Mendel-Straße 33 1180 Vienna Austria Tel.: +431 47654 4463 Fax.: +431 47654 4459

Dr. Sabine Marlene Hille

Institute of Wildlife Biology and Game Management

University of Natural Resources and Applied Life Sciences

Gregor Mendel-Straße 33 1180 Vienna Austria

Tel.: +431 47654 4463 Fax.: +431 47654 4459 skype: sabinehille

Sabine Hille <sabine.hille@boku.ac.at>

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Dear EvolDir Folks,

Our department has an ABI 3100 sequencer. This machine uses a 16 capillary array, the older syringe system, and POP6 polymer. We are currently in a situation where most labs send sequences out to core facilities, but some people still use the machine for small batches of samples. Therefore, we're exploring ways to cost effectively run the machine given the limited throughput and increases in ABI pricing. I assume that many labs are in a similar situation, and I was looking for some input on how people are dealing with common issues:

Polymer -ABI is now only selling POP6 in 7 mL aliquots (list price: \$468). Does anyone order POP6 from a different distributor at a better price?

-POP7 can be bought in bulk, and although it is thinner it seems that people have used it in a 3100 (see link below). I'm curious to hear about experiences with this, particularly regarding syringe leakage. [http://www.biotechniques.com/multimedia/archive/00036/BTN\\_A\\_04366BM01\\_-O\\_36600a.pdf](http://www.biotechniques.com/multimedia/archive/00036/BTN_A_04366BM01_-O_36600a.pdf)

Capillary arrays and regeneration: We currently use The Gel Company's array regeneration service (\$200), usually sending arrays out every 6 months or 200 runs. I'd be interested in hearing about experiences with number of runs between regenerations, lifetime of arrays, other companies, or doing this yourself.

Any other general helpful tips would be appreciated. I will compile responses and send back to the list. Thanks for any information,

Jeff DaCosta

Boston University dacostaj@bu.edu

Jeffrey DaCosta <dacostaj@bu.edu>

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## ABI 3100 Supplies answers

Dear EvolDir Folks,

I received just a few responses to my questions about cost-saving tips for sequencing with an ABI 3100 (see original post at bottom). Here are the main points:

- \* It is possible to buy generic polymer from MCLab ([www.mclab.com](http://www.mclab.com)), who produces their own versions of POP4-7. \* It is possible to get a service contract from the third party company SeqGen ([www.seqgen.net](http://www.seqgen.net)). \* Labs seem to commonly use capillaries for 600-700 runs.
- \* One person suggested that the life an array can be ex-

tended to 1000 runs by not cleaning the polymer blocks unless the array is being changed. The idea is that limiting the array's exposure to water particles helps it last longer. \* I did not hear from anyone using POP7 with an ABI 3100.

Thanks for the responses, -Jeff

ORIGINAL POST: Our department has an ABI 3100 sequencer. This machine uses a 16 capillary array, the older syringe system, and POP6 polymer. We are currently in a situation where most labs send sequences out to core facilities, but some people still use the machine for small batches of samples. Therefore, we're exploring ways to cost effectively run the machine given the limited throughput and increases in ABI pricing. I assume that many labs are in a similar situation, and I was looking for some input on how people are dealing with common issues:

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Any other general helpful tips would be appreciated. I will compile responses and send back to the list. Thanks for any information,

dacostaj@bu.edu dacostaj@bu.edu

---

## AFLP MismatchDist PairwiseDiff

Dear evoldir members,

I am looking for a way to calculate the 'mismatch distribution' (or pairwise differences) from an AFLP dataset with >2000 loci and 120 individuals. Usually one can use Arlequin, but in my case I always get an 'overflow error', probably because the data-matrix is too big. It works with up to 20 individuals, but with more indi-

viduals included the calculation aborts.

Does anyone have an idea how I could solve the problem or is there another software for calculating the mismatch distribution ?

Any hints are highly welcome,

thanks & greetings,

Matthias

Matthias Felix Geiger <matthias.f.geiger@stud.uni-muenchen.de>

---

### Alberta VolunteerFieldAssist SquirrelPops

Field Assistants Required Columbian ground squirrels Sheep River Provincial Park, Alberta, Canada

We are looking for up to 4 volunteers to assist with fieldwork beginning April 07, 2010. End date is negotiable, but preference will be given to applicants who can stay until Aug 15, 2010. The project investigates the evolutionary ecology of Columbian ground squirrels. As a member of the study, assistants will be involved with monitoring the phenology (when animals emerge from hibernation), reproduction and survival of individuals. Fieldwork will involve live-trapping and handling of animals, behavioural observation and assistance with the measurement of physiological (metabolism) traits on free-ranging animals. This is an excellent opportunity to gain experience working with a collaborative research team on a long-term study of a wild mammal. Opportunities exist for side-projects for interested and motivated applicants. All fieldwork is carried out in the spectacular Rocky Mountains of western Alberta, Canada, home to some of the most majestic wildlife in North America.

We will be staying at the University of Calgary's R.B. Miller research station in Sheep River Provincial Park, Alberta (<http://bgs.ucalgary.ca/facilities/-facilities>). You will interact with other researchers working with ground squirrels on a diversity of projects in behavioural and population ecology. Additionally, the field station is home to a number of other researchers working on a variety of projects, ranging from insects to large mammals.

Food, accommodation and travel costs within western Canada are provided. Applicants from outside of western Canada are welcomed. In this case, the equivalent

of airfare within western Canada will be provided to help offset travel costs.

Training will be provided and no experience is necessary, but candidates should have an interest in a number of the following (the more the better!): ecology, evolutionary biology, wildlife, field biology, and animal behaviour. Periods of time will be spent camping and, as such, successful applicants need to enjoy the outdoors, be up-beat, positive, responsible and work well as a member of a team.

If you wish to apply for a post then please send a CV with a cover letter and contact details of three references (with e-mail address), by email to Jeff Lane (contact info below), by February 28, 2010.

Contact: Dr. Jeffrey Lane

E-mail: [Jeff.Lane@ed.ac.uk](mailto:Jeff.Lane@ed.ac.uk) Institute of Evolutionary Biology Kings Buildings University of Edinburgh Edinburgh EH9 3JT

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

Jeff Lane <[Jeff.Lane@ed.ac.uk](mailto:Jeff.Lane@ed.ac.uk)>

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### Applications Automata Theory

Dear Colleagues,

For understanding biological complexity and algebraic automata theory applied to living and evolving organisms, as well as psychology, philosophy and game theory, you may be interested the new, long-awaited edition of the previously unpublished underground classic by John Rhodes.

Best Regards,

Chrystopher L. Nehaniv

Royal Society Wolfson BioComputation Research Lab  
University of Hertfordshire Hatfield AL10 9AB United Kingdom

APPLICATIONS OF AUTOMATA THEORY AND ALGEBRA Via the Mathematical Theory of Complexity to Biology, Physics, Psychology, Philosophy, and Games by John Rhodes (University of California at Berkeley, USA) , edited by Chrystopher L Nehaniv (University of Hertfordshire, UK) , & foreword by-Morris W Hirsch (University of California at Berkeley, USA)

Publisher: World Scientific Publishing (3 Nov 2009)

This book was originally written in 1969 by Berkeley mathematician John Rhodes. It is the founding work in what is now called algebraic engineering, an emerging field created by using the unifying scheme of finite state machine models and their complexity to tie together many fields: finite group theory, semigroup theory, automata and sequential machine theory, finite phase space physics, metabolic and evolutionary biology, epistemology, mathematical theory of psychoanalysis, philosophy, and game theory. The author thus introduced a completely original algebraic approach to complexity and the understanding of finite systems. The unpublished manuscript, often referred to as “The Wild Book”, became an underground classic, continually requested in manuscript form, and read by many leading researchers in mathematics, complex systems, artificial intelligence, and systems biology. Yet it has never been available in print until now.

This first published edition has been edited and updated by Chrystopher Nehaniv for the 21st century. Its novel and rigorous development of the mathematical theory of complexity via algebraic automata theory reveals deep and unexpected connections between algebra (semigroups) and areas of science and engineering. Co-founded by John Rhodes and Kenneth Krohn in 1962, algebraic automata theory has grown into a vibrant area of research, including the complexity of automata, and semigroups and machines from an algebraic viewpoint, and which also touches on infinite groups, and other areas of algebra. This book sets the stage for the application of algebraic automata theory to areas outside mathematics.

The material and references have been brought up to date by the editor as much as possible, yet the book retains its distinct character and the bold yet rigorous style of the author. Included are treatments of topics such as models of time as algebra via semigroup theory; evolution-complexity relations applicable to both ontogeny and evolution; an approach to classification of biological reactions and pathways; the relationships among coordinate systems, symmetry, and conservation principles in physics; discussion of “punctuated equilibrium” (prior to Stephen Jay Gould); games; and applications to psychology, psychoanalysis, epistemology, and the purpose of life.

The approach and contents will be of interest to a variety of researchers and students in algebra as well as to the diverse, growing areas of applications of algebra in science and engineering. Moreover, many parts of the book will be intelligible to non-mathematicians, including students and experts from diverse backgrounds.

Contents: Introduction What is Finite Group Theory? A Generalization of Finite Group Theory to Finite Semigroups A Reformulation of Physics Automata Models and the Complexity of Finite State Machines Applications: Part I: Analysis and Classification of Biochemical Reactions Part II: Complexity of Evolved Organisms Part III: The Lagrangian of Life: The Laws of Growing and Evolving Organisms Complexity, Emotion, Neuorsis and Schizophrenia Part IV: Complexity of Games Readership: Students and researchers interested in understanding complexity in biology (evolution, genetics, metabolism, biochemistry), physics, mathematics, philosophy, mathematical psychology and psychoanalysis, artificial intelligence, automata theory (and its foundations in semigroup and group theory), game theory, and computational sciences.

<https://www.wspc.com.sg/mathematics/7107.html>  
Available in hardback or software cover editions.

---

## BEAST partitioning

Dear lovers of estimating divergence timing,

Please can someone relate to an experience I'm having with BEAST version 1.5.2 where an “Illegal entry” error message appears on opening BEAST, and after running the .xml file, have BEAST terminate and return the log:

```
“Parsing error - poorly formed BEAST file,
Aus_only_Feb10_3_Partit.xml:
```

```
Object with idref=treeModel has not been previously
declared.
```

```
Exception in thread "main"
java.lang.RuntimeException: ErrorLog: Maximum
number of errors reached. Terminating BEAST
```

```
at dr.util.ErrorLogHandler.publish(Unknown Source)
```

```
at java.util.logging.Logger.log(Unknown Source)
```

```
at java.util.logging.Logger.doLog(Unknown Source)
```

```
at java.util.logging.Logger.log(Unknown Source)
```

```
at java.util.logging.Logger.severe(Unknown Source)
```

```
at dr.app.beast.BeastMain.<init>(Unknown Source)
```

```
at dr.app.beast.BeastMain.main(Unknown Source)”
```

Any advice will be warmly received.

Cheers,

Michael McLeish Postdoctoral Fellow University of Stellenbosch Department of Botany & Zoology Email: mcleish@sun.ac.za Tel: +27 (0) 21 808 4387 Fax: +27 (0) 21 808 2405

“McLeish, MJ, Dr <mcleish@sun.ac.za>”

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### Beaver samples

Hi, my name is Mariana Fasanella, Im doing my doctoral thesis in invasive species in *Castor canadensis* in Tierra del Fuego (Argentina) and Im looking for some samples of tissue or DNA from *Castor canadensis* in USA or CANADA, in preference from Alberta (Canada) because the introduced beavers in Argentina maybe belong to Alberta (we are not sure yet). Has anyone knows someone who work in this species?

Thank you very much.

Best

Mariana

Lic. Mariana Fasanella

Laboratorio de Ecología Molecular Centro Regional de Estudios Genómicos (AUGM-UNLP) Av. Calchaquíkm. 23,5. Florencio Varela (1888). Buenos Aires- Argentina Te. Fax: +54 -11 4275 8100 URL: [www.creg.org.ar](http://www.creg.org.ar) marianfasanella@gmail.com

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### Bower award understanding genomes

Dear evoldir members–

Each year, the Franklin Institute bestows the Bower award (250,000 USD cash) to an outstanding scientist in a chosen field. In 2011, it will be given on the basis of achievement in “understanding genomes”. I can think of some evolutionary biologists who have had a rather large impact on how we understand genomes, so I thought I would share the information for this reason (I don’t have any personal affiliation with this award). The announcement says:

“The Franklin Institute seeks nominations for the 2011 Bower Award and Prize for Achievement in Science of

individuals who have made significant scientific contributions to our understanding of the structure and function of genomes. Nominations may recognize efforts including, but not limited to: functional genomics, comparative genomics, studies of complex diseases, and personalized medicine. Nominations should clearly indicate the scientific impact of the nominee’s work, whether innovative, technical, conceptual, and/or integrative.”

Please see the following web site for details (nominations are due by May 31, 2010):

[http://www.fi.edu/franklinawards/-bscience\\_eligibility.html](http://www.fi.edu/franklinawards/-bscience_eligibility.html) Arlin

Arlin Stoltzfus (stoltzfu@umbi.umd.edu) CARB, 9600 Gudelsky Drive, Rockville, MD tel: 240 314 6208; web: [www.molevol.org](http://www.molevol.org) Arlin Stoltzfus <stoltzfu@umbi.umd.edu>

---

### Covaris setting advice

Hi,

I use Covaris to shear DNA for library preparation and am trying to obtain a set of optimal parameters to shear 1-2 ug of ~60 kb DNA to 300-600 bp fragments. I tried the settings recommended by Covaris for 300 bp (10% dc, 4 i, 200 bpc, 120 s) but got too much of the fragments falling below 250 bp, whereas lowering the settings (5% dc, 3-5 i, 200 bpc, 90-120 s) result in two distinct clusters, one around 2-300 bp and one around 5-600 bp. Has anyone got some recommendations please?

Thanks,

Maureen Liu

Postdoc Research Fellow The University of Nottingham U.K.

Maureen.Liu@nottingham.ac.uk  
Maureen.Liu@nottingham.ac.uk

Maureen.Liu@nottingham.ac.uk

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### DGGE MHC genotyping

Dear colleagues,

We are conducting population genetic studies in house



sparrows, and we are genotyping MHC of individuals using DGGE. Among other techniques, we used a CBS Scientific system (DGGE 2401). However, we sometimes get puzzling gels with this system : migration lanes are not parallel but look like a “drop cloth”, with central lanes fleing from the bottom central part of the gel. Did anyone already experience this problem (and found solution)? Any help from people experienced with CBS system would be welcome.

Thanks a lot in advance.

Dr Stephane Garnier

–

Stéphane Garnier

Equipe Ecologie Evolutive UMR CNRS 5561  
Biogéosciences Université de Bourgogne 6 Bd Gabriel  
21000 Dijon - France Tel: +33 (0) 3 80 39 90 58 Fax:  
+33 (0) 3 80 39 62 31

stephane.garnier@u-bourgogne.fr

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### DNA from IMS

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

Thank you very much in advance, Caitriona

Caitriona McInerney <c.mcinerney@qub.ac.uk>

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### Evolution Creationism website

Dear Colleagues, the European Society for Evolutionary Biology is pleased to announce the launch of a new website “Evolution Matters”, devoted to explaining evolution and and debunking creationism: <http://www.oeaw.ac.at/klivv/evolution/> This is a first version, and if you have constructive comments please end them to the... er...creator of the website, Dustin Penn, at [evolution@klivv.oeaw.ac.at](mailto:evolution@klivv.oeaw.ac.at)

Sincerely, Tad Kawecki Secretary, the European Society

for Evolutionary Biology

– Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Biophore CH 1015 Lausanne, Switzerland

tadeusz.kawecki@unil.ch

---

### Gel-purification methods answers

Dear All,

A couple weeks ago, I asked the list for suggestions and opinions on methods for the purification of DNA from agarose gels. Thanks for all the great responses! Several people asked if I could summarize the results and send it to the list, so here it is.

I decided to go with the Omega Ultra-Sep Gel Extraction Kit because it is very cost efficient (500 preps for ~USD \$200). Tania King (who recommended this method, said “it’s very cheap and the yield is very good - better than any other gel kit I’ve used.” <http://www.omegabiotek.com> Other options include:

1. Roche High Pure PCR Purification kit - used for gel and direct PCR purification <http://www.roche-applied-science.com>
2. Bio Rad Freeze 'N Squeeze DNA Gel Extraction <http://www.bio-rad.com>
3. Millipore Montage Purification Kit - quick, only takes 10 mins and no need to melt the gel <http://www.millipore.com>
4. Healthcare illustra GFX PCR DNA and Gel Band Purification kit <http://www.gelifesciences.com>
5. Promega Wizard gel extraction kit <http://www.promega.com>
6. Zymoclean Gel DNA recovery Kit from Zymo Research <http://www.zymoresearch.com>
7. Qiagen Gel Extraction kits - multiple people reported having issues with the quality of the extracted products <http://www.qiagen.com>
8. “Pepsi’s” (published by Travis Glenn, though I couldn’t find the ref) - involves putting aquarium wool in 1mL pipette tips and adding the gel slice to the wool; spin inside a 1.5mL tube. Recovery varies, but very cheap (suggested by Joe Stanton)

Stacy J. Mantooth Ecology and Evolutionary Biology Section School of Life Sciences University of Nevada, Las Vegas 4505 Maryland Parkway Las Vegas, NV 89154-4004 (702) 895-5373 / (702) 895-3956 (fax)

[mantooth@unlv.nevada.edu](mailto:mantooth@unlv.nevada.edu) <http://faculty.unlv.edu/~mantooth/> [mantooth@unlv.nevada.edu](mailto:mantooth@unlv.nevada.edu) [mantooth@unlv.nevada.edu](mailto:mantooth@unlv.nevada.edu)

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## GeneMapperSoftware Windows7

Hello all,

I'm going to install the ABI PRISM GeneMapper Software v3.5 from Applied Biosystems in a laptop computer with Windows 7 Professional.

The software needs to run in an english Microsoft Windows 2000 Professional, so I've thought about making a virtual machine with this operative system or making a partition to run it.

I've asked several people about it because the software is quite demanding with the laptop requirements and can generate many troubles, but nobody has tried to install it yet in a laptop with Windows 7, with or without any arrangement.

Has any of you tried it? Any suggestion for making it work? Do you know any trick about how to manage it?

My e-mail adress is [ines.sanchezdonoso@ub.edu](mailto:ines.sanchezdonoso@ub.edu)

I'll summarize and send the answers to [evoldir](mailto:evoldir).

Thank you very much in advance.

Inés Sánchez Donoso PhD Student

Animal Biology Department Faculty of Biology  
Barcelona University Spain

Inés Sánchez Donoso <[ines.sanchezdonoso@gmail.com](mailto:ines.sanchezdonoso@gmail.com)>

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## Guide to Evolution Webpage

Announcement:

A new webpage has been launched, entitled:

Evolution Matters: A Guide to the Evolution/Creationism Controversy

see: <http://www.oeaw.ac.at/klivv/evolution/> This website is hosted by the European Society for Evolutionary Biology, as part of its efforts to help improve public education and understanding of evolution.

I plan to continue to update and improve this webpage in the future, and I welcome suggestions.

Dustin Penn, PhD Director and Senior Scientist Kon-

rad Lorenz Institute for Ethology Austrian Academy of Sciences Savoyenstrasse 1a A-1160 Vienna, Austria

Adjunct Professor Center for Organismal Systems Biology University of Vienna

Dustin Penn <[D.Penn@klivv.oeaw.ac.at](mailto:D.Penn@klivv.oeaw.ac.at)>

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## Hottonia inflata samples

I am looking for seeds of native *Hottonia inflata* (American featherfoil) for a comparison with *H. palustris*. Up to now I wasn't able to locate a nursery from which I can purchase it. Does someone of you know possible suppliers or has some seeds to send me? It would be of great help for me. Thank you in advance for any suggestion.

Paola Arduino

Dr. Paola Arduino Dept. Ecology and Sustainable Economic Development (DECOS) Università della Tuscia Largo dell'Università 01100 Viterbo - ITALY tel.: (+)-39-0761-357759 FAX: (+)39-0761-357751 e-mail [arduino@unitus.it](mailto:arduino@unitus.it)

Paola Arduino <[arduino@unitus.it](mailto:arduino@unitus.it)>

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## How to Install and use Bioedit legally

Hello,

Many of us use BioEdit for sequence viewing/alignment/editing as evidenced by the most recent summary of alignment programs (Jan 9, 2009). BioEdit is a Windows program, however I have recently begun using BioEdit on my mac without using windows. There are easy to follow instructions for installing WINE on your machine which allows you to run windows programs without also installing or running a windows distribution (much faster and FREE!).

See this website for the details on installing Wine:

<http://davidbaumgold.com/tutorials/wine-mac/> I hope this helps you, -Heather

Heather R. L. Lerner, Ph.D. Post-doctoral researcher,

Smithsonian Institution and University of Maryland (College Park) hlerner@gmail.com 202-633-4118 (office) Smithsonian Institution National Zoological Park Center for Conservation and Evolutionary Genetics Genetics Lab- MRC 5513 PO Box 37012 Washington, DC 20013-7012

Heather Lerner <hlerner@gmail.com>

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## Human Evolution Textbook

Can anyone recommend a good Human Evolution text book or popular science book(s) to be used for an undergraduate, non-majors course in Human Evolution? "Human Evolution" by Roger Lewin has been used in the past, but we are looking for something that addresses a broader audience of non-majors.

Response can be directed to sarahhuber@rmc.edu

Thank you.

Sarah Huber, Ph.D. Assistant Professor Biology Department Randolph-Macon College Copley Science Building 304 Caroline St. Ashland, VA 23005

Phone: 804-752-7336 E-mail: sarahhuber@rmc.edu

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## Lyon SMBE UndergradMentors

CALL FOR MENTORS SMBE UNDERGRADUATE MENTORING AND DIVERSITY PROGRAM AWARDS 2010 ANNUAL MEETING OF THE SOCIETY FOR MOLECULAR BIOLOGY AND EVOLUTION July 4-8, Lyon, France CONFERENCE WEBSITE: <http://smbe2010.univ-lyon1.fr/> PROGRAM OUTLINE: The Society for Molecular Biology and Evolution (SMBE) will make available 10 awards for undergraduate students to participate in a Mentoring and Diversity Program. Five of these positions will be reserved for undergraduates from traditionally underrepresented groups in our scientific discipline. The goals of this program are: (1) to provide undergraduate students with the opportunity to experience the excitement of attending and presenting at an international scientific conference, (2) to foster enthusiasm for molecular biology and evolution as well as a possible career in this field, and (3) to promote diversity at the SMBE annual meeting.

To achieve these goals, each recipient of an SMBE Undergraduate Mentoring and Diversity Program Award will be paired with two mentors, one a senior graduate student; the other a postdoctoral fellow or faculty member.

Mentor activities will include:

1. Attending some conference sessions with the student, answering questions about the basic concepts being presented, and, more generally, explaining the "goings-on" at a multi-day scientific conference in order to minimize the anxiety often felt by first-time conference attendees..
2. Interacting with the student during some mealtimes, coffee breaks and other social gatherings.
3. Introducing the student to other undergraduates, graduate students, postdoctoral fellows and faculty members as a way of facilitating connections with potential future graduate supervisors and colleagues.
4. Attending the poster session and SBME Undergraduate Mentoring and Diversity Program Award reception with the student.

WE ARE SEEKING INDIVIDUALS INTERESTED IN BEING A MENTOR

If you are interested in mentoring an undergraduate at this year's SMBE meeting in Lyon, please email Dan Graur (dgraaur[at]uh.edu).

dgraaur@gmail.com

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## Lyon SMBE Undergrad TravelAwards

SMBE Undergraduate Mentoring and Diversity Program Awards 2010 Annual Meeting of the Society for Molecular Biology and Evolution July 4-8, Lyon, France CONFERENCE WEBSITE: <http://smbe2010.univ-lyon1.fr/> DEADLINE FOR RECEIPT OF NOMINATIONS/APPLICATIONS: April 10, 2010

The Society for Molecular Biology and Evolution (SMBE) is pleased to make available 10 awards for undergraduate students to participate in a Mentoring and Diversity Program. Five of these positions will be reserved for undergraduates from traditionally underrepresented groups in our scientific discipline.

The goals of this program are: (1) to provide students with the opportunity to experience the excitement of

attending and presenting at an international scientific conference, (2) to foster enthusiasm for molecular biology and evolution as well as a possible career in this field, and (3) to promote diversity at the SMBE annual meeting.

To achieve these goals, each recipient of an SMBE Undergraduate Mentoring and Diversity Program Award will be paired with two mentors, one a senior graduate student and the other a postdoctoral fellow or faculty member. Mentors will serve as contact points for the students, attend some sessions with the students, and, more generally, explain the “goings-on” at a multi-day scientific conference in order to minimize the anxiety often felt by first-time conference attendees. The mentors will also facilitate connections to graduate students, postdoctoral fellows and faculty members.

**Eligibility:** Candidates must currently be enrolled as undergraduate students (Bachelor’s level degree) or have graduated within the last 6 months at the time of application. Some awards will be reserved for undergraduates from traditionally underrepresented groups in our scientific discipline.

**Conference participation:** Recipients of an SMBE Undergraduate Diversity Mentoring Program Award will be invited to present their research at a special reception/poster session attended by their mentors, supervisors and other interested conference participants.

**Awards:** Ten awards will be given. Award recipients residing in Europe will receive US \$1,000 to be used to help cover the cost of airfare, accommodation, and meeting registration. All other recipients will receive US \$1,500. Each participant will also receive an online student subscription to the journal *Molecular Biology and Evolution* for the year of 2011.

#### Application

1. Faculty members may nominate undergraduates by sending a brief letter of recommendation and the abstract of the work to be presented at the poster session. The single PDF file should be sent to Dr. Dan Graur (dgraur[at]uh.edu).

OR

2. Students may apply for the award themselves by providing information on their background, academic status, the email address of their supervisor, and an abstract of the work to be presented at the poster session. The single PDF file should be sent to Dr. Dan Graur (dgraur[at]uh.edu).

**Traditionally Underrepresented Groups:** Applications for one of the awards reserved for undergraduates from traditionally underrepresented groups should contain a

brief statement of eligibility for these awards.

**Deadline:** The deadline for receipt of nominations/applications is April 10, 2010.

dgraur@gmail.com

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### MacquarieU VolunteerFieldResAssist FinchEvolution

FIELD RESEARCH ASSISTANT(S) (1-2) needed from mid March to early August 2010 (dates flexible) for a PhD project on the breeding ecology and behaviour of the long-tailed finch in Australia. Fieldwork will take place in the main study area, located in the East Kimberley (Northern tip of Western Australia) near Wyndham. Work for the project will consist of checking nestboxes, behavioural observations and mist-netting. Fieldwork will require getting up before dawn, and applicants need to be fit. Ideally, applicants should have previous bird and field experience, good observational skills, and enthusiasm for bird watching. Previous experience with bird ringing is also highly desirable. Study sites are located near a small town, where a field station with basic facilities is located. Successful applicants must be reliable, able to work independently, be tolerant of heat and able to hike for up to 7-8 hrs per day (6 or 7 days/week). The position is a volunteer position, however food and housing expenses will be covered when at the research site. Interested applicants should email a cover letter, resume, dates of availability, and the contact information of 2-3 references to ERICA VAN ROOIJ (email: erica AT galliform.bhs.mq.edu.au). Applications should be submitted as soon as possible, and will be reviewed until position is filled.

Erica van Rooij PhD student Macquarie University Sydney Australia

Erica Van Rooij <erica@galliform.bhs.mq.edu.au>

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### MaxPlanckInst Leipzig VolFieldAssist RhesusMonkeyEvol

Field assistants for rhesus monkey research on Cayo

Santiago, Puerto Rico.

Hiring Organization:

Max Planck Institute for Evolutionary Anthropology, Leipzig (Germany)

We are looking for a volunteer to assist on a project examining kin recognition on a semi free-ranging rhesus macaque population on Cayo Santiago, Puerto Rico. The project is being undertaken in the Lab of Dr Anja Widdig, Max Planck Institute for Evolutionary Anthropology, Leipzig (Germany) (see <http://www.eva.mpg.de/pks/index.html>). The volunteers will work alongside Dr. Dana Pfefferle (<http://www.eva.mpg.de/pks/files/people.html>).

The successful applicant will be expected to work on Cayo Santiago for 5-6 days a week, and may also be required to undertake data entry and/ or processing in the later afternoon and early evenings. On Cayo Santiago, the primary task will be to assist carrying out playback experiments as well as to help recording rhesus macaque vocalizations. In order to do so, appropriate training (including the analyses procedure ultimately taking place) will be provided, after which a good quantum of independence is expected. This position is ideal for graduate students or recent graduates looking to gain experience in fieldwork and data collection.

Carrying out playback experiments is a protracted and patience challenging task, including many hours of waiting for the correct situation. Thus you must be able to maintain a positive attitude. In general, applicants must be in good physical and mental condition; feel comfortable being far away from family and friends; be emotionally mature, energetic, and very patient; have an excellent eye for detail; don't be afraid of approaching monkeys (!); willing to work in a small team setting and follow instructions. The ability to work in tropical conditions and the willingness to adapt to a foreign culture is needed. Although the work can be demanding, being close to habituated primates is very rewarding and a great experience.

The language in our team is English. The successful candidate must have medical insurance, a valid IACUC certificate ([www.citiprogram.org](http://www.citiprogram.org)) and a TB-test from within the last six months.

There is NO financial support available for airfare, health insurance, housing and food.

Shared accommodation can often be found very cheaply in Punta Santiago (e.g. \$250 per month).

Term of Appointment: 13th March until 13th June 2010

Application Deadline: Open till position is filled

Comments: To apply, candidates should email a brief cover letter outlining their interests, experience, and why they wish to join the project. They should attach a CV and make sure that two reference letters are sent directly to Dr. Dana Pfefferle (E-mail preferred). Please only send email applications.

Contact Information: Dana Pfefferle  
danapfefferle(at)googlemail.com

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## Megabace1000 filter set 2

Dear All,

does anyone have a spare filterset 2 from the Megabace 1000 capillary system? We have gotten a used machine but unfortunately without the filterset 2 for genotyping and would be willing to buy it for a reasonable price. Amersham does sell them - but for an insane amount of money. If you do, please contact me at Lars.Opgenoorth@staff.uni-marburg.de

Thank you Lars

- Dr. Lars Opgenoorth Department of Ecology University of Marburg

Karl-von-Frisch Strasse 8 35043 Marburg Germany

phone: \*\*49 (0) 6421 2822080 (office)  
Lars.Opgenoorth@staff.uni-marburg.de

Lars Opgenoorth <Lars.Opgenoorth@staff.uni-marburg.de>

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## Microsatellite Analyser program

Hi all,

I would like to use the Microsatellite Analyser program by Dieringer and Schlotterer, but I can't access the download site (<http://i122server.vu-wien.ac.at/>) for some reason. Does anyone have a copy they would be willing to email to me? Or can you point me to another website where I can download it?

Thanks for your help!

Ivan



Ivan C. Phillipsen Department of Zoology Oregon State University 3029 Cordley Hall Corvallis, OR 97331-2914  
Email: philliiv@science.oregonstate.edu

phillipsen@gmail.com

## Netherlands VolunteerFieldAssist RadioTracking

\*\*\* field assistant radio tracking \*\*\* Netherlands Institute of Ecology (NIOO) - Heteren - The Netherlands

Because I just heard that my current student is ill (and will be for the next months), I would like to make this very late call for a field assistant position to help follow 25 female great tits in the period before egg laying at the National Park the Hoge Veluwe. Field work will start March 9th already! Unfortunately we can not pay a salary, but we can talk about travel expenses / accommodation. Students who want to make it a research project are welcome too. We (me, another student & you) will work 7 days a week for a period of 6 weeks to collect the data (March 9th - April 17th).

The project focusses on the timing of egg laying. Timing of egg laying is important since climate change shifted the optimal timing of egg laying earlier. Some bird species, like the great tit, have not advanced egg laying and are suffering from 'being too late'. Conditions during the period before egg laying are likely to be important for the timing of egg laying, however, almost nothing is known about what female great tits are actually doing during this period of year! Therefore we will measure food availability and monitor a number of females (using radio telemetry) to see how they make use of the available food. All this will take place in the nest box population at the Hoge Veluwe in the Netherlands, which is one of the longest running tit studies in the world.

For more information, feel free to contact Luc te Marvelde L.temarvelde@nioo.knaw.nl

Drs. Luc te Marvelde Netherlands Institute of Ecology (NIOO-KNAW) Department of Animal Ecology PO Box 40 6666 ZG Heteren The Netherlands

Tel: +31 (0)26 4791 247 Fax: +31 (0)26 4723 227 E-mail: l.temarvelde@nioo.knaw.nl <http://www.nioo.knaw.nl/users/ltemarvelde/> "Marvelde, Luc te" <L.teMarvelde@nioo.knaw.nl>

## New Drosophila species stocks

NEW DROSOPHILA ISOFEMALE LINES These isofemale lines are available until April 1st, 2010:

*Drosophila melanogaster*: 11-isofemale lines from Apia, Upolu, American Samoa (2009) stock # 14021-0231.134A

*Drosophila simulans*: 12-isofemale lines from Cuzco, Peru (2009) stock # 14021â0251.279A

*Drosophila subobscura*: 25-isofemale lines from Goombrick, United Kingdom (2009) stock # 14011â0131.13A

NEW DROSOPHILA STOCKS IN THE PERMANENT COLLECTION: ISOFEMALE STOCKS: *Drosophila eugracilis* 14026-0451.10 (Kuala Belalong, Brunei 2002). *Drosophila ficusphila* 14025-0441.06 (Taiwan 1961). *Drosophila melanogaster* 14021-0231.133 (Cuzco, Peru 2009). *Drosophila mimetica* 14023-0381.00 (Kuala Belalong, Brunei 2002). *Drosophila mimetica* 14023-0381.01 (Kuala Belalong, Brunei 2002). *Drosophila obscura* 14011-0151.03 (Goombrick, United Kingdom 2009). *Drosophila rhopaloa* 14029-0021.00 (Vietnam). *Drosophila subobscura* 14011-0131.12 (Torno, Portugal 2008). *Drosophila subobscura* 14011-0131.14 (Derby, United Kingdom 2009). *Drosophila takahashii* 14022-0311.14 (Yun Shui, Taiwan 1968).

MULTIFEMALE STOCKS: *Drosophila melanogaster* 14021-0231.134 (Apia, Upolu, American Samoa 2009). *Drosophila simulans* 14021-0251.279 (Cuzco, Peru 2009). *Drosophila subobscura* 14011-0131.13 (Goombrick, United Kingdom 2009).

STOCKS with MUTATIONS: *Drosophila pseudoobscura* 14011-0121.171 Balancer, Dpse\or[1]L[1]SC/or[1]+ST[lethal] *Drosophila pseudoobscura* 14011-0121.172 Balancer, Dpsb\or[1]pr[1] *Drosophila pseudoobscura* 14011-0121.173 Balancer, Dpsb\or[1]Bl[1]pr[1]cv[1] AR/CU(lethal)

NEW GENOME PROJECT STOCKS: *Drosophila takahashii* 14022-0311.13 (Yun Shui, Taiwan 1968) *Drosophila rhopaloa* 14029-0021.01 (Vietnam) *Drosophila kikkawai* 14028-0361.14 (Leticia, Colombia) *Drosophila bipectinata* 14024-0381.19 (Chia-I, Taiwan 1967) *Drosophila ficusphila* 14025-0441.05 (Taiwan 1961) *Drosophila elegans* 14027-0461.03 (Hong Kong)

Therese Ann Markow, Professor Amylin Chair in Life

Sciences Section of Ecology Behavior and Evolution  
Division of Biological Sciences Muir Biology Building  
2215 9500 Gilman Drive University of California at San  
Diego La Jolla, CA 92093-0116

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<http://biology.ucsd.edu/labs/markow/> <http://stockcenter.ucsd.edu>  
Therese Markow  
<tmarkow@ucsd.edu>

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### Portland Oregon Undergrad conference

Undergraduate Diversity at Evolution 2010

\*\*\*Deadline March 1\*\*\*\*

For the eighth consecutive year, the Undergraduate Diversity at SSE/SSB program, funded by the Undergraduate Research and Mentoring in the Biological Sciences (URM) program at NSF, will take place at the 2010 meeting of the Society for the Study of Evolution (SSE) and the Society of Systematic Biologists (SSB) in Portland, OR. This year we again team up with staff at the National Evolutionary Synthesis Center (NESCent) to send up to 25 undergraduates to the meetings to present posters and receive mentoring from graduate students, postdocs and faculty in evolutionary biology. For full information and links to the application portal see

<http://www.oeb.harvard.edu/faculty/edwards/-community/application.html> The deadline for applications this year is March 1, 2010. Applications can be made online through a special portal at the National Evolutionary Synthesis Center (NESCent):

[http://www.nescent.org/eog/-signup\\_evolution2010diversity.php](http://www.nescent.org/eog/-signup_evolution2010diversity.php) . Applications consist of a title, author line and abstract of the poster to be presented by the undergraduate; a one-page statement of academic interests and career goals; and a letter of recommendation. The personal statement should address how attending the Evolution meetings will help meet these goals, and should indicate whether or not the student plans to attend graduate school, if this is known. The letter of recommendation, ideally from the undergraduate's research advisor, should indicate how inclusion of the student will increase diversity of the group participants. All materials required for application can be found at the NESCent application portal. Details on selection criteria are

available at the program headquarters at the Harvard web site.

We can only accept applications from students who are US citizens or permanent residents. Applications will be accepted only from students registered or very recently graduated from U.S. institutions, including Puerto Rico (i.e., no later than having finished classes during the winter or spring semesters before the meeting) and traveling to the meeting from within the US. Students demonstrating a need for funds to attend SSE/SSB will be given preference, and will be selected so that as a group, they will maximize cultural diversity among undergraduates at the meetings.

You can also contact one of the program organizers for more information:

Scott V. Edwards (sedwards@fas.harvard.edu) Richard Kliman (rmkliman@cedarcrest.edu)

at NESCent: Jory Weintraub (jory@nescent.org)

sedwards@fas.harvard.edu

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### Q Value software help

In the past, I've used the q value software package to control the false discovery rate when making large number of pairwise comparisons of gene frequencies or Fst values (I'm one of those who feel that the typical Bonferroni "correction" is too conservative for preliminary surveys). However, I can't get the latest versions of the software to run on any of my computers, MAC OS 10.4.x, 10.5.x, or Windows XP Professional. In every case, the program loads the P values from a text file, but then "hangs" at the "Execute" stage. In each case, I believe that I have the correct version of R (the statistical package that supports the Q value calculations) installed and running, with the appropriate interface also. However, I'm no "R" expert by any means, and I could be making some obvious mistake that I'm (not so blissfully) unaware of..

I would appreciate knowing if there is anyone out there successfully running "Q value" on machines like mine, and if so, can I get some advice? I have been unable to contact any Q value support groups. Does the LINUX version work better?

Thanks to all.

Bruce J. Turner Dept. Biol. Sci. VIRGINIA TECH  
Blacksburg, VA 24061 USA

“Bruce J. Turner, Dept. Biol. Sci., VPISU, Blacksburg, VA 240” <fishgen@vt.edu>

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## SexGenderBook CallForPapers

Call for papers:

### CHALLENGING POPULAR MYTHS OF SEX, GENDER AND BIOLOGY

This call for papers is for a transdisciplinary anthology about gender and biology written by international researchers, aimed at a public audience. Empirical research in biology, psychology, and other life sciences sometimes undergirds popular notions of female and male sexual difference, while much of current biology actually opens a space for variable and non-static views of sex and gender; instead of emphasizing dichotomous difference, the natural sciences may look into sameness and the continuum of morphologies, behaviors and processes in between. Our aim is to make these insights public knowledge.

We would like to highlight different areas of biology and related disciplines that question popularly held ideas of biology. There exist many popular conceptions about biology, sex, gender, and bodies that stem from supposedly common-sense notions of gender, human evolution, biological processes animals in general, and even life at the microbial level. Often these popular beliefs are distantly connected to the ideas developed and held by researchers in biology, archaeology and medicine. Our goal is to deepen the understanding of biology beyond these popular conceptions. We want contributions that 1) explain areas where biologists/archaeologists/psychologists, etc. have a varied view of sex/gender which is not known to the public and/or 2) has a critical perspective on different biological topics pertaining to sex and gender.

Possible questions to explore include:

How does a recent understanding of developmental biology, rate of evolution, diversity of sexualities, the anisogamy argument, parental investment and sexual selection affect our views of sex and gender? How can a critical perspective shed light on topics like sexual conflict, toy preference research, ideas about hunter-gatherers? What is a statistically significant biological sex difference? - how can we explain variation within and between categories? Where does brain research fit in constructing or challenging popular notions of differ-

ence between the sexes? How can we understand the diversity and variation of sex within nature? How has the notion of ?sex roles? been used to describe animal behavior and what are the consequences?

Deadline for abstracts (approximately 300 words) and a short CV: 1 May 2010 Selected submissions will be notified at the latest by June 1, 2010. Completed chapters (4000 words) will be due by August 31, 2010.

Editors: Malin Ah-King, Department of Ecology and Evolutionary Biology University of California Los Angeles, USA /Centre for Gender Research Uppsala University, Sweden

Andrew Lee, Department of Sociology Queen's University at Kingston, Ontario, Canada We are looking forward to your contribution.

For further information, in case of questions, and for sending in your contribution please contact Malin Ah-King: malin.ah-king@gender.uu.se

– Malin Ah-King Centre for Gender Research Uppsala University Box 634, SE-751 26 Uppsala Thunbergsv 3 H Phone: +46 18-471 22 77 Mobile: +46 70-255 67 66 Fax: +46 18 - 471 35 70 [www.gender.uu.se/en/node133](http://www.gender.uu.se/en/node133) E-mail: Malin.Ah-King@gender.uu.se

Malin Ah-King <malin.ah-king@gender.uu.se>

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## Shrimp Popgene

Hello, I am safari , graduated student for master degree in biotechnology of fisheries. I used popgene for calculation data on shrimp. It s diploid. My assume was 0,1 . I put 1 for visible and 0 for invisible in popgene . as you know there is no item a bout heterozygosity and homozygosity in part of dominant marker for diploid in this programme. After calculating my data a reviewer ask me you should determine hetrozyosity and homozygosity, why it might be concluded that one band differs due to het- or homozygosity, what should I do? Please help me with it. Thank you in advance

roggi safari <roggi\_safari@yahoo.com>

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## SNP analysis software

Dear Colleagues ;

In my lab , we have about 10 000SNP on 200 samples , and we would like to analyse the data set with classical analysis of diversity. Does anybody know a software under linux or an other systeme to analyse this dataset. Thank you for your answer .

Catherine Breton Phd, Biologie des populations et Evolution Post doctorate associate Institute of Plant Breeding, genetics and genomics Center for applied Genetic Technologies 111 Riverbend Road The University of Georgia, Athens, Georgia 30 602 USA Tel : 1 706 542 5223 Fax : 1 706 583 8120

Catherine Breton <cbreton@uga.edu>

## SNP genotyping companies

Hi all, Does anyone know (and recommend) a company (or any other institution) that genotypes home-made SNPs for a reasonable price? We have fish DNA of at least 2-400 individuals and would like to genotype around 100 SNPs (already developed) in them. The offers we got so far range around at least 20,000 Euros, which overspends our budget... Happy for any suggestion, Katharina

Katharina Oetjen PhD student

Institute for Evolution and Biodiversity Westfälische Wilhelms-Universität Hüfferstr. 1 48149 Münster

Tel.: +49 (0) 251 83 21652 Fax: +49 (0) 251 83 24668  
Email: oetjen@uni-muenster.de

<http://www.uni-muenster.de/Evolution.PlantEvolEcol/People/Katharina/oetjen@uni-muenster.de> oetjen@uni-muenster.de

## SNP genotyping companies answers

Hello everybody, I posted a question a few weeks ago regarding a company /an institution that does SNP genotyping for reasonable prices and as some people asked me to post the answers, here they are. My original question is posted below. Thanks a lot to all who responded, your comments were very helpful! By the

way: we have not decided yet which offer to take, so there is no final judgement from my side. But it seems that the actual price is going to be like 12,000 Euros at least - if you go for a company. Best, Katharina

— Hi all, Does anyone know (and recommend) a company (or any other institution) that genotypes home-made SNPs for a reasonable price? We have fish DNA of at least 2-400 individuals and would like to genotype around 100 SNPs (already developed) in them. The offers we got so far range around at least 20,000 Euros, which overspends our budget... Happy for any suggestion, Katharina

Answers:

Someone suggested to contact

Maribel Riveiro, [riveirom@dnalandmarks.ca](mailto:riveirom@dnalandmarks.ca)  
<<mailto:riveirom@dnalandmarks.ca>>

- [www.dnalandmarks.ca](http://www.dnalandmarks.ca) < <http://www.dnalandmarks.ca/> >

<http://www.kbiosciences.co.uk> <  
<http://www.kbiosciences.co.uk/> > - they were recommended from several people and seem to be not too expensive - and they have a cost calculator at their web site

Applied Biosystems Open array platform - seems like they design the primers for you and prep the plate and all you have to do is bring your samples and load the machine...

<https://products.appliedbiosystems.com/ab/en/US/adirect/ab?cmd=catNavigate2&catID=605780&tab=DetailInfo> <  
<https://products.appliedbiosystems.com/ab/en/US/adirect/ab?cmd=catNavigate2&catID=605780&tab=DetailInfo> >

Two reasonably priced facilities inCanada:

1.Sick Kids Hospital inToronto <http://www.tcag.ca/dnaSequencingSynthesis.html>

2. McGill / GenomeQuebec Innovation Centre  
<http://www.genomequebecplatforms.com/mcgill/services/genotyping/index.aspx?l=e>

'We have always found Sick Kids to be cheaper and more willing to work on smaller scale projects'

MassARRAY system by Sequenom, f.ex.implemented in

CIGENE,Norway, contact "Paul Ragnar Berg" <[paul.berg@umb.no](mailto:paul.berg@umb.no)> <<mailto:paul.berg@umb.no>> or

<http://www.ncl.ac.uk/ihg/research/facilities/flx/sequenom.htm> <http://www.src.sk.ca/html/>

research\_technology/ag\_bio/genserve\_lab/about\_us/-  
index.cfm

New Mexico State University, Roche-454 FLX Genome  
Sequencer, contact Peter Houde

genomics@biology.nmsu.edu  
<mailto:genomics@biology.nmsu.edu>

<http://biology-web.nmsu.edu/houde/conspirators.htm>

maybe try new technologies like <http://www.raindancetechnologies.com/> for cheaper genotyping

MTT Agrifood Research Finland, ask Johanna Vilkki

University of Wisconsin – see website, but they charge 48.5% overhead to external clients (<http://www.biotech.wisc.edu/ServicesResearch/DNA/-DNASeq/Genotyping.asp>)

v.lucchini@ngbgenetics.com  
<mailto:v.lucchini@ngbgenetics.com> - offer the analysis of 96 SNPs in 480 samples for around 13.000 euro. The laboratory is certified ISO 17025.

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Katharina Oetjen PhD student

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oetjen@uni-muenster.de](http://www.uni-muenster.de/Evolution.PlantEvolEcol/People/Katharina/oetjen@uni-muenster.de) oetjen@uni-muenster.de

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## Software Arlequin ver 3 5

ARLEQUIN ver 3.5 —————

A new version of the Arlequin software for population genetic analyses is now available on <http://cmpg.unibe.ch/software/arlequin35/> The new version of Arlequin is now available under three different forms: - a Windows graphical version (WINARL35), - a console version of Arlequin (ARLECORE), - a specific console version to compute summary statistics (ARLSUMSTAT).

The console versions run under both Linux (32 and 64 bit versions) and Windows (32 bit).

The main innovations of the new version include - enhanced outputs in XML format - the possibility to embed graphics displaying computation results directly into output files - implementation of a new method to detect loci under selection from genome scans when populations are hierarchically structured (Excoffier et al. 2009).

More details are available on <http://cmpg.unibe.ch/software/arlequin35/Arl35WhatsNew.html>

Command-line versions are designed to handle large series of files and ARLSUMSTAT can be used to generate summary statistics from simulated data sets within an Approximate Bayesian Computation framework.

More information can be found in an updated Arlequin manual on <http://cmpg.unibe.ch/software/arlequin35/man/arlequin35.pdf> –

Laurent Excoffier

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Computational Population Genetics Swiss Institute of Bioinformatics (SIB) [http://www.isb-sib.ch/groups/-Computational\\_Population\\_Genetics.htm](http://www.isb-sib.ch/groups/-Computational_Population_Genetics.htm) Laurent Excoffier <laurent.excoffier@iee.unibe.ch>

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## Software GeoPhyloBuilder ArcGIS

GeoPhyloBuilder v1.1 for ArcGIS is now available. GeoPhyloBuilder is an add-on for ESRI's ArcGIS geographical information system that builds 3D spatial trees from a tree file and associated geographical data. v1.1 supports two new methods for node positioning based on minimum convex polygon centroids and the centroids of overlap and disjunction between sister nodes.

The installation file, VB.net source code and reference manual can be downloaded from <http://sourceforge.net/projects/geophylobuilder/> . Project web pages [https://www.nescent.org/wg\\_EvoViz/-GeoPhyloBuilder#Software\\_Information](https://www.nescent.org/wg_EvoViz/-GeoPhyloBuilder#Software_Information) David M. Kidd

Research Associate Center for Population Biology Sil-



wood Park Campus Imperial College London 0207 594  
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d.kidd@imperial.ac.uk<mailto:d.kidd@imperial.ac.uk>

“Kidd, David M” <d.kidd@imperial.ac.uk>

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### Steelco lab dishwashers

Hi all,

we are going to buy a new lab dishwasher for our core cleaning facility (serving 3 insitutes, approx. 60 people) and ended up with two offers: a Steelco 610 for EUR 26000.- and a Miele G7825 for EUR 43000.-; both machines have more or less the same technical specifications.

We all know that Miele builds excellent machines, but the price difference is really staggering, and we wonder if the quality of the cheaper machine will be ok. Therefore I would appreciate any experiences the community made with Steelco dishwashers.

Thanks & regards Wolfgang

–

Dr. Wolfgang Arthofer

University of Innsbruck Molecular Ecology Group Technikerstrasse 25 / 5. OG 6020 Innsbruck, Austria

Tel +43 (0) 512 / 507 - 6151 Fax +43 (0) 512 / 507 - 6190 Mob +43 (0) 664 / 734 35 871 wolfgang.arthofer@uibk.ac.at

[http://www.uibk.ac.at/ecology/forschung/molecular\\_ecology.html.de](http://www.uibk.ac.at/ecology/forschung/molecular_ecology.html.de) Wolfgang Arthofer  
<Wolfgang.Arthofer@uibk.ac.at>

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### Structure file conversion

Is there a program that can convert a STRUCTURE file to a format read by other programs?

Thanks,

Avshalom Zoosmann-Diskin

yzussman@smile.net.il yzussman@smile.net.il

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### UNotreDame ResExperienceUndergraduate

One Research Experience for Undergraduates (REU) position is available in Dr. Jeffrey Feder’s Evolutionary and Ecological Genetics Laboratory with the University of Notre Dame for summer 2010.

**Project Description:** The main project the REU will conduct will involve the monitoring of *Rhagoletis pomonella* (the apple maggot fly) in eclosion cages set up the summer of 2009 to determine the eclosion curves of different populations; this is with the hypothesis that the different host races will eclose at a time that briefly precedes the ripening of their respective host fruit. In addition to monitoring tents, the REU will also be involved in setting up an experiment to investigate host odor discrimination under natural conditions, driving up and down the Pacific Northwest to collect infested fruit, and then processing subsequent pupae for further experimentation. There also exists the opportunity for the REU to conduct an independent project involving questions related to the sympatric speciation of *Rhagoletis pomonella*. A valid driver’s license and passport is required, and the ability to identify trees from a moving vehicle is preferred (some training will be involved).

**Project Site Location:** The Pacific Northwest, the lab is stationed in Vancouver, WA (20 minutes north of Portland, OR), but a lot of travelling up and down the I-5 corridor will be involved and trips to southern Oregon and Canada are likely.

These REU positions are offered through the University of Notre Dame GLOBES program, and application materials and further information can be found at: <http://globes.nd.edu/reu2010.shtml>. Priority will be given to applications postmarked by Feb. 12, 2010. Eligible candidates must be current sophomores and juniors, who are U.S. citizens or permanent residents. Women, minority students, disabled students, and students from small colleges are encouraged to apply.

ssim@nd.edu ssim@nd.edu

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### WoodsHole REU Symbiosis

REU, Woods Hole, Symbiosis

We invite undergraduate students to apply for a summer REU fellowship to explore an ant-bacterial symbiosis. Working within Jen Wernegreen’s lab at the Marine Biological Lab in Woods Hole, MA, the student will contribute to evolutionary and functional studies of an obligate mutualism between bacteria and ants of the tribe Camponitini.

Applicants should have a strong interest in ecology and evolution, symbiosis, microbiology, insect physiology, and/or molecular biology, and possess a genuine drive to perform basic research. The project will combine local field work, rearing of ants in the lab, and molecular biology approaches to quantify symbiont densities and gene expression patterns.

The 10-week position will include housing at the MBL, travel, and a summer stipend. REU positions are available to U.S. citizens or permanent residents who are currently enrolled as undergraduates at U.S. colleges or universities. Sorry, graduating seniors are not eligible to apply. The position is contingent upon funding from the NSF.

Please see <http://jbpc.mbl.edu/labs-wernegreen.html> for more information about the lab and publications relating to the project. Please contact Jen Wernegreen ([jwernegreen@mbledu](mailto:jwernegreen@mbledu)) with any questions about the position or project possibilities.

Prior research experience using molecular biology techniques is essential. Applications should be submitted through the MBLs HR website. Please see the link below for additional project information and application instructions:

[mbl.simplehire.com/applicants/Central?quickFindP830](http://mbl.simplehire.com/applicants/Central?quickFindP830)

Jennifer Wernegreen Josephine Bay Paul Center for Comparative Molecular Biology and Evolution Marine

Biological Lab 7 MBL Street Woods Hole, MA 02543

email: [jwernegreen@mbledu](mailto:jwernegreen@mbledu)

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### Zotero citation styles for evolution-related journals

Dear colleagues,

I recently switched over to the open-source Zotero for managing my references, PDFs, and citations within manuscripts. They have quite a few citation styles, but are lacking many for evolution-related journals. (see <http://www.zotero.org/> if interested in the software).

In particular, I am wondering if anyone has created a style for “Molecular Ecology”. This journal uses the Harvard reference format, but with several slight modifications. Zotero styles are written in a markup language, so I thought I would ask before learning the code and reinventing the wheel!

If anyone has styles for other related journals, then I would be happy to collect them and get them on the Zotero website for public use.

Regards, Jason

Jason Munshi-South, Ph.D. Assistant Professor Graduate Deputy Chair of Biology Baruch College & The Graduate Center City University of New York [Jason.Munshi-South@baruch.cuny.edu](mailto:Jason.Munshi-South@baruch.cuny.edu) Phone: (646) 660-6238 <http://faculty.baruch.cuny.edu/jmunshi-south/> <http://www.baruch.cuny.edu/envbio/> Sent from New York, NY, United States

[jason.munshisouth@gmail.com](mailto:jason.munshisouth@gmail.com)

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## PostDocs

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## AarhusU FishPopulationGenetics 2

### Postdoc in Fish Populations Genetics and Genomics

(This position was advertised during Christmas, but the application deadline has now been extended until 1 March 2010)

A three-year postdoctoral position will be available at the Department of Biological Sciences, Aarhus University, Denmark, starting 1 April 2010 or as soon as possible thereafter.

The appointed postdoc will assist Michael M. Hansen (Head of Department) in his research, teaching and student supervision activities. A major part of the research concerns a project on speciation and footprints of selection in Atlantic Anguillid eels (European and American eel), funded by the Danish Council for Independent Research | Natural Sciences. The project involves, among others, a SNP based genome scan and is partly based on unique samples of eel larvae collected in the Sargasso Sea. This is a collaborative project with Thomas Damm Als and Dorte Bekkevold, Technical University of Denmark, Silkeborg, and with Louis Bernatchez (Université Laval, Quebec, Canada) and Gregory Maes (Catholic University of Leuven, Belgium). Furthermore, a Ph.D. student will be recruited to the project.

The postdoc will also be involved in other collaborative projects: one concerning population genetic studies of brown trout, particularly implementation of SNP markers and landscape genetics (with Dorte Bekkevold, Technical University of Denmark, Silkeborg), and another project with Øystein Skaala and Kevin Glover

(Institute of Marine Research, Norway) concerning QTL mapping of Atlantic salmon in a natural setting.

Internally at the department there are also excellent relevant collaboration partners, particularly the research groups of Volker Loeschcke, Cino Pertoldi and Trine Bilde.

The position furthermore involves participation in teaching a 3rd-4th year course in Conservation Genetics.

Applicants should have a Ph.D. in evolutionary biology and/or population genetics and must document cutting-edge skills in statistical analysis of molecular markers/population genetic data and excellence in writing scientific papers. Finally, applicants should be ambitious, show strong capabilities for team-work, and should also be able to take initiatives and responsibility.

Applications should include a CV, publication list, a 1-2 pages description of research experience and research interests, and the names and contact details of three persons, who would be willing to send a letter of recommendation.

The Department of Biological Sciences offers an ambitious, scientifically strong but also socially pleasant working environment. For more information about the Department of Biological Sciences, see [www.biology.au.dk](http://www.biology.au.dk) For more information about Michael M. Hansen's research, see [www.michaelmhansen.dk](http://www.michaelmhansen.dk) For further details on the position, please contact Michael M. Hansen ([mmh@biology.au.dk](mailto:mmh@biology.au.dk))

Applications must be submitted online before 1 March February 2010. See <http://science.au.dk/en/positions-and-fellowships/academic-positions/>

“\”Michael Møller Hansen\” <[mmh@biology.au.dk](mailto:mmh@biology.au.dk)>

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## Athens Extinctions

\*PostDoc Position \*

Project - \*Predicting extinctions on islands: a multi-scale assessment\*± (2010-2013. (FCT- PTDC/BIA-BEC/100182/2008)

Creative and motivated candidates are invited to apply for a three-year Postdoctoral Scientist position, at the Azorean Biodiversity Group, \*University of Azores\* for participation in a collaborative project between Paulo A. V. Borges, Kostas Triantis (University of Azores), Aris Parmakelis (University of Athens) and Robert Whittaker (Biodiversity Research Group, Oxford University Centre for the Environment).

This project will investigate the dynamics of species extinction in Azorean endemic arthropods. The project will be conducted in 13 fragments of primary forest in seven Azorean islands. The primary method of investigation will be analysis of genetic diversity of populations in large and small fragments, but the project will also include the modelling of abundance and distribution data of endemic species sampled sequentially from 1999/2000 and onwards, as well as the samplings to be obtained during the project.

Candidates should hold a Ph.D. in a pertinent field; entomological experience is desirable but not mandatory. The ideal candidate would have excellent skills in statistics, handling of large data sets, stochastic/mechanistic and/or prognostic modelling and an interest in combining molecular and ecological research to analyse past and future arthropod biodiversity trends. The project will require extensive field work in the summer and some travel to the University of Oxford and Athens.

Starting salary will be 1495€/month (2245€/month when working in Athens or Oxford).

Please send a CV, a brief statement of research interests, and the names and contact information for two references to Paulo Borges, pborges@uac.pt <mailto:pborges@uac.pt>. Review of applicants will begin on March 1 and will continue until the post is filled. We would like the post-doc to start on or before May 1, 2010.

ARIS PARMAKELIS, MSc., PhD. DEPARTMENT OF ECOLOGY AND TAXONOMY FACULTY OF BIOLOGY NATIONAL & KAPODISTRIAN UNIVERSITY OF ATHENS PANEPISTHMIOPOLI

ZOGRAFOU, GR-15784, ATHENS, GREECE Tel.: ++302107274736 aparmakel@biol.uoa.gr

Aristeidis Parmakelis <aparmakel@biol.uoa.gr>

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## BangorU CelticSeaTroutEvolution

Postdoctoral Research Officer - Celtic Sea Trout Project

Bangor University - School of Biological Sciences

Starting Salary: £29,853 (on Grade 7) p.a.

We wish to appoint a Postgraduate Research Officer who will undertake research within the Celtic Sea Trout Project (CSTP) based in the Molecular Ecology and Fisheries Genetics Laboratory (<http://-mefgl.bangor.ac.uk/index.htm>) under the supervision of Dr Martin Taylor and Prof. Gary Carvalho. The post is part-funded by an ERDF grant from the INTERREG 4A Ireland-Wales programme with a partnership including the Environment Agency, Cefas, University of Cork and Central Fisheries Board of Ireland plus other associate partners. The research will investigate population genetic structure and ecological characteristics of anadromous (sea trout) brown trout (*Salmo trutta*) populations around the Irish Sea. The appointee will be primarily responsible for screening microsatellite and single nucleotide polymorphisms (SNP) markers. In addition to the molecular aspects of the project, the successful candidate will also be expected to conduct ecological research into anadromous life history variation and its determinants in trout. This will include extensive scale reading and use of image analysis methods to explore growth, age and breeding patterns.

The successful candidate will also have the opportunity to support/contribute to other CSTP research activities. In addition, s/he will participate in the CSTP project management meetings and, with co-workers, prepare papers for publication or presentation at conferences.

Applications are invited from candidates with a Ph.D. in molecular ecology and research interests in population genetic structure, fisheries genetics, life history theory or related topics. The post is available from 1 April 2010 until 31 March 2012 and successful candidates will be expected to start as soon as possible after the start date.

Application forms and further particulars should be obtained by contacting Human Resources, Bangor University; tel: (01248) 382926/388132; e-mail: [personnel@bangor.ac.uk](mailto:personnel@bangor.ac.uk); web: [www.bangor.ac.uk](http://www.bangor.ac.uk) Please quote reference number 10-9/120 when applying.

Closing date for applications: Monday 22nd February, 2010.

Informal enquiries can be made by contacting Dr Martin Taylor, email [m.taylor@bangor.ac.uk](mailto:m.taylor@bangor.ac.uk)

Committed To Equal Opportunities

[nitram8@hotmail.com](mailto:nitram8@hotmail.com)

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## CornellU EvolutionDrosophilaImmunity

A postdoctoral position is available to apply genome-wide association mapping (GWAS) to identify the genetic basis for resistance to bacterial infection and other fitness-related traits in *Drosophila*. The project will be performed in collaboration with Profs. Brian Lazzaro and Jason Mezey at Cornell University on the Cornell main campus in Ithaca, NY. The aims of the project will be to identify genetic polymorphisms that underlie natural variation in resistance to infection under a variety of nutritional and other environmental conditions, and to develop methods for GWAS analysis that are optimal for handling the complexity inherent in mapping phenotypes in a highly polymorphic organism like *Drosophila*. The project will be primarily lab based, with lab work and appointee housing located in the Lazzaro Lab, but should also include a substantial computational component, which will be undertaken under the supervision of Dr. Mezey. We are therefore looking for candidates who have good experience in empirical quantitative genetics and strong computational and analytical skills. Background in *Drosophila* and/or immunity will be considered a plus. The position is available immediately, although start date can be negotiated. Applications will be continuously reviewed until a suitable candidate is found. The initial appointment will be made for one year, with the expectation of renewal for a second year pending satisfactory performance and available research funds. Salary will be on the NIH scale. Cornell is an equal opportunity employer.

Inquiries and applications can be sent directly to Brian Lazzaro ([bplazzaro@cornell.edu](mailto:bplazzaro@cornell.edu)) or Jason Mezey

([jgm45@cornell.edu](mailto:jgm45@cornell.edu)). Further information about the Lazzaro and Mezey labs can be found at <http://www.entomology.cornell.edu/Lazzaro/> and <http://mezeylab.cb.bscb.cornell.edu/>. [bplazzaro@gmail.com](mailto:bplazzaro@gmail.com)

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## CSIRO Perth Modelling

CSIRO Sustainable Ecosystems is offering a postdoctoral fellowship in agro-ecological modelling to be based in Perth, Australia at the Centre for Environment and Life Sciences (CELS) with links with the University of Western Australia.

There are more details on these websites:

SEEK ad <http://www.seek.com.au/job/-postdoctoral-fellow-in-agro-ecological-modelling/perth/16705186/34/1/>

And on CSIRO Careers site: [https://recruitment.csiro.au/asp/Job\\_Details.asp?RefNo=-2010%2F19](https://recruitment.csiro.au/asp/Job_Details.asp?RefNo=-2010%2F19)

Thanks

Michael

Asst/Prof Michael (Saam) Renton School of Plant Biology, University of Western Australia and CSIRO Sustainable Ecosystems Ph: +61 8 6488 1959 / Fax: +61 8 6488 1108 [michael.renton@uwa.edu.au](mailto:michael.renton@uwa.edu.au) [www.uwa.edu.au/people/michael.renton](http://www.uwa.edu.au/people/michael.renton)

Michael-Saam Renton <[mrenton@cyllene.uwa.edu.au](mailto:mrenton@cyllene.uwa.edu.au)>

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## DukeU ForestPathogens

Postdoctoral positionV Microbial Ecology: Seedling pathogens and forest dynamics

A postdoctoral researcher is needed for a newly funded project on the effects of seedling pathogens on forest dynamics in the context of climate warming. Goals of this research are to identify putative seedling pathogens in a temperate mixed hardwood forest, and determine how seedling density, distance from conspecific adults, and increased temperature influence patterns of seedling demography and fungal community composition.

The postdoc will coordinate a large-scale field project



and develop and implement protocols for DNA-based identification of fungi. She or he will be based at Duke University and work in the labs of Jim Clark and Rytas Vilgalys. The project will involve training and supervision of research technicians, and travel to field sites at Harvard Forest. The ideal candidate will possess both strong field and molecular skills and play a role in both the intellectual development of the project along with management of data collection.

Start date: immediate through 4/1/2010

Salary negotiable

Requirements: Ph.D. in ecology, mycology, plant pathology, or related field Experience coordinating and managing large-scale field studies Strong laboratory and bioinformatics skills, including DNA sequencing and interpretation of sequence data to identify environmental samples Experience culturing fungi preferred, but not required

To apply, send a CV, statement of research interests (2 pages max), and contact information for three references by March 21, 2010 to Jim Clark at <jimclark@duke.edu>. Position is available in spring 2010.

Rytas Vilgalys <fungi@duke.edu>

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## DurhamU ConservationGenetics

Conservation Genetics post-doctoral position now available for application through the Durham University web-site:

School of Biological & Biomedical Sciences

Post Doctoral Research Associate for CONGRESS project

£29,853, per annum, pro-rata

CONGRESS (Conservation Genetic Resources for Effective Species Survival) is a new EU consortium dedicated to the improved communication of conservation genetic data, and the facilitation of its analysis and integration into conservation policy. The post-doc will work in Prof. Rus Hoelzel's lab in Durham and together with other consortium partners to build a web-based 'decision matrix'. The objective will be to integrate informative text and illustrations together with database and analytical tools into a web-based facility that will promote the determination of the best strategy for managers, policy makers and conservation genetics

practitioners interested in specific problems. Technical aspects of the website will be developed primarily by IT experts. The role of the post-doc will be to learn about what is needed through consortium-based meetings, discussions with other partners, and literature research, and to apply this to the design and development of the decision matrix to be implemented on the web site. The post-doc will work especially closely with another post-doc, based in London, who will be developing the literature database. The post is part-time 50% FTE, fixed-term for 36 months, starting 1 May 2010. Please send a cover letter explaining why you are especially well suited to this post, a copy of your c.v., and arrange to have three letters of reference sent on your behalf.

Vacancy reference: 3681. Closing date: 19 March 2010.

Further details of the post and an application form are available on our website (<https://jobs.dur.ac.uk>) or telephone 0191 334 6499; fax 091 334 6495

"HOELZEL A.R." <a.r.hoelzel@durham.ac.uk>

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## Durham UK ConservationGenetics

Conservation genetics post-doctoral position available CONGRESS (Conservation Genetic Resources for Effective Species Survival) is a new EU consortium dedicated to the improved communication of conservation genetic data, and the facilitation of its analysis and integration into conservation policy. The post-doc will work together with other consortium partners to build a web-based 'decision matrix'. The objective will be to integrate informative text and illustrations together with database and analytical tools into a web-based facility that will promote the determination of the best strategy for managers, policy makers and conservation genetics practitioners interested in specific problems. Technical aspects of the website will be developed primarily by IT experts. The role of the post-doc will be to learn about what is needed through consortium-based meetings, discussions with other partners, and literature research, and to apply this to the design and development of the decision matrix to be implemented on the web site. The post-doc will work especially closely with another post-doc, based in London, who will be developing the literature database.

The successful candidate will have a PhD in a relevant field, strong knowledge of the field of conservation ge-

netics, good communication and inter-personal skills, and a keen interest in the practical application of conservation policy. Knowledge of web design would be useful, but not essential.

The post will be based in Durham and run for 36 months half-time (preferably), or possibly 18 months full-time, starting in May 2010.

Preliminary applications should include a copy of your c.v. and a cover letter, and can be sent (by email) to:

Prof. Rus Hoelzel

School of Biological and Biomedical Sciences

Durham University, South Road, Durham, DH1 3LE

a.r.hoelzel@dur.ac.uk

Further information on the procedure for application through the University HR office and the application deadline will then be provided (and will be announced on the University web site). Please send preliminary applications by March 8th.

“HOELZEL A.R.” <a.r.hoelzel@durham.ac.uk>

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## HarvardU PlantEvolution

\*Harvard University Department of Organismic and Evolutionary Biology Plant Evolutionary Biology Post-doctoral Fellow or Research Assistant with Professor Charles Davis\*

\*Duties & Responsibilities\*

\* \*The postdoctoral fellow or research assistant will work under the supervision of the faculty member and will conduct experiments involving the evolution of vascular plants, with a focus on the molecular genetics and phylogeography of arctic and alpine plants. Research will be directed primarily at examining the effects of Quaternary climate cycles of plants distributed in Arctic-Alpine systems. Uncovering which historic events had the largest genetic consequences for arctic and alpine floras during the Quaternary will greatly aid in our understanding of the role that climate change has played in species evolution. Additional responsibilities will include helping to understand plant phylogeny, biogeography, and mechanisms of horizontal gene transfer in plants.

Lab management will include the purchase of lab supplies and equipment, maintenance of commonly used lab stocks, upkeep of tissue samples, and gen-

eral paperwork related to university protocols (e.g., inventory of chemicals). The individual is expected to maintain accurate and timely lab books, attend lab meetings, and perform other related duties as required. For more information on the Davis laboratory contact Charles Davis at [cdavis@oeb.harvard.edu](mailto:cdavis@oeb.harvard.edu) <<mailto:cdavis@oeb.harvard.edu>>, and please visit our website at <http://www.people.fas.harvard.edu/~ccdavis/> <<http://www.people.fas.harvard.edu/~%7Eccdavis/>>.

\*Required Education, Experience, Skills\*

\* \*Applicants must possess at least a college degree with a preferred major in biology. They should have the ability to conduct DNA/RNA extractions, PCR, gel electrophoresis, cloning of PCR products, and sequencing. Analytical skills should include PCR primer design, DNA sequence alignment, and phylogenetic methods. Experience with bioinformatics are preferred. Excellent communication (oral and written) skills, enthusiasm and ability to work in team environment with demonstrated skills and experience in molecular techniques are required.

Harvard University is an equal opportunity/affirmative action employer.

Applications will be accepted until March 21, 2010.

Christopher Preheim <[cpreheim@oeb.harvard.edu](mailto:cpreheim@oeb.harvard.edu)>

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## HostChoice in *Anopheles gambiae*

A Post-Doctoral position is available to conduct NIH-funded research in the Slotman lab in the Department of Entomology at Texas A&M University. The Slotman lab is interested in the evolutionary genetics of malaria mosquitoes, with an emphasis on the *Anopheles gambiae* complex. The major malaria vector in this complex, *An. gambiae* s.s, strongly prefers blood feeding on humans and it is strongly attracted to the smell of human sweat. This anthropophily, or preference for humans, is one the main reasons *An. gambiae* is such an efficient malaria vector.

The successful candidate will investigate the genetic basis of host choice in *An. gambiae* using gene expression approaches. The ultimate goal of the project is to identify olfaction genes responsible for the attraction of *An. gambiae* to humans. The results of this research would contribute greatly to our understanding of the biology of this important disease vector, and could promote the



different levels: (a) comparative study between species with different levels of sperm competition; (b) intraspecific studies looking at the degree of variation found in natural populations at the phenotypic and molecular level. Our model system are several species of rodents, some of which are kept in animal facilities, while others are captured in the field.

The study involves intensive laboratory work to analyse semen quality and sperm traits, to carry out in vitro fertilization experiments, and to analyse candidate reproductive genes.

We are looking for candidates with a solid evolutionary background and experience in reproductive physiology and/or molecular biology. A PhD in molecular evolution or reproductive physiology would be ideal.

Recent publications related to this project include:

Gomendio M, Martin-Coello J, Crespo C, Magaña C, Roldan ERS (2006) Sperm competition enhances functional capacity of mammalian spermatozoa. *Proceedings of the National Academy of Sciences of the USA* 103, 15113-15117.

Martin-Coello J, Benavent-Corai J, Roldan ERS, Gomendio M (2009) Sperm competition promotes asymmetries in reproductive barriers between closely related species. *Evolution* 63, 613-623.

Martin-Coello J, Dopazo H, Arbiza L, Ausió J, Roldan ERS, Gomendio M (2009) Sexual selection drives weak positive selection in protamine genes and high promoter divergence, enhancing sperm competitiveness. *Proceedings of the Royal Society of London, series B* 276, 2427-2436.

Tourmente M, Gomendio M, Roldan ERS, Gójalas LC, Chiaraviglio M (2009) Sperm competition and reproductive mode influence sperm dimensions and structure among snakes. *Evolution* 63, 2513-2524.

If interested please send (no later than 22 February 2010) your CV to Montse Gomendio (montseg@mncn.csic.es) as well as cover letter explaining your scientific background, your interests, and your willingness to spend a few years in Spain.

The fellowships are offered by the Spanish Ministry of Science (<http://www.micinn.es/portal/site/MICINN/>). The programme "Juan de la Cierva" is for early post-docs (PhD no later than 2006) and offers 3 years of funding, and the programme "Ramon y Cajal" is for senior post-docs (not more than 10 years after obtaining the PhD) and offers 5 years of funding. Candidates must apply to the Spanish Ministry of Science and compete in a highly competitive international scheme.

Deadlines for the official application: 2 March 2010 Ra-

mon y Cajal, 4 March 2010 Juan de la Cierva.

Montse Gomendio Reproductive Ecology and Biology Group Museo Nacional de Ciencias Naturales (CSIC) Jose Gutierrez Abascal, 2 28006 Madrid Spain -

Montse Gomendio Research Professor Reproductive Ecology and Biology Group Museo Nacional de Ciencias Naturales (CSIC) c/Jose Gutierrez Abascal 2 28006-Madrid (Spain) Tel. +34-91-411-1328, ext. 1222 Fax +34-91-564-5078 email: montseg@mncn.csic.es

<http://www.gebir.csic.es/> Montserrat Gomendio <montseg@mncn.csic.es>

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## Milan Evolutionary Genomics Cancer

One PostDoctoral position is available in the lab of evolutionary genomics of cancer led by Dr Francesca Ciccarelli at the European Institute of Oncology (IEO) at the IFOM-IEO-Campus in Milan (Italy).

The lab uses a combination of experimental and computational methods to analyze the somatic modifications occurring in the cancer genome. Two main lines of investigation are pursued:

- 1- estimation of cancer-associated genomic instability by large-scale re-sequencing of the cancer genome using next-generation technology;
- 2- analysis of evolutionary and network properties of cancer genes;

The ideal candidate must have a strong background in statistics, genetics and computational biology. Experience with the treatment of large-scale genomics data would be favourable.

The position is framed within the Structured International Post Doc program (SIPOD) of the IFOM-IEO-Campus, which offers highly competitive salaries and training opportunities. The program is co-funded in the context of the FP7 Marie Curie Actions People.

For more information and inquiry, please contact Francesca Ciccarelli (francesca.ciccarelli@ifom-ieo-campus.it) and visit <http://www.semm.it/PostDoc.php> Recent publications of the group include:

- De Grassi A, et al. Ultra-deep Sequencing of a Human Ultraconserved Region Reveals Somatic and Constitutional Genomic Instability (2010) *PLoS Biology* 8: e1000275
- De Grassi A, Ciccarelli FD Tandem re-

peats modify the structure of primate-specific genes expanding in the human population (2009) *Genome Biol* 10:R137 - Syed A, et al Network of Cancer Genes (NCG): a Web Resource to Analyze Duplicability, Orthology and Network Properties of Cancer Genes. (2010) *Nucleic Acids Res* 38:D670 - Rambaldi D, Ciccarelli FD FancyGene: interactive visualization of gene structures and protein domain architectures on genomic loci. (2009) *Bioinformatics* 25:2281 - Rambaldi D, et al Low duplicability and network fragility of cancer genes. (2008) *Trends Genet.* 24:427-30

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 Francesca D. Ciccarelli, PhD Evolutionary Genomics of Cancer IFOM-IEO-Campus Via Adamello, 16 20139 Milan, Italy tel +39-02574303053 fax +39-0294375990 web: <http://ciccarelli.group.ifom-ieo-campus.it/> francesca.ciccarelli@ifom-ieo-campus.it

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## MPI Ploen SexualSelection

Postdoctoral position: sexual selection in *Saccharomyces*

\*Max Planck Institute for Evolutionary Biology, Ploen, Germany\*

Experimental Evolution group, led by Duncan Greig

We are looking for a post-doc to work on sexual selection in budding yeast. Yeast sex cells produce pheromones that attract mates, but it is not clear what information this signal carries, or why the system has evolved. One possibility is that the sex pheromone is an honest signal of mate quality that has evolved under the handicap principle (see Pagel, 1993). To evaluate this hypothesis, we need to determine the conditions and circumstances under which yeast has sex in nature, and assay signal strength, mate preference, and fitness using experiments in appropriate environments. We also use yeast as a laboratory model system for sexual selection experiments (Rogers and Greig, 2008), and are developing the system to test the predictions and underlying assumptions of specific genetic mechanisms of sexual selection.

The Max Planck Institute for Evolutionary Biology is a well-funded, expanding, and vibrant research institution, with superb facilities. It is located in Ploen, an attractive small town surrounded by lakes, a few kilometres from the Baltic coast. Neighbouring larger towns are Kiel and Lubeck, and the international air-

port at Hamburg is 80km away. Further information on the institute can be found at:

<http://www.evolbio.mpg.de/english/index.html> The position is potentially suitable for any level of postdoc and will initially be funded for two years, with an extension for an additional year if appropriate. The ideal candidate would be an evolutionary biologist with expertise in an appropriate area such as sexual selection or the evolution of sex, as well as laboratory experience in yeast molecular genetics and genetic manipulation. However evolutionists with practical experience of another organism, or yeast geneticists with a strong interest in evolutionary biology are also encouraged to apply. Funding is available from March 1st 2010, and comes in two forms depending on nationality. Foreigners can receive between 2100 and 3000 Euro per month, depending on experience, which is free from income taxes and social insurance contributions. Germans receive a similar grant, calculated according to several factors such as age, marital and family status.

Contact [d.greig@evolbio.mpg.de](mailto:d.greig@evolbio.mpg.de) for more information or to apply. Applications should comprise a letter describing the candidates research interests and relevant experience, a CV, a list of publications, and contact information for three referees.

Pagel, M (1993) *Nature* 363:539-541 Rogers, DW, & Greig, D (2009) *Proc R Soc B* 276:543-549

Duncan Greig <[d.greig@evolbio.mpg.de](mailto:d.greig@evolbio.mpg.de)>

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## Nairobi EmergingDiseaseEvolution

Post Doctoral Fellow - Molecular Biology and Biotechnology Department

icipe is an independent, intergovernmental organization funded by government aid agencies, UN organisations and private foundations to carry out research and training in the environmentally sound and sustainable management of arthropods for improving health and agricultural productivity in Africa. icipe has approximately 300 staff to support its research and capacity building programmes, located at various sites in Kenya, and other locations in Africa, including Ethiopia and Sudan.

icipe seeks to recruit a young and highly motivated Post Doctoral Fellow to work in its Molecular Biology and Biotechnology Department and be part of the new collaborative project entitled "An Integrated Response System For Emerg-



ing Infectious Diseases in East Africa (AVID)” (<http://avid.icipe.org>; <http://sites.google.com/site/arbivirusdynamicsprojectsite>). AVID aims to bring current molecular and epidemiological approaches to the detection of pathogens - both known and unknown in field samples. One of icipe’s critical roles in this project is to develop a platform of wet-lab technologies enabling high-throughput screening and detection of known and unknown arthropod transmitted viruses (arboviruses).

This position is an opportunity for a dynamic and highly motivated post-doc who is capable of working in dispersed and complex teams, to make important contributions to the understanding of disease in Africa - particularly epidemic viral disease. This job is based in Nairobi. Requirements

\* PhD in molecular biology/genetics. \* Experience in molecular analysis of complex biological material. \* Hands on experience of highly multiplexed PCR. \* Quantitative PCR and mass spectrometry, e.g. for diagnostics and of working with complex, mixed biological samples. \* Phylogenetic/population analysis in prokaryotes or eukaryotes would be an advantage. \* Excellent communication and interpersonal skills. \* Ability to reason independently. \* A track record of publications and report writing. \* Fluency in spoken and written English. Knowledge of French would be an added advantage.

Responsibilities

\* Designing and testing highly multiplexed assays for host/vector/pathogen identification. \* Establishing QPCR and other analytical protocols including mass-spectrometry for detection of known viruses. \* Develop protocols for the identification of unknown pathogens.

This appointment is for two years with the possibility to renew subject to performance and funding availability. Benefits including a competitive international compensation package will be offered to the successful candidate.

Applications will be accepted up to 15th February, 2010, or when the position gets filled whichever is the earlier. Please send an application with a detailed CV and names and addresses of 3 referees including e-mail addresses and Fax numbers to [hr@icide.org](mailto:hr@icide.org) This e-mail address is being protected from spambots. You need JavaScript enabled to view it or:

The Human Resources Department icipe - African Insect Science for Food and Health P.O. Box 30772-00100 Nairobi Kenya

“Masiga, Daniel” <[dmasiga@icide.org](mailto:dmasiga@icide.org)>

## NewcastleU ParasiteEvolution

NEWCASTLE UNIVERSITY

INSTITUTE FOR CELL AND MOLECULAR BIOSCIENCES

Research Associate Position to Study the Minimal Mitochondria of Parasitic Protozoa

Research Associate position based in the Institute for Cell and Molecular Biosciences available for three years funded by the Wellcome Trust. The RA will join the laboratory of Martin Embley and Robert Hirt as part of an international team carrying out a multidisciplinary investigation of the fundamental biology of the minimal mitochondria (mitosomes) of obligate intracellular microsporidian parasites. The ideal candidate will have experience in molecular biology and/or cell biology coupled with a strong interest in evolution and/or parasitology. Only applicants holding a PhD degree or the expected imminent submission of a PhD thesis will be considered. Closing Date: as soon as the post is filled.

Further information can be obtained contacting Prof. Martin Embley ([martin.embley@ncl.ac.uk](mailto:martin.embley@ncl.ac.uk)). <http://www.ncl.ac.uk/camb/staff/profile/martin.embley> [http://www.ncl.ac.uk/microbial\\_eukaryotes/](http://www.ncl.ac.uk/microbial_eukaryotes/) Brief background to the project: Microsporidia are opportunistic intracellular parasites that cause chronic diarrhoea in children and the elderly, especially in the developing World and they frequently infect patients with HIV/AIDS. They are among the simplest eukaryotic cells known, having lost many metabolic pathways common to other eukaryotes and have greatly simplified the structure and functions of their organelles. As a consequence, Microsporidia are ideal model systems for identifying the truly indispensable features of eukaryotic cells. Recent data from our laboratory suggest that mitosomes, the basic mitochondria found in Microsporidia, house enzymes that are vital for parasite survival (Nature, 452, 624-628; Nature 453, 553-556; Nature, 418: 865-869). The aim of this project is now to fully determine the essential function(s) of these minimal mitochondria. The work has far reaching importance because: (i) it will provide functional data for an organelle that is essential for the survival of major human parasites and (ii) it will challenge the long-held hypothesis (Nature, 440: 623-630) that the key function of mitochondria

(defined in the broadest sense) in eukaryotic cells is to make ATP. The techniques to be used include core molecular biology, parasite culture and cell fractionation, proteomics, and immuno-localisation of key proteins using confocal light microscopy. The successful candidates will join a research group working at the forefront of international efforts to understand the fundamental biology and evolution of Microsporidia. Our collaborators include Dr Eva Heinz (Newcastle) a Marie Curie Post Doctoral Fellow who is working on microsporidian genomics and transport proteins, Prof. Roland Lill (Marburg, Germany) a World leader in the field of mitochondrial iron-sulphur cluster biogenesis (Nature 460 831-838), Dr Edmund Kunji (Cambridge, UK) a leading expert on mitochondrial transport proteins (PNAS 105: 17766-71), Prof. Jan Tachezy (Prague, Czech Republic) a parasitologist and expert on mitosomes (PNAS 102: 10924-9), and Dr Adrian Hehl (Zurich, Switzerland) a leader in light microscopy and parasite cell biology (JBC: 280, 30557-63). Dr John Lucocq (Dundee, UK) a pioneer in the field of electron microscopy is also a PI on the project and staff in his lab will study the detailed ultrastructure and protein content of mitosomes. Our goal is to form a mutually supportive network of expertise to solve the outstanding problems in the biology of microsporidian mitosomes. The successful candidate will be expected to liaise with other members of the network, to travel between labs for short research visits to learn new skills when necessary, and to discuss results.

[martin.embley@ncl.ac.uk](mailto:martin.embley@ncl.ac.uk) [martin.embley@ncl.ac.uk](mailto:martin.embley@ncl.ac.uk)

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## Oxford BacterialGenomeEvolution

We are recruiting a Postdoctoral Scientist to join the group of Dr. Daniel Wilson. The group is principally engaged in the activities of the UKCRC Consortium Modernising Medical Microbiology ([www.modmedmicro.ac.uk](http://www.modmedmicro.ac.uk)), an ambitious project with the goal of revolutionising approaches to tracing and tracking clinically important micro-organisms in near-to- real time using whole genome sequencing technologies. The aim is to elucidate the evolution and epidemiology of four medically important pathogens, namely Mycobacterium tuberculosis, Staphylococcus aureus, Clostridium difficile and norovirus through the application and development of statistical analyses.

Postdoctoral Scientist Salary Scale for University Grade 7: £28,983 - £35,646 p.a. Candidates holding a PhD

and experience in statistical inference, computationally intensive methods or population genetics and a programming language such as C++ are sought to be responsible for designing and implementing analyses of whole genome population data. You will need to work well independently and in a team, have good written and verbal skills and a publication record. Excellent applicants from non-genetics backgrounds are also welcomed. This post is funded by the UK CRC and is initially available for up to 2 years. Please quote reference HB-10-006-DW.

An application form and a job description are available from the Personnel Officer, Room 5800, Experimental Medicine Division, Nuffield Dept of Clinical Medicine, John Radcliffe Hospital, Oxford OX3 9DU, by phone (+44 1865 220528), email ([personnel@ndm.ox.ac.uk](mailto:personnel@ndm.ox.ac.uk)) or online ([www.expmedndm.ox.ac.uk](http://www.expmedndm.ox.ac.uk)). The closing date for applications is Friday, 2 April 2010.

Daniel Wilson <[daniel.wilson@ndm.ox.ac.uk](mailto:daniel.wilson@ndm.ox.ac.uk)>

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## Ploen Germany MicrobialEvolution

Postdoctoral position: microbial metagenomics of wild yeast communities

\*Max Planck Institute for Evolutionary Biology, Ploen, Germany\*

Experimental Evolution group, led by Duncan Greig

We are looking for a person with expertise in metagenomics of microbial communities to join the new Experimental Evolution research group. Candidates should have experience both of laboratory processing of environmental samples to produce sequences, and of bioinformatic analysis of such data. Experience or interest in evolution and ecology would also be an advantage.

*Saccharomyces cerevisiae* is a research supermodel—particularly for genetics, but increasingly for evolutionary biology. However, very little is known about its life in its natural habitat. *Saccharomyces paradoxus*, an undomesticated relative of *S. cerevisiae*, is readily isolated from the bark and leaves of oak trees. The aim of this project is to study *Saccharomyces paradoxus*, and other interacting microbes, in environmental samples from oak and associated soil, water, and insects. In addition to studying the natural history and ecology of wild *Saccharomyces*, the group also uses yeast in laboratory experiments on social interactions, sexual selection, and speciation.

The Max Planck Institute for Evolutionary Biology is a well-funded, expanding, and vibrant research institution, with superb facilities. It is located in Plön, an attractive small town surrounded by lakes, a few kilometres from the Baltic coast. Neighbouring larger towns are Kiel and Lübeck, and the international airport at Hamburg is 80km away. Further information on the institute can be found at:

<http://www.evolbio.mpg.de/english/index.html> The position is potentially suitable for any level of postdoc and will initially be funded for two years, with an extension for an additional year if appropriate. Funding is available from March 1st 2010, and comes in two forms depending on nationality. Foreigners receive between 2100 and 3000 per month, depending on experience, which is free from German income taxes and social insurance contributions. Germans will receive a grant that depends on age, marital and family status.

Contact [d.greig@evolbio.mpg.de](mailto:d.greig@evolbio.mpg.de) for more information or to apply. Applications should comprise a letter describing the candidate's research interests and experience in metagenomics, a CV, a list of publications, and contact information for three referees.

Duncan Greig <[d.greig@evolbio.mpg.de](mailto:d.greig@evolbio.mpg.de)>

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## Spain Evolutionary Biology proposals

The post-doctoral fellowship programs Ramón y Cajal (five year fellowships) and Juan de la Cierva (three year fellowships) have launched a new call for proposals. The Department of Functional and Evolutionary Ecology at the Estación Experimental de Zonas Áridas (EEZA-CSIC) welcomes candidates interested in pursuing work on any of the research lines described below.

Details of the call (unfortunately in Spanish) can be found at <http://www.boe.es/boe/dias/2010/02/09/pdfs/BOE-A-2010-2154.pdf> If you are interested in applying for a Ramón y Cajal or Juan de la Cierva fellowship at the EEZA, please contact us as soon as possible.

Studies of colouration in reptiles. Evaluation of the different hypotheses on the function of body colour: relationship with predation, thermoregulation, social interactions and reproduction. Changes in colouration through ontogenetic development and implications of the behaviour and ecology of the species. Proximal causes of colouration: hormones and

pigments or structures responsible for colour. Effect of ecological traits and phylogeny on colouration: comparative species between species and populations. Contact: Javier Cuervo [jcuervo@eeza.csic.es](mailto:jcuervo@eeza.csic.es) <http://www.eeza.csic.es/eeza/personales/jcuervo.aspx>

Conservation of endangered ungulate species Research focuses on the relationship between parental investment and breeding systems, host-parasite interactions in different environments and implications of inbreeding for the conservation of endangered species. The populations of North African ungulate species kept at the PRFS (<http://www.eeza.csic.es/eeza/parque.aspx>) for the captive-breeding programs, as well as the infrastructures and information accumulated in the studbooks provide excellent research opportunities. Contact: Eulalia Moreno [emoreno@eeza.csic.es](mailto:emoreno@eeza.csic.es) <http://www.eeza.csic.es/eeza/personales/emoreno.aspx>

Arthropod Ecology Our group studies arthropod ecology in a wide sense. From evolutionary and behavioural ecology to food web ecology and ecosystem processes. We are currently trying to contribute to the ongoing link between evolutionary biology and community ecology, working on a new hypothesis for diversity gradients and how trait variation affects food web dynamics. Contact: Jordi Moya-Laraño [jordi@eeza.csic.es](mailto:jordi@eeza.csic.es) <http://www.unioviado.es/icab/-jordi.html>

Pollination ecology Our group focuses on how the foraging strategies of pollinators affect plant-pollinator networks at the evolutionary and ecological time scales. We use theoretical and experimental approaches and study functional and mechanistic aspects of plant-pollinator interactions. Contact: Miguel A. Rodríguez-Gironés [rgirones@eeza.csic.es](mailto:rgirones@eeza.csic.es) <http://www.eeza.csic.es/eeza/personales/rgirones.aspx>

Interactions between bacteria and birds We focus on: Costs and benefits of symbiotic interactions; factors affecting variability of the bacterial communities associated with birds (feathers, eggs and europygial gland); mutualistic relationship between hoopoes (*Upupa epops*) and mutualistic bacteria living in its europygial gland. Contact: Juan Soler [jsoler@eeza.csic.es](mailto:jsoler@eeza.csic.es) <http://www.eeza.csic.es/eeza/personales/jsoler.aspx>

Host-parasite interactions Evolution and ecology of host-parasite interactions, with special emphasis on parasite speciation processes and proximate mechanisms regulating host-parasite interactions (host health and immune system, social and environmental factors). Contact: Francisco Valera [pvalera@eeza.csic.es](mailto:pvalera@eeza.csic.es) <http://www.eeza.csic.es/eeza/personales/pvalera.aspx> [rgirones@eeza.csic.es](mailto:rgirones@eeza.csic.es)

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UCaliforniaDavis  
SalmonidGenomicVariation

Position: Post-doctoral Researcher (two years with potential for longer term) in the Genomic Variation Laboratory at UC Davis

Salary: \$45,000

Closing: Until filled

Responsibilities: The Genomic Variation Laboratory at the University of California Davis is seeking one Post-Doctoral Researcher who will participate with academic researchers and agency biologists in a genetics-based planning and management effort to reintroduce salmonids as part of the San Joaquin River Restoration Program. The successful applicant will supervise high-throughput SNP genotype collection to genetically characterize potential broodstock and monitor the success of an adaptive reintroduction strategy. Responsibilities may include but are not limited to: 1) writing hatchery and genetic management plans that integrate artificial propagation and passive reintroduction strategies and ecological genomic investigations of salmonids, 2) developing high-throughput SNP approaches and associated databases to assess habitat, hatchery, and harvest impacts on local adaptation and reintroduction success, 3) representing UC Davis at agency meetings. Given the multi-agency and highly collaborative nature of the project, the ability to work as a member of an integrative team is essential.

Qualifications: Applicants must have a PhD at the beginning of employment in genetics, ecology, evolutionary biology, or related field, strong quantitative background experience with SNPs or sequence data, knowledge of/experience with salmonid ecology and genetics, and excellent written and verbal communication skills. Expertise in gene expression profiling, nextGen sequencing, epigenetics, or bioinformatics is desirable.

Contact: Bernie May, Adjunct Professor Department of Animal Science Director, Genomic Variation Laboratory University of California Davis, CA 95616 (530) 754-8123 bpmay@ucdavis.edu <http://genome-lab.ucdavis.edu/> Melinda Baerwald <mrbaerwald@ucdavis.edu>

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UCaliforniaLosAngeles  
PlantEvolution

POST-DOCTORAL SCHOLAR POSITION in Plant Evolutionary Biology/Molecular Ecology Department of Ecology and Evolutionary Biology UCLA

A postdoctoral scholar position is available in the lab of Prof. Victoria Sork to conduct research on the environmental genomics of oaks (2/3) and to manage the lab (1/3 time). Current, on-going lab projects include: population genomics, landscape genetics, and phylogeography of California oaks; co-evolution of lichen fungal-algae symbioses; and molecular ecology of pollen and seed dispersal. The lab is an intellectually dynamic environment consisting of students, postdocs, and visiting researchers working on a diverse range of questions. We meet weekly to discuss projects and articles, and have annual field trips and retreats. UCLA offers an exciting environment for evolutionary biologists, ecologists, conservation biologists, and bioinformaticians through its myriad seminars, colloquia, and informal activities within the department and across campus.

The specific post-doctoral project will be developed jointly. The lab management component will include data management, statistical analyses, grant preparation, and manuscript preparation, with their relative emphasis varying during the year. The successful candidate will also oversee day-to-day management of the laboratory and mentor undergraduate and graduate students working in the lab. Despite the diverse range of responsibilities, they would be balanced to ensure that the candidate could spend time on his/her own project.

Requirements for the position include: a Ph.D. in biology; experience with DNA sequencing and microsatellite markers; statistical skills in population genetics and genomics; and good project management skills. Experience with high throughput technology and data management is desirable. Knowledge of US funding sources is also a plus.

Please apply by emailing as attachments your c.v., cover letter, contact information for references, and a statement of research interests and experience to Sork Research Position, c/o Ms. Bobbi Fenske, LSSA Personnel Manager, rfenske@lifesci.ucla.edu. Screening of applications will begin February 22, 2010, and will continue until filled. Ideally, the position would start

May 2010, but the start date is flexible. The initial appointment is for one year, with renewal based on performance. Salary is commensurate with years of post-doctoral experience and education and in accordance with University policy, starting around \$45,000. For more information, please contact Victoria Sork (vl-sork@ucla.edu).

UCLA is an Equal Opportunity/Affirmative Action Employer.

Victoria Sork <vlsork@ucla.edu>

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### UCalifornia SantaBarbara ChordateEvolutionaryGenet

Evolutionary genetic and ecological studies on self/non-self recognition in a basal chordate

A NSF-funded postdoctoral position is available to study molecular evolution and ecological aspects of self/non-self (allo-) recognition in the colonial ascidian, *Botryllus schlosseri*. Overall, we would like to understand the establishment and maintenance of extraordinary diversity at a newly defined allorecognition locus, called the fuhc. Previous studies have provided the basis and tools for empirical study of the evolutionary genetics of this system, allowing the candidate to directly address the underlying processes. Specifically, we would like to characterize the patterns of genetic variation within and among populations, as well as directly test a putative linkage between allorecognition and larval settlement behavior.

Our lab is located at UC Santa Barbara, an excellent venue in which to carry out this research. Relevant links can be found here: <http://www.lifesci.ucsb.edu/mcdb/faculty/detomaso/> Interested individuals should send a recent CV with referee contact information, copies of any publications, and a brief description of their interest in the position to: detomaso@lifesci.ucsb.edu. A review of applications will begin on March 1, 2010 and continue until the position is filled.

Thomas Turner <tturner@lifesci.ucsb.edu>

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### UCollegeLondon MolecularPhylogenetics

Research Associate in Molecular phylogenetics

University College London - Genetics, Evolution & Environment

Full Time :

The appointment will be on UCL Grade 7. The salary range will be  $\pounds\frac{1}{2}31,778$  -  $\pounds\frac{1}{2}38,441$  per annum, inclusive of London Allowance.

Duties and Responsibilities

The project is in collaboration with Dr Philip Donoghue in University of Bristol and Professor Bruce Rannala of University of California at Davis, and aims to develop models and algorithms for estimation of species divergence times, incorporating uncertainties and errors in the fossil calibrations, and to apply those methods to real data analysis (see, e.g., Syst. Biol. 2007. 56, 453-466; Mol. Biol. Evol. 2006. 23, 212-226; Syst Biol 2010. 59:74-89).

The post is funded until 31st December 2011, in the first instance, with a start date of 1 May 2010 or soon after.

Key Requirements

Professor Ziheng Yang seeks an independent researcher to apply the newly-developed as well as existing methods to analyze large-scale datasets to address practical phylogenetic problems. Expertise in molecular systematics/taxonomy, evolutionary biology (in particular, work on primates, vertebrates, and metazoan) and computer programming skills (C/C++ & PERL) are desirable. Knowledge and experience of modern phylogenetic methods is essential.

A PhD (or working towards a PhD), in one of the following areas is essential: molecular evolution and phylogenetics, taxonomy, genetics, computational statistics, or computer science.

Further Details

For further details about the vacancy and how to apply on line please go to <http://www.ucl.ac.uk/hr/jobs/> and search on Reference Number 1129564

If you have any formal enquiries please contact Professor Ziheng Yang at z.yang@ucl.ac.uk, for infor-



mal enquiries please contact Mr. Ian Evans on [ian.evans@ucl.ac.uk](mailto:ian.evans@ucl.ac.uk)

Please attach a brief personal statement, explaining how your qualifications and experience make you a good candidate for this job, a CV and the names and email addresses for two references

UCL Taking Action for Equality

Closing Date 15 Mar 2010

Latest time for the submission of applications 5.00 pm

To apply click here <https://atsv7.wcn.co.uk/-saf/login.cgi?owner=5041178&ownertype=fair&jcode=1129564&external=38303> Ziheng Yang <[z.yang@ucl.ac.uk](mailto:z.yang@ucl.ac.uk)>

## UEastAnglia ButterflyDispersal

University of East Anglia, School of Environmental Sciences

Senior Research Associate Spatial modelling of butterfly dispersal Ref: RA638

£29,853 to £35,646 per annum

The postholder will contribute to the UEAs work on a NERC funded project in collaboration with the University of York, University of Helsinki and Butterfly Conservation. He or she will collect and analyse field data on butterfly species abilities to move through fragmented landscapes. Frequent travel is required for field work and to visit collaborators. You must have a PhD (or equivalent) in a relevant discipline and be able to fulfill all essential elements of the person specification. This full-time post is available from 1 May 2010 for a period of 36 months.

Closing date: 12 noon on 12 March 2010.

Further particulars and an application form are available on our website: [www.uea.ac.uk/hr/jobs/](http://www.uea.ac.uk/hr/jobs/) or Tel. 01603 593493

Aldina M. A. Franco School of Environmental Sciences University of East Anglia Norwich NR4 7TJ, UK Tel: +44(0)1603 592721

Email: [a.franco@uea.ac.uk](mailto:a.franco@uea.ac.uk) <http://www.uea.ac.uk/env/people/facstaff/francoa> UEA is a partner of the European Master on Applied Ecology- EMAE [www.master-emaec.org/](http://www.master-emaec.org/) FELLOW-SHIPS AVAILABLE for EU and NON-EU students

“Franco Aldina Dr (ENV)” <[A.Franco@uea.ac.uk](mailto:A.Franco@uea.ac.uk)>

## UEdinburgh EvolutionaryGenetics

Two Postdoctoral Positions in Evolutionary Genetics

The BBSRC has recently funded us to investigate the interactions between spontaneous mutation and natural selection in the genome of *Chlamydomonas*, a unicellular green algae. Within this 3 year project we are looking to appoint two postdoctoral researchers.

The first position will be responsible for establishing, maintaining and analysing long term mutation accumulation lines of *Chlamydomonas reinhardtii*. to study variation in the mutation rate in the *Chlamydomonas* genome The lines will be studied by phenotypic assays and by whole-genome sequencing. We are seeking an evolutionary biologist with experience of maintaining experimental populations (ideally of microbes), and the ability to design and analyse evolutionary experiments. Good aseptic technique and molecular skills as well as direct experience of microbial experimental evolution would be highly advantageous, as would a background in population genetics.

The second position will be responsible for whole-genome sequencing and analysis of the mutation accumulation lines, and a set of *Chlamydomonas reinhardtii* sampled from the wild, as well as an isolate of the related species *Chlamydomonas incerta*. These data will be analysed by state of the art evolutionary genomics techniques. The position will also involve giving some help with phenotypic assays of the mutation accumulation lines. Experience in molecular evolution and/or computational biology would be highly advantageous.

The research would all be carried out within the Institute of Evolutionary Biology at the University of Edinburgh (<http://www.biology.ed.ac.uk/research/-institutes/evolution/>). This vibrant and diverse institute houses a group of internationally recognised researchers investigating a wide range of questions within evolutionary biology. The expected start dates for both positions are no later than July 2010, and the salaries will be in the range of £29,853 - £35,646.

For further details please contact Nick Colegrave ([n.colegrave@ed.ac.uk](mailto:n.colegrave@ed.ac.uk)) or Peter Keightley ([peter.keightley@ed.ac.uk](mailto:peter.keightley@ed.ac.uk)).

Applications should be via <http://www.jobs.ed.ac.uk> vacancy refs 3012379 and 3012371 closing dates 3rd

March 2010.

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

peter.keightley AT ed.ac.uk peter.keightley AT ed.ac.uk

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## UHelsinki EvolutionaryGenetics

Ecological Genetics Research Unit of the University of Helsinki is offering a one year position for

### POSTDOCTORAL RESEARCHER

The position involves linkage map construction and QTL-mapping of ecologically interesting traits in three- (Gasterosteus aculeatus) and nine-spined sticklebacks (Pungitius pungitius), as well as in the common frog (Rana temporaria). Informative crosses, data collection and genotyping have already been conducted, so the datasets are ready to be analyzed. For a skillful and creative person, this position offers an opportunity to obtain quick results.

A person selected for the post of postdoctoral researcher is required to have a doctoral degree in biology or animal/plant breeding and the ability to do independent scientific work as well as having the necessary teaching skills. Good knowledge and preferably also experience in conducting linkage and QTL-mapping are required. The candidate is expected to fulfill the language requirements decreed in university ordinance 770/2009. If a foreigner or a Finnish citizen who was not born in Finland or who has not received their education in Finnish or Swedish applies for this position, they may be exempted from the Finnish and Swedish language requirements without separate application. The candidate is expected to be able to express him/herself fluently in English (written and spoken), be able to work both independently and as a member of a team. Excellent writing and communication skills are essential.

The salary will be based on level 5 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointees will be paid a salary component based on personal work performance. All this translates to a salary of ca. 2903,12 - 3380,39 euros/month.

The work can start immediately but the starting date is negotiable.

Ecological Genetics Research Unit (EGRU, head: Prof. Juha Merilä) in the Department of Biosciences at the University of Helsinki, Finland, is located at the Viikki campus of the University of Helsinki (<http://www.helsinki.fi/biotieteet/>). EGRU members work with population, evolutionary, and ecological genetics and genomics problems. Most of the work is addressing directly or indirectly broad, general evolutionary or conservation problems. Fish - nine-spined and three-spined sticklebacks in particular - constitute the main models, but also birds and amphibians are frequently used in the group's research. More information of the research and our interests can be found at <http://www.helsinki.fi/biosci/egru/> To apply, please send a letter describing your interests and qualifications, a CV (including publication list), and contact information for two references (who have agreed to provide a letter of reference) to Prof. Juha Merila ([juha.merila@helsinki.fi](mailto:juha.merila@helsinki.fi)). Deadline for applications is 15.3.2010.

Juha Merilä Ecological Genetics Research Unit Department of Biosciences PO Box 65 (Biocenter 3, Viikinkaari 1) FIN-00014 University of Helsinki Finland

E-mail: [juha.merila@helsinki.fi](mailto:juha.merila@helsinki.fi) <http://www.helsinki.fi/~merila> <http://www.helsinki.fi/biosci/egru/> GSM: +358-40-8374165 Fax: +358-9-19157694

Juha Merilä <[juha.merila@helsinki.fi](mailto:juha.merila@helsinki.fi)>

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## Uillinois PopGenetics

Postdoc or PhD position in Population Genetics, Phylogeography and Conservation of Pollinators Cameron Lab, Department of Entomology, University of Illinois

A postdoctoral or PhD student position is available beginning June 2010 to work on conservation genetics of wild pollinators. Apologies for the double post, the message subject line was cut off in the first posting a few weeks back and I wanted to make sure everyone saw the listing. Don't worry if you've already applied, we have not yet reviewed applications and you are still fully in consideration! Please don't resend your materials.

We are looking for someone excited about interdisciplinary work in population genetics. The focus of the research will be to untangle the recent evolutionary history of bumble bee (*Bombus*) pathogens that may be a

factor in the population decline of these wild pollinators across North America. Those able to integrate phylogeographic theory and statistical modeling into data analysis are particularly encouraged to apply. Candidates should have a strong interest in the use of DNA sequence markers to understand recent evolutionary history, including questions regarding host/pathogen interactions, biodiversity, population structure, phylogeography, and ecology of invasion. Field work will be conducted in Europe and North America, and lab work will involve sequencing DNA from contemporary samples and historical museum specimens. Motivated individuals with experience in the fields of ecology, evolution, or genetics are preferred. The position is best suited to a person who has independent initiative for problem-solving, is well organized and works well with a team and can work effectively under pressure.

In the Cameron Lab (see <http://www.life.uiuc.edu/~scameron> for further information on the lab), the successful applicant will work closely with a postdoc and graduate students working on *Bombus* population structure, ecology and phylogeography. You may contact Sydney Cameron directly if you have additional questions. For information about the Department of Entomology see <http://www.life.illinois.edu/entomology>. Application Procedure: The position is initially funded for two years. Interested applicants should send the following required materials as a single attachment: 1) CV, 2) statement of research interests and explanation of why this position is suitable to your experience and skills, 3) informal transcripts, and 4) names and contact information for at least three referees with whom you have done research. Please email the application file to Jeffrey Lozier ([jdlozier@life.illinois.edu](mailto:jdlozier@life.illinois.edu)), a postdoctoral collaborator on the project (<http://www-u.life.uiuc.edu/~jdlozier/index.html>). APPLICATIONS ARE DUE 31 MARCH 2010

The University of Illinois is committed to equal opportunity and the diversity of its workforce.

[jdlozier@life.uiuc.edu](mailto:jdlozier@life.uiuc.edu) [jdlozier@life.uiuc.edu](mailto:jdlozier@life.uiuc.edu)

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### U Liverpool Experimental Coevolution

Postdoctoral RA School of Biological Sciences, University of Liverpool 36 months Salary: £30594

Project - Host-symbiont coevolution: Exploring the

parasitism-mutualism continuum

An enthusiastic, dedicated postdoctoral research assistant is sought for a 3-year NERC-funded project that will use experimental evolution allied with genome re-sequencing to study coevolution across the parasitism-mutualism continuum. While both parasitism and mutualism are common ways of life, relatively little is known about how antagonistic and mutualistic coevolution differ. In this project, we will exploit the natural variation in the relationship between a plasmid and its bacterial host, associated with different environmental conditions, to examine in detail the consequences of parasitism and mutualism for the tempo and mode of evolution of both parties in a symbiosis. A complete evolutionary genetic picture of coevolution will be created through utilizing the recent advances in second generation sequencing technologies (454, illumina etc.).

The experimental evolution and/or comparative genomics research would be desirable. Training in analysis of next-generation sequencing data and bioinformatics will be provided. The post-holder will perform long-term selection experiments; whole genome re-sequencing; bioinformatics; statistical analysis; manuscript preparation; and assist in lab management. The post will be based in the School of Biological Sciences, University of Liverpool under the supervision of Dr Michael Brockhurst and Dr Steve Paterson.

The post is available for 3-years from May 2010 (or until a suitable candidate is found). Deadline for applications is the 15th March 2010. Informal enquiries to Dr Brockhurst ([brock@liverpool.ac.uk](mailto:brock@liverpool.ac.uk); 01517954519).

Closing date: 15th March 2010

For full details, or to request an application pack, visit: [http://www.liv.ac.uk/working/job\\_vacancies/-research/R-571660.htm](http://www.liv.ac.uk/working/job_vacancies/-research/R-571660.htm)

or e-mail [jobs@liv.ac.uk](mailto:jobs@liv.ac.uk) Tel 0151 794 2210 (24 hr answerphone)

[Michael.Brockhurst@liverpool.ac.uk](mailto:Michael.Brockhurst@liverpool.ac.uk)

[Michael.Brockhurst@liverpool.ac.uk](mailto:Michael.Brockhurst@liverpool.ac.uk)

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### U Manchester EvoDevoBloodVertebrates

Postdoctoral Research Associate Faculty of Life Sciences, University of Manchester, UK Closing date: 03/03/2010 Reference: LS/92207

A postdoctoral position, funded by the Leverhulme Trust, is available to work with Dr Tokiharu Takahashi on the evolutionary origin of multiple cell lineages in vertebrate haematopoiesis. This project will involve cloning and analysing the expression of candidate genes in chordate invertebrates (amphioxus and tunicates), as well as microinjection into *Danio rerio*. The work will be conducted in collaboration with Prof Peter Holland and Prof Roger Patient at the University of Oxford.

Applicants should have a PhD in a relevant field, a strong background in developmental biology, and molecular biology experience. Experience with any of the species described above will be an advantage. Applicants should be prepared to spend a few weeks in summer of 2010 in the USA, to collect specimens and do experiments during the spawning seasons of amphioxus.

The post is available for up to 36 months in the first instance, with an expected appointment date of 1 April 2010.

Salary: GBP 28,983 - 35,646 p.a.

Further information on the project can be found in the link below:

<http://www.manchester.ac.uk/aboutus/jobs/-research/vacancy/index.htm?ref=3D169371> Tokiharu Takahashi, MD, PhD Lecturer in Anatomy The University of Manchester Faculty of Life Sciences Michael Smith Building Oxford Road Manchester M13 9PT UK Tel: +44 (0)161 2755538 Fax: +44 (0)161 2755082 E-mail: Tokiharu.Takahashi@manchester.ac.uk

Tokiharu.Takahashi@manchester.ac.uk Toki-  
haru.Takahashi@manchester.ac.uk

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## UMuenster HostParasiteCoevolution

Postdoctoral Project Leader: Bioinformatic analysis of the genetic basis of host-parasite coevolution (SPP1399)

A three-year postdoctoral position with the possibility of extension is available as part of the DFG funded priority programme SPP 1399 "Host-Parasite Coevolution" (<http://ieb.uni-muenster.de/spp/>).

This newly founded priority programme comprises 21 individual projects and seeks to study evolution in action, by means of one of the most dynamic processes known in evolution, the host-parasite coevolutionary

arms race. The goal of this specific postdoc project is to unravel the genetic basis of coevolutionary adaptation, that is parasite infectivity and host immune defense in coevolving antagonists. The priority programme provides unique access to genomic data from hosts and parasites with a known history of coevolution. The immediate focus of the postdoc project is to characterize and analyse genomic changes in *Bacillus thuringiensis* microparasites that have undergone experimental coevolution with nematode and arthropod hosts. For this purpose, whole-genome sequence and also transcriptome data will be available for microparasites before and after coevolution. The available material will allow us to identify genes, structural elements, and regulatory networks involved in reciprocal adaptation and also the associated patterns of molecular evolution (negative vs. positive selection, etc). Work ranges from genome assembly, characterization of SNPs during coevolution, identification of changes in gene regulation from transcriptomic data, to analysis of molecular evolution. The postdoc will also have the opportunity to contribute to establishment of a platform that shall enhance accessibility and thus exchange of data within the priority programme.

Specifics and future directions of the postdoc project can be tailored to the interests of and developed together with the successful candidate who is expected to be in a good position to publish in esteemed journals.

The postholder will be based in Muenster as part of the Molecular Evolution and Bioinformatics Group of Prof. Erich Bornberg-Bauer. The first part of the postdoc project will include intensive interaction with the group of Prof. Hinrich Schulenburg (Kiel University) and the associated genomics analysis platform, which generated the material to be analysed. Future projects will involve interactions with experimentalists in Muenster (Prof. Joachim Kurtz), Kiel (Prof. Thorsten Reusch, IFM-GEOMAR), and other participants of the priority programme..

Postholders will apply a wide range of bioinformatics techniques and supervise an assistant for maintenance of technical infrastructure. Accordingly, good knowledge of biological databases, bioinformatics programmes and scripting in languages such as Python, Perl or Ruby is essential. Further required qualifications are: \* PhD in natural sciences and research experience in a biological area OR \* PhD in computer science, statistics or bioinformatics with experience and/or desire to excel in a biological area \* Motivation and proven ability to carry out research independently \* Good communication skills, English

CLOSING DATE is April 10th 2010. Commencing date



is flexible, with June 1st 2010 being preferred.

Interested candidates should send applications to Prof. Bornberg-Bauer [ebb\[at\]uni-muenster.de](mailto:ebb[at]uni-muenster.de) as pdf attachment (max. 2 pages) detailing: education, positions held, publications, technical skills, names of prospective referees and a short statement of research interest. Women are strongly encouraged to apply. Equal opportunity regulations apply.

Prof. Dr. Erich Bornberg-Bauer AG Evolutionary Bioinformatics, Institut for Evolution and Biodiversity, FB Biologie, Westfälische Wilhelms Universität Münster Hüfferstrasse 1, D-48149 Münster, Germany [www.uni-muenster.de/Evolution.ebb](http://www.uni-muenster.de/Evolution.ebb) Münster hosts many excellent scientific institutions such as a newly founded Max-Planck Institute for biomedical research, a Centre for Nanotechnology or a great number of specialised research areas ("SFBs"). Münster is a dynamic city with a world-famous heritage centre and in the middle of the beautiful "Münsterland". It is very lively, last not least because of the high number of students and the rich choice of social, cultural and sporting facilities (see [www.muenster.de](http://www.muenster.de))

Prof. Erich Bornberg-Bauer PhD, Institute for Evolution and Biodiversity School of Biol.Sciences, University of Muenster, Huefferstr.1 D48149 Germany Tel/Fax: +49(0)251-83-21630/24668 web: [www.uni-muenster.de/evolution/ebb/](http://www.uni-muenster.de/evolution/ebb/) "E. Bornberg" <[ebb@uni-muenster.de](mailto:ebb@uni-muenster.de)>

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## UppsalaU FishBrainEvolution

Post-doctoral position at the department of Animal Ecology, Evolutionary Biology Centre, Uppsala University:

### Brain Evolution in Fishes

A one year (with good chances of extension to a total of two years) post-doctoral position is available in the Kolm group at the department of Animal Ecology, Uppsala University. The project aims at investigating the evolution of brain size and brain structure in fishes using a combination of phylogenetic comparative analyses and lab experiments.

The foundation of the project is an existing database on brain size and brain structure in Tanganyikan cichlid fish species. This database, together with a molecular phylogeny and a database on ecological, sexually selected and life-history traits provide a strong basis for

phylogenetic comparative analyses of brain evolution. The post-doc will also collect a new dataset on brain size and structure for Syngnathid fishes (pipefishes and seahorses), a group with sex-role reversal and paternal care, which provides an interesting contrast to the cichlid fishes.

Depending on the specific interests of the applicant, there will also be opportunities for experimental work on brain evolution and its implementations for sexual selection and life-history evolution using an artificial selection approach, as well as experimental work on the link between cognitive ability and brain structure in a poeciliid fish. A well-equipped fish lab is available for these experiments. Together, these approaches aim at providing novel insights into the patterns of brain evolution in vertebrates.

The successful applicant should have a PhD in evolutionary biology. A strong interest in cognitive ecology is important and experience in modern phylogenetic comparative analysis is considered a merit even though the project will offer good chances of acquiring such skills for the right candidate. Experience in general fish ecology and fish dissection is also welcome but not essential. The net salary is 20000 SEK/month (~1980 Euros) (not subject to Swedish income tax).

The Evolutionary Biology Centre at Uppsala University is one of Europe's finest and largest institutions in its field and hosts 15 departments working on the levels of genes, organisms and communities. This provides for outstanding possibilities for cross-disciplinary interactions. See [http://www.ebc.uu.se/index\\_eng.php](http://www.ebc.uu.se/index_eng.php) for further information.

Applications (2 copies) should include a brief description of research interests and past research experience, Curriculum vitae and the name and contact information of 2 personal references. Relevant publications should be attached to the application. Application dead-line is 15th of March 2010 and the project is planned to start as soon as possible after mid April 2010 but some flexibility in starting-date can be provided. Please contact Niclas Kolm ([niclas.kolm@ebc.uu.se](mailto:niclas.kolm@ebc.uu.se)) for informal enquiries regarding the position.

Applications should be submitted to:

Dr Niclas Kolm, Assistant Professor Dep Animal Ecology/Inst of Ecology and Evolution Evolutionary Biology Centre (EBC) Uppsala University Norbyvägen 18D, 75236 Uppsala, Sweden

Docent Niclas Kolm, Assistant Professor Animal Ecology/Department of Ecology and Evolution Evolutionary Biology Centre (EBC) Uppsala University Norbyvägen 18D 75236 Uppsala, Sweden



e-mail: niclas.kolm@ebc.uu.se tel: 46(0)184712639 mobile: 46 (0)730980809 fax: 46(0)184716484

UPDATED homepage with pdf' s:

<http://www.iee.uu.se/zooekol/default.php?type=-3Dpersonalpage&id=3D86&lang=sv>

niclas.kolm@ebc.uu.se niclas.kolm@ebc.uu.se

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## UToronto PlantEvolutionaryBiol

POSTDOCTORAL FELLOWSHIP in Plant Evolutionary Biology, Department of Ecology and Evolutionary Biology, University of Toronto. A postdoctoral fellow is sought for collaborative research on the impacts

of global change on plant evolution. The lab is investigating selective forces on flowering phenology, the temporal genetic structure of populations, and introgression rates between migrants and resident populations when the two are phenologically distinct. The successful candidate will have broad latitude in developing specific projects within these general themes, but field experiments will be based at Koffler Scientific Reserve, 50 km north of Toronto. A background in population genetics and solid experience with microsatellites and/or other molecular techniques are required. A Spring 2010 starting date is preferred. Salary will be \$40,000 CAD per year, for two years. For more information on the lab, see <http://labs.eeb.utoronto.ca/weis/> . Applicants should submit a CV, statement of interests and copies of publications/manuscripts to Arthur E. Weis at [arthur.weis@utoronto.ca](mailto:arthur.weis@utoronto.ca). Review of files will start on 8 March 2010.

“Arthur E. Weis” <[arthur.weis@utoronto.ca](mailto:arthur.weis@utoronto.ca)>

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## Arolla Switzerland EvolBiol Jun20-26

Evolutionary Biology Workshop in the Alps

20 - 26 June, Arolla, Switzerland

Faculty: David Haig (Harvard University) John Pannell (University of Oxford) Jerome Goudet (University of Lausanne) Tad Kawecki (University of Lausanne)

Target participants: PhD students, advanced master students This workshop, based on a concept developed by Steve Stearns and John Maynard Smith, takes place

in a small Alpine village (Arolla), which will allow you to focus while being able to enjoy the landscape and the Alpine flora. The main goals of this course are to develop the following skills: - developing your scientific ideas through discussions in groups; - thinking critically and expressing oneself clearly; - turning a general idea into a research project; - writing a research proposal and defending it. It is you, the students, who will be in charge in this course. You will be divided in groups of 4-5 students. In those groups, you will work on your ideas. You, as a group, will decide what the important questions in broadly defined evolutionary biology are, you will choose one, and attempt to develop a proposal for a research project that will address it. The faculty will visit the groups during the discussions to answer your questions, provide coaching and give you feedback on your projects, but they will generally take the back seat. Additionally, the faculty will give informal talks about their research and be available for informal discussion with individual students. At the end you will present your projects to other participants, and we will party.

Costs: CHF 430.- for room and board.

More information under <http://www.unil.ch/ee/-page73344.html> To apply, send a single file (pdf or rtf) containing a short motivation letter, a cv and the name of your scientific adviser to [tadeusz.kawecki@unil.ch](mailto:tadeusz.kawecki@unil.ch).

Deadline for application: March 1, 2010

– Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Biopôle CH 1015 Lausanne, Switzerland

[tadeusz.kawecki@unil.ch](mailto:tadeusz.kawecki@unil.ch) [tadeusz.kawecki@unil.ch](mailto:tadeusz.kawecki@unil.ch)

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### CornellU Evolution of InfectiousDiseases Jun6-9

The 2010 Workshops on Ecology and Evolution of Infectious Diseases will be held at Cornell University in Ithaca NY, June 6-9, 2010. This follows the annual Ecology and Evolution of Infectious Diseases Meeting also being held at in Ithaca June 3-5, 2010 ([http://www.eeid.cornell.edu/EEID\\_2010.html](http://www.eeid.cornell.edu/EEID_2010.html)).

Workshops are designed to provide graduate students, post-doctoral researchers, and other researchers with skills for modeling and analysis of ecological and evolutionary processes affecting infectious disease dynamics. Emphasis is on analyses using the program R. Sepa-

rate workshops, offered in parallel, are designed focus on either Ecology or Evolution of infectious diseases.

The year's workshop will follow the same format as previous year's workshops held at Colorado State University (<http://rydberg.biology.colostate.edu/-EEID2008/eeidworkshop.html>), University of Georgia (<http://www.eeidconference.org/Workshops/-index.html>), Penn State University, and Cornell University.

A web page with further details for this year's workshop will be available soon, an application form is attached here.

Applications for the workshop are due April 2, 2010. Funding from the National Science Foundation will cover the workshop fee and up to \$500 travel assistance for 40 graduate students or post-doctoral researchers (funding is for U.S. citizens, permanent residents, or non-US nationals in good standing at U.S. universities only). Funding will be provided to individuals to attend either the Ecology or Evolution workshop one time, and we encourage previous attendees of either and Ecology or Evolution workshop to apply for the parallel workshop this year.

– Michael F. Antolin

Department of Biology Colorado State University Fort Collins, CO 80523-1878 U.S.A.

e-mail: [Michael.Antolin@ColoState.edu](mailto:Michael.Antolin@ColoState.edu) Voice: (1)-970-491-7011 FAX: (1)-970-491-0649

Mike Antolin <[michael.antolin@colostate.edu](mailto:michael.antolin@colostate.edu)>

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### Groningen EvolutionaryDynamics Feb23-26

The Groningen Research School Ecology and Evolution (RSEE) organizes a course on theoretical evolutionary dynamics.

The aim of the course is to provide participants with a basic understanding of theoretical approaches for modelling slow and fast evolutionary dynamics. At the end of this short course, they should be able to apply the tools presented to simple population dynamical models, to turn them into evolutionary dynamical systems.

Date: 23-26 February 2010 Instructors: Martijn Egas (University of Amsterdam) and Tom Van Dooren (Netherlands Centre for Biodiversity Naturalis, Leiden University)

More information, including a detailed list of lectures is available at:

<http://www.rug.nl/biologie/onderzoek/-onderzoekScholen/RSEE/phdCourses/-evolutionaryDynamics> Please contact Corine Eising (C.M.Eising@rug.nl) or Tom Van Dooren (tvdooren@gmail.com) for more information.

t.j.m.van.dooren@biology.leidenuniv.nl

t.j.m.van.dooren@biology.leidenuniv.nl

## Guarda Switzerland EvolBiol Jun19-26

Course: Workshop in evolutionary biology for master students and first or second year PhD students.

It is my pleasure to announce this years Guarda workshop in Evolutionary Biology. The main aim of this 1 week course is to develop the skills to produce an independent research project in evolutionary biology. The course is for students with a keen interest in evolutionary biology.

The course takes place in the June 2010 (19.-26. June) in the Swiss mountain village Guarda. Faculty includes Sarah Otto, Tim Clutton-Brock, Sebastian Bonhoeffer and Dieter Ebert (organizer).

The course is intended for master (Diploma) students and early PhD students. For the course 3 ECTS credit points are awarded.

Application deadline is March 21, 2010.

The web page with all the details can be found under:

<http://www.evolution.unibas.ch/teaching/guarda/-index.htm> Please communicate this information to interested students.

dieter ebert

<dieter.ebert@unibas.ch> <http://www.evolution.unibas.ch/> Universität Basel, Zoologisches Institut, Vesalgasse 1 4051 Basel, Switzerland Tel. +41-(0)61-267 03 60

dieter.ebert@unibas.ch dieter.ebert@unibas.ch

## LakeheadU AncientDNA May10-28

The Paleo-DNA Laboratory at Lakehead University in Thunder Bay, Ontario, Canada is offering the opportunity to participate in our annual Ancient DNA Training Program. This year we are delivering the course from May 10th to 28th, 2010.

During this hands-on laboratory and lecture program, participants are taught various extraction, purification, and amplification methodologies applied to ancient, degraded or damaged DNA. They will also be provided instruction in data analysis. They will analyse their own blood, buccal, and hair samples and generate their own nuclear DNA profile, determine their own mitochondrial haplotype, and learn sex identification and DNA sequencing. The methodology will include Polymerase Chain Reaction (PCR), PCR-RFLP (Restriction Fragment Length Polymorphism), multiplex PCR, sequencing, and gel and capillary electrophoresis. Students will practice preparing samples from a number of different tissue types such as bone, teeth, hair, blood residues and mummified tissue.

Students will learn to recognize the use of genetic analysis and its potential in evolutionary biology, archaeozoology, palaeopathology, archaeology, forensic science, palaeobotany and palaeontology. Lectures by experts in the fields of archaeology, genetics, ancient DNA, forensic science, palaeopathology and more are integrated with the laboratory sessions.

If you would like registration forms or further information, please visit our website at < <http://www.ancientdna.com> > [www.ancientdna.com](http://www.ancientdna.com) or feel free to contact me direct at <mailto:cjaspers@lakeheadu.ca> [cjaspers@lakeheadu.ca](mailto:cjaspers@lakeheadu.ca) or toll free at 1-866-DNA-LABS.

Cheryl Jaspers

Administrative Coordinator

2010 Ancient DNA Training Program

Carney Matheson <cmatheso@lakeheadu.ca>

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## Montreal Population Genomics Jun1-4 2

Montreal Spring School of Population Genomics and Genetic Epidemiology

1st - 4th June 2010

Extended program

See [www.MontrealSpringSchool.ca](http://www.MontrealSpringSchool.ca) for details Instructional Program

Day 1 - June 1st Introductory Concepts in Human Populations and Medical Genomics Instructors: Philip Awadalla and Lluís Quintana-Murci Time: 8:00 - 17:00 Place: Room 1

Lecture will cover major modern concepts in population genetics. Models that describe genealogical histories underlying sampled chromosomes in natural populations are central to the analysis of such data. The lecture covers the derivation and properties of the basic model and its extension to include factors such as recombination, geographical structure.

- o Mutation and recombination
- o Recombination at pedigree level - concept of linkage disequilibrium (LD)
- o Measures of LD and its decay
- o Coalescence and population genealogies - demography
  - Population mutation parameter, population recombination rate
  - The lab introduces methods of analysis using the statistical software package R.

Data resources

- o 1000 genomes project
  - Demography of human populations. Inferences from uniparental and autosomal markers.
- o This lecture will introduce the different models to explain human evolution. It will give an overview of the most recent genetic data explaining the human origins and migration patterns. It will concentrate on phylogeographic studies, mostly concerning uniparentally-inherited genomes.
- o A rapid overview of the HapMap contribution to the better understanding of the demographic history of human population will be given.

- o A new Human Genome Diversity Project (HGDP) resource

Day 2 - June 2nd Introductory Concepts in Genetic Epidemiology Instructors: Marie-Hélène Roy-Gagnon, Alexandre Bureau, Alexandre Alcaïs and Hélène Vézina Time: 8:00 - 17:00 Place: Room 1

We will first briefly introduce concepts and designs to study familial aggregation followed by basic principles of linkage and association analysis for qualitative traits. Topics covered will include designs and analytical methods used to study genetic linkage. Both parametric and non-parametric linkage analysis will be covered. Presentation of the concepts will be followed by a computer lab application using real data and currently available software such as MLB and MERLIN.

The second part of the lecture will cover designs and analytic methods for genetic association studies. Methods to investigate direct (candidate locus) and indirect (linkage disequilibrium mapping) associations with human disease will be introduced. Both family-based and population based designs will be presented.

Presentation of the concepts will be followed by a computer lab application using real data and currently available software such as FBAT.

Finally, a brief introduction to web resources will be presented, including databases useful in genetic epidemiology studies, an introduction to the BALSAC genealogical resource and presentation of existing tools for their analysis.

Day 3 - June 3rd (Concurrent Sessions - lectures and computer labs - followed by invited lecture)

Advanced Concepts in Population Genomics Instructors: Lluís Quintana-Murci and Luis B. Barreiro Time: 8:00 - 16:15 Place: Room 1

Simulation approaches (e.g. ABC, best-fitting) how we can infer demography from genetic data.

Methods in population genetics and hands-on lab

- o Quality control of the data (e.g. test for HW equilibrium)
- o Haplotype reconstruction using Phase
- o Methods to detect selection from molecular data
- o Description of interspecies neutrality tests (e.g.  $d_n/d_s$ )
- o Sequence-based neutrality tests
- o Population differentiation methods (i.e.  $F_{st}$  approaches)
- o LD-based methods

Advanced Concepts in Genetic Epidemiology and Statistical Genetics Instructors: Marie-Hélène Roy-Gagnon, Alexandre Bureau and Alexandre Alcaïs Time: 8:00 - 16:15 Place: Room 2

Data quality control (pedigree and genotyping error checks)

Introduction to quantitative genetics theory and linkage and association analysis for quantitative traits I

Introduction to quantitative genetics theory and linkage and association analysis for quantitative traits II

Haplotype analysis

Invited Lecture Speaker: to be determined Time: 16:15 - 17:00 Place: Room 1

Day 4 -June 4th (Concurrent Sessions - lectures and computer labs)

Advanced Concepts in Population Genomics Instructors: Lluís Quintana-Murci, Luis B. Barreiro, Philip Awadalla, Nicolas Lartillot Time: 8:00 - 17:00 Place: Room 1

Analysis of signatures of selection in genomic data - applications

o Analysis of real data on which students will perform all different types of neutrality tests

o Practical examples of natural selection in humans, and its utility in epidemiology o Extensions of The Coalescent in Population Genetics

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evoldir.html>

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## MountainLake EvolutionPopBiol When

Summer NSF/REU undergraduate internships and college courses in field-based EVOLUTION, ECOLOGY, POPULATION BIOLOGY and BEHAVIOR are available at Mountain Lake Biological Station (University of Virginia). Visit MLBS.org for details and on-line applications. Email [mlbs@virginia.edu](mailto:mlbs@virginia.edu) or call 434-982-5486. We'd love to hear from your students. Eric Nagy, Associate Director MLBS.

“Nagy, Eric” <[enagy@virginia.edu](mailto:enagy@virginia.edu)>

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## NatlUIreland UndergradSummerSchool Jun8

Hi folks,

I am pleased to announce details of our 10-week Undergraduate Summer School programme in evolutionary biology, funded by Science Foundation Ireland (SFI).

We have funding for 10 students for 10 weeks, starting June 8th.

Students from all over the world can apply and they will be funded to the tune of 300 Euro per week (though some of this money must be used to cover accommodation).

In addition, for students traveling from outside Ireland, there is some funding to help defray travel costs.

Students should not be in the final year of their degree course (i.e. students should be returning to University after the summer), but students that are taking courses in any discipline related to evolutionary biology (bioinformatics, ecology, etc.) are encouraged to apply. Student acceptance is judged by a short statement of coursework and a short personal statement.

We have been hugely oversubscribed for the past two years, so applicants should ensure that the personal statement is informative.

The web address for the course is:

<http://bioinf.nuim.ie/ureka/> The email address for the course is:

[2010ureka@gmail.com](mailto:2010ureka@gmail.com)

All correspondence should be directed towards this email address.

James.

– James McInerney, NUI Maynooth, Co. Kildare, Ireland. P: +353 1 7083860 F: +353 1 7083845 W: <http://bioinf.nuim.ie/> [james.o.mcinerney@nuim.ie](mailto:james.o.mcinerney@nuim.ie) [james.o.mcinerney@nuim.ie](mailto:james.o.mcinerney@nuim.ie)



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## NESCent GMOD 2010 SummerSchool May6-9

I am pleased to announce that we are now accepting applications for:

2010 GMOD Summer School - Americas 6-9 May 2010 NESCent, Durham, NC, USA [http://gmod.org/wiki/2010\\_GMOD\\_Summer\\_School\\_-\\_Americas](http://gmod.org/wiki/2010_GMOD_Summer_School_-_Americas) This will be a hands-on multi-day course aimed at teaching new GMOD users/administrators how to get GMOD Components up and running. The course will introduce participants to the GMOD project and then focus on installation, configuration and integration of popular GMOD Components.

GMOD (<http://gmod.org/>) is a collection of open-source and interoperable software components for visualizing, annotating, and managing biological, especially genomic, data. GMOD is also a community of users and developers addressing common challenges with their data.

The course will be held May 6-9, at the US National Evolutionary Synthesis Center (NESCent) in Durham, NC. These GMOD components will be covered: \* Apollo - genome annotation editor \* Chado - a modular and extensible database schema \* Galaxy - workflow system \* GBrowse - the Generic Genome Browser \* GBrowse\_syn - A generic synteny browser \* JBrowse - genome browser \* MAKER - genome annotation pipeline \* Tripal - web front end for Chado

The deadline for applying is the end of Friday, February 22. Admission is competitive and is based on the strength of the application (especially the statement of interest). In 2009 there were over 50 applications for the 25 slots. Any applications received after the deadline will be placed on the waiting list.

See the course page for details and an application link: [http://gmod.org/wiki/2010\\_GMOD\\_Summer\\_School\\_-\\_Americas](http://gmod.org/wiki/2010_GMOD_Summer_School_-_Americas) Thanks,

Dave Clements GMOD Help Desk

PS: We are also investigating holding a GMOD course in the Asia/Pacific region, sometime this fall. Watch the GMOD mailing lists and the GMOD News page/RSS feed for updates. - [http://gmod.org/wiki/2010\\_GMOD\\_Summer\\_School\\_-\\_Americas](http://gmod.org/wiki/2010_GMOD_Summer_School_-_Americas) [http://gmod.org/wiki/GMOD\\_News](http://gmod.org/wiki/GMOD_News)

clementsnescent@gmail.com

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## NESCent GMOD 2010 SummerSchool May6-9 DeadlineFeb22

Hello all,

This is a reminder that the deadline for applying to the 2010 GMOD Summer School - Americas is the end of the day on Monday, February 22, which is now less than a week away. Any applications received after that will automatically be placed on the waiting list.

Admission is competitive and is based on the strength of the application, especially the statement of interest. See below and [http://gmod.org/wiki/2010\\_GMOD\\_Summer\\_School\\_-\\_Americas](http://gmod.org/wiki/2010_GMOD_Summer_School_-_Americas) for additional information.

Thanks,

Dave Clements

----- Forwarded message ----- From: Dave Clements <clements@nescent.org> Date: Fri, Jan 29, 2010 at 2:26 PM Subject: Course: 2010 GMOD Summer School - Americas To: [evoldir@evol.biology.mcmaster.ca](mailto:evoldir@evol.biology.mcmaster.ca)

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– [http://gmod.org/wiki/2010\\_GMOD\\_Summer\\_School\\_-\\_Americas](http://gmod.org/wiki/2010_GMOD_Summer_School_-_Americas) [http://gmod.org/wiki/GMOD\\_Logo\\_Program](http://gmod.org/wiki/GMOD_Logo_Program) [http://gmod.org/wiki/GMOD\\_News](http://gmod.org/wiki/GMOD_News) clementsnescent@gmail.com

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## Online SpeciesTrees Feb24

Noah Rosenberg (U. Michigan) will be giving a freely accessible online seminar concerning “Consistency properties of species tree inference algorithms under the multispecies coalescent” Wednesday, February 24 at 1pm PST.

To learn about how to attend this and other similar seminars, please visit <http://phyloseminar.org/>. Abstract: The topologies of gene trees that evolve along the branches of a species tree need not match the species tree topology. As a result of this discordance, when gene tree evolution is assumed to follow a “multispecies coalescent” model, simple phylogenetic algorithms can exhibit peculiar statistical inconsistencies in inferring species trees. This talk will examine the statistical consistency under the multispecies coalescent of several algorithms - based on consensus trees, ranked gene trees, and the “minimize deep coalescences” algorithm. A summary will be presented of the known consistency properties of the various algorithms.

Erick Matsen <ematsen@gmail.com>

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## Rockville MD VirusEvolution Aug29-Sep3

“16th International Bioinformatics Workshop on Virus Evolution and Molecular Epidemiology”

August 29 - September 3rd, 2010 in Rockville, MD USA.

Dear colleague,

We would like to announce the “16th International Bioinformatics Workshop on Virus Evolution and Molecular Epidemiology”, which will be hosted by the Johns Hopkins University Center for Biotechnology Education, August 29 - September 3rd, 2010 in Rockville, MD USA. The workshop intends to give theoretical and practical training in basic and advanced phylogenetics and data mining analysis applied to virology.

Registration fee is 800 Euro, covering lectures, computer class sessions, lunch, coffee breaks. Participation is limited to 20 scientists in each module and therefore a selection procedure will be performed based on the submitted abstract and statement of motivation.

A limited number of grants are available for scientists who experience difficulties to attend because of financial reasons. Abstract and application deadline is 15 March.

Selection criteria:

(in order of importance)

1. Quality of your abstract: International reviewing process of the abstract with priority for applicant as first author.
2. How urgent is your need for training: Motivation letter.
3. Per module, not more than 1 participant from the same lab.
4. Per module, not more than 2 participants from the same country. (To allow participation from countries with limited resources).
5. In case of ex aequo: priority to participants with best publication record.

Grant criteria:

(in order of importance)

1. Priority to countries with limited resources.
2. Ranking according to the quality of the abstract.

Additional information and application forms are available at our website: "<http://www.kuleuven.ac.be/-aidslab/veme.htm>". We are convinced that this course meets the needs of many molecular virologists, and hope that we can help them in their search for training in Bioinformatics methods.

For all further information, please contact: [ria.swinnen@uz.kuleuven.ac.be](mailto:ria.swinnen@uz.kuleuven.ac.be)

Yours sincerely,

Anne-Mieke Vandamme

Organizing Committee Prof. Anne-Mieke Vandamme  
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Johns Hopkins University Center for Biotechnology Education 9601 Medical Center Drive Rockville, MD 20850 USA

Workshop Contact Ria Swinnen Rega Institute & University Hospitals Minderbroedersstraat 10 3000 Leuven Belgium  
Tel.: +32 16 332160 Fax.: +32 16 332131 E-mail: [ria.swinnen@uz.kuleuven.ac.be](mailto:ria.swinnen@uz.kuleuven.ac.be)

Prof Dr Anne-Mieke Vandamme Katholieke Universiteit Leuven Laboratory for Clinical and Epidemiological Virology AIDS Reference Laboratory Rega Institute and University Hospitals Minderbroedersstraat 10 B-3000 Leuven, Belgium  
Phone: +32-16-332160 Fax: +32-16-332131 E-mail: [anne-mie.vandamme@uz.kuleuven.ac.be](mailto:anne-mie.vandamme@uz.kuleuven.ac.be)

~ be a virus, see the world ~

~ Gary Larson

Annemie Vandamme

<[annemie.vandamme@uz.kuleuven.ac.be](mailto:annemie.vandamme@uz.kuleuven.ac.be)>

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**Shenzhen China**  
**ComputationPhyloinformatics**  
**Aug5-17**

Computational Phyloinformatics: A BGI-Shenzhen and NESCent Course 5 August - 17 August 2010

<http://www.nescent.org/courses/2010/comphy/>  
<http://www.genomics.cn/en/edu.php?type=-show&id=477> Course Contacts: Wang Xiaol-

ing ([training@genomics.org.cn](mailto:training@genomics.org.cn)) and William Piel ([piel@treebase.org](mailto:piel@treebase.org))  
Organizing Committee: Li Zhuo, Wang Xiaoling, Hilmar Lapp, William Piel, Todd Vision

Computational Phyloinformatics is an 11-day intensive summer course co-sponsored by BGI-Shenzhen and the U.S. National Evolutionary Synthesis Center (NES-Cent), and will take place at the BGI-Shenzhen genomics institute in Yah Tian District, Shenzhen, China. The venue is in proximity to beaches, national forests, and holiday resorts. The course aims to give students practical knowledge and hands-on programming skills in phyloinformatics.

**SYNOPSIS** Biologists are faced with ever-larger datasets, more complex evolutionary models, and increasingly elaborate analytical methods. Seldom is it sufficient to run a dataset with an off-the-shelf program on a desktop PC; increasingly, biologists need to write scripts to interface with internet services and databases, build analytical pipelines, customize analyses, and distribute computation over multiple processors. This course is designed for graduate students, postdocs, and researchers in phylogenetics interested in receiving practical, hands-on training in the use of Perl and SQL for phyloinformatics applications.

The course is divided into three parts:

• Part I: A tutorial review of Perl, including object oriented programming and building packages

• Part II: Introduction and practical use of BioPerl and Bio::Phylo, (e.g. scripting for large tree inference engines, automating model testing, supertree assembly, rate smoothing and branch calibration, tree traversal, etc).

• Part III: Introduction to database design; computing and querying nested sets and transitive closure; topological querying of both large trees (e.g. NCBI) and large collections of trees (e.g. TreeBASE)..

Students will learn how to write basic phylogenetic or comparative analysis scripts, parse NEXUS files, traverse and compute over trees, and make practical use of phylogenetic software libraries. These skills will be learned in a biological context, touching on a diverse array of topics such as analysis of large datasets, automation of supertree assembly, querying for topological patterns in large collections of trees, etc.

**INSTRUCTORS** Darin London, William Piel, Rutger Vos

**PREREQUISITES** Biology: A solid understanding of phylogenetics (e.g. familiarity with MP, ML, BI, NJ, substitution models, tree searching,

bootstrapping, etc) â for example, having already taken the Workshop on Molecular Evolution (<http://www.molecularevolution.org/>), Bodega Applied Phylogenetics Workshop (<http://bodegaphylo.wikispot.org/>), or equivalent coursework or experience.

Computing: Prior experience with Perl or careful study of the suggested reading materials (see web site). Students should have experience with basic Unix shell commands. All students are expected to bring either their own Mac OSX computer or a LINUX computer; otherwise LINUX computers will be provided.

FEES Full tuition is Â6,800 (~\$996), and includes lunches, coffee, computer equipment, and an outing on one of two free days. Students are free to find their own accommodation, but shuttle service is offered to/from the recommended hotels: Pattaya Hotel and East Coast Blue Club Hotel, located near Dameisha beach.

HOW TO APPLY Apply through the course website. You will be asked to provide a resume and a motivation statement (including a self-assessment of your skills, experience, and knowledge of both phylogenetics and computing). Applications are due by April 5 2010.

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### SilwoodPark PopulationsUnderPressure Jun9-11

Dear colleague,

We are pleased to announce that the Populations under Pressure symposium will run again between June 9th-11th at Imperial College London, Silwood Park, UK.

The symposium is aimed at convening PhD students and early stage post-docs for interdisciplinary discussions within the broad field of applied population biology and conservation. This year's themes are Range Limits and Global Change and Uncertainty in Models.

Participants will gather in a friendly setting where they will have the opportunity to present their own work and participate in workshops with an international group of researchers from different backgrounds. The workshops will be complemented by plenary presentations from leading researchers in applied population biology and a number of transferrable skills sessions, alongside evening social events.

We ask you to forward this invitation to students and colleagues in your lab and department as well as other interested parties.

Full details of the invited speakers, the workshop topics, contact email addresses and application procedures can be found on our website: <http://www.iccs.org.uk/-PuP10.htm>. Deadline for applications is 30th April 2010.

With thanks,

Lynsey & the rest of the PuP 2010 organising committee

Lynsey McInnes PhD Student Imperial College London  
Silwood Park Campus

<http://www.bio.ic.ac.uk/research/apurvis/lynsey.htm>

[http://www.justgiving.com/offset\\_silwood\\_carbon](http://www.justgiving.com/offset_silwood_carbon)

lynsey.mcinnnes01@imperial.ac.uk

lynsey.mcinnnes01@imperial.ac.uk

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### SmithsonianTropicalSta SpongeSystematics Jun7-Aug2

Meiofauna and Sponge Courses

The Bocas del Toro Research Station 2010 Training in Tropical Taxonomy program offers 2-week courses in identification and taxonomy of Meiofauna (June 7-18) and Sponges (July 20-August 2). The courses are aimed at graduate students but advanced undergrads and interested researchers or professors can also apply.

For more information go to: [http://striweb.si.edu/-taxonomy\\_training/](http://striweb.si.edu/-taxonomy_training/) Thank you very much.

Rachel

Dr. Rachel Collin Director, Bocas del Toro Research Station Smithsonian Tropical Research Station

"Collin, Rachel" <CollinR@si.edu>

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### UNottingham SummerSchool MolEvol Jul26-31

The BBSRC (UK) will run a Summer School in Molecular Evolution and Diversity at the University of Nottingham from Monday 26th July until Saturday 31st July 2010.

This is a course designed mainly, although not exclu-

sively, for early career researchers (postgraduate and postdoctoral) in quantitative aspects of Evolutionary Biology, who are, or wish to, study genetic variation within and/or between species, and who need to gain a greater understanding of the quantitative and theoretical tools that will aid their interpretation of evolutionary data. The course will largely consist of plenary lectures and talks from experts in population genetics theory and molecular evolutionary analyses. There will also be 3 computer sessions, intended to help participants in the analysis of sequence and other types of data, and to understand how these analyses can be used to study important biological questions. In addition, those chosen to participate in the Summer School will be asked to present a short talk or a poster about their research project or planned project.

Places on the course are free, and, while we expect 90% of those chosen for the course to be postdoctoral or postgraduate researchers, 10% of places have been reserved for more experienced researchers. All those chosen will need to pay their travel expenses, and will be asked to commit to attending the entire meeting. Places are not restricted to BBSRC-funded researchers. Applications will be via the website: <http://www.nottingham.ac.uk/biology/-apps/summer-school/> The application form will ask for a poster or talk title and abstract, and also the supervisor's name (if relevant) and department and institution. The deadline for applications is Thursday, 1st April 2010.

The Summer School will cover the following areas of micro- and macro-evolution: Genetic Diversity Within Populations Genetic Drift and the Coalescent Mutation and Selection Recombination and its Impact on Genetic Variation The Detection of Selection from Population Genetic Data Genetic Diversity Between Populations The Effects of Recent Demographic Changes on Populations Measurement of Inter-population Genetic Variation Genetic Variation Between Species Alignment of DNA sequences Tree-Building Evolution of Development and Evolutionary Genomics The Evolution of Development Patterns of Selective Constraint in the Genome Microbial Evolution and Systems Biology The Study of Fitness at the Genomic Scale Gene Networks Recombination, Selection and Genetic Variation in Microbial Populations Plenary Speakers will include: Brian Charlesworth, Deborah Charlesworth, Paul Sharp, Peter Keightley (University of Edinburgh), Michael Akam (University of Cambridge), John Brookfield, John Armour (University of Nottingham), Simon Whelan, Daniela Delneri (University of Manchester)

Please contact John Brookfield at [john.brookfield@nottingham.ac.uk](mailto:john.brookfield@nottingham.ac.uk) if you have ques-

tions.

John Brookfield <[John.Brookfield@nottingham.ac.uk](mailto:John.Brookfield@nottingham.ac.uk)>

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## UWashington StatGenetics Jun14-Jul2

Registrations and scholarship applications are now being accepted for the 15th annual Summer Institute in Statistical Genetics, to be held June 14 through July 2 at the University of Washington in Seattle, Washington. Go to <http://www.biostat.washington.edu> and click on Summer Institutes.

The Institute is a series of 22 modules, each taught over 2.5 days by leaders in the field, on many aspects of statistical genetics. New in 2010 are modules in Gene Expression Profiling, Human Quantitative Genetics, Advanced R Programming for Bioinformatics, and GWAS Data Cleaning.

Send any questions to [sig@u.washington.edu](mailto:sig@u.washington.edu)

Bruce Weir

– Bruce S. Weir Professor and Chair, Department of Biostatistics University of Washington Seattle, WA 98195-7232 Phone (206) 221-7947. Fax (206) 543-3286.

Bruce Weir <[bsweir@u.washington.edu](mailto:bsweir@u.washington.edu)>

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## Valencia MEPPA10 MolecularEvolution June14-18

FIRST ANNOUNCE

DEADLINE FOR APPLICATIONS: May 3th 2010

Dear mailing list member,

Registration is now open for:

MEPPA10 - Molecular Evolution, Phylogenetics, Phylogenomics and Adaptation

Please visit the Course website for details:

[http://bioinfo.cipf.es/courses/mol\\_evol\\_phylo\\_5ed/](http://bioinfo.cipf.es/courses/mol_evol_phylo_5ed/)

This course is likely to be very competitive for seats. Our maximum capacity is 25 seats. Early application is recommended!



Instructors: Hernan Dopazo, Toni Gabaldon, François Serra, Jaime Huerta-Cepas and Leonardo Arbiza  
 Invited Instructors: David Posada, University of Vigo (Spain) and Rafael Zardoya, MNCN-CSIC (Madrid, Spain)  
 Duration: 5 days. June 14-18, 2010  
 Course Fee: Eur 330, include meals. A limited number of grants will be available. Place: Centro de Investigacion Principe Felipe. Valencia. Spain

#### Course description:

Currently, the simplest Bioinformatics analysis uses species comparisons in order to hypothesise the function of a novel biological sequence. Moreover, in most Molecular Biology labs, evolutionary and phylogenetic concepts are constantly being used with more or less formality: homology, similarity, evolutionary rates, long branch attraction, rooted and unrooted trees, monophyletic group, molecular clock, adaptation, lineage effects, neutralism, cladograms, phylograms, etc. The course aims to provide the necessary background to understand the basic concepts from comparative and evolutionary biology that are frequently used in molecular biology and bioinformatics analyses. The course consists in five full-day sessions with an adequate balance between theory and computer practice, oriented to solve frequent problems and hypothesis testing. The program covers the basic and advanced analysis of Phylogenetic reconstruction, Phylogenomic analysis of genomes and Maximum likelihood tests for molecular adaptation. The software resources that will be used in the practical sessions include: Phyml, Phylip, MEGA, TreePuzzle, MrBayes, PAML, Modeltest-Protest, Jmodeltest and the Phylemon web server.

Please feel free to pass this information to colleagues in your community.

Co-ordinators: Hernan Dopazo and François Serra

Hernán J. Dopazo, PhD Head of the Comparative Genomics Unit Bioinformatics & Genomics Department Centro de Investigación Príncipe Felipe c/ ep Avda. Autopista del Saler 16 (Junto al Oceanográfico) 46012, Valencia, España Tfn: (34) 96 328 96 80 ext: 1008 Fax: (34) 96 328 97 01 hdopazo@cipf.es <http://hdopazo.bioinfo.cipf.es/> Hernan Dopazo <hdopazo@cipf.es>

Workshop on Molecular Evolution, Woods Hole

<http://www.molecularevolution.org/workshop> 25 July - 6 August 2010, individual research session 6 - 13 August 2010

Application Deadline 1 March 2010

Michael P. Cummings, Director

The Workshop on Molecular Evolution has been the finest course on the subject since first offered in 1988 in Woods Hole, USA. The Workshop consists of a series of lectures, demonstrations and computer laboratories that cover various aspects of molecular evolution. Faculty are chosen exclusively for their effectiveness in teaching theory and practice in molecular evolution. Included among the faculty are developers and other experts in the use of computer programs and packages such as BLAST, BEAST, Clustal W and Clustal X, FASTA, FigTree, GARLI, Genealogical Sorting Index, LAMARC, MAFFT, MrBayes, PAML, PAUP\*, and SeaView who provide demonstrations and consultations. The course is designed for established investigators, postdoctoral scholars, and advanced graduate students with prior experience in molecular evolution and related fields. Scientists with strong interests in molecular evolution, phylogenetics, population genetics, and related fields are encouraged to apply for admission. Lectures and computer laboratories total ~90 hours of scheduled instruction. An optional all-computer laboratory of 54+ hours of independent work with guidance and consultation of some faculty and teaching assistants is offered during the third week. Admission is limited and highly competitive, with admissions decisions determined by an international committee. Participants find the individual research session to be especially useful.

Topics to be covered include:

- Databases and sequence matching: database searching; protein sequence versus protein structure; homology; mathematical, statistical, and theoretical aspects of sequence database searches - Phylogenetic analysis: theoretical, mathematical and statistical bases; sampling properties of sequence data; Bayesian analysis; hypothesis testing - Maximum likelihood theory and practice in phylogenetics and population genetics: coalescent theory; maximum likelihood estimation of population genetic parameters - Molecular evolution integrated at organism and higher levels: population biology; biogeography; ecology; systematics and conservation - Molecular evolution and development: gene duplication and divergence; gene family organization; coordinated expression in evolution - Comparative genomics: genome content; genome structure; genome

evolution - Molecular evolution integrated at lower levels: biochemistry; cell biology; physiology; relationship of genotype to phenotype

2009 Fees: \$2650 (room and board at no additional charge), plus an additional \$1000 for the individual research session.

More information is available at <http://www.molecularevolution.org/workshop>

The direct link to application information is - <http://gosnold.mbl.edu/StudentApp/StudentApp.asp?CourseID=3DMOLE>

mike@umiacs.umd.edu mike@umiacs.umd.edu

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## Instructions

Instructions: To be added to the EvolDir mailing list please send an email message to [Golding@McMaster.CA](mailto: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](mailto:Golding@McMaster.CA). In addition, if it originates from ‘blackballed’ addresses it will be sent to me at [Golding@McMaster.CA](mailto:Golding@McMaster.CA). These messages will only be read and dealt with when I have time. The code 000000 has all channels turned off and hence gets only a once monthly notification of the availability of a monthly review pdf file.

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

To send messages to the EvolDir direct them to the email [evoldir@evol.biology.McMaster.CA](mailto:evoldir@evol.biology.McMaster.CA). Do not include encoded attachments and do not send it as Word files, as HTML files, as L<sup>A</sup>T<sub>E</sub>X files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at [Golding@McMaster.CA](mailto:Golding@McMaster.CA) and processed later. In either case, please do not expect an instant response.

## Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by L<sup>A</sup>T<sub>E</sub>X do not try to embed L<sup>A</sup>T<sub>E</sub>X or T<sub>E</sub>X in your message (or other formats) since my program will strip these from the message.