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# E v o l D i r

March 1, 2012

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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### ArizonaStateU Phylomedicine Mar23-24 register

Final call for registration <http://www.smbe.org/-phylomed/> Arizona State University is hosting a Phylomedicine Symposium March 23-24, 2012 in Tempe, Arizona, USA. This symposium is sponsored by the Society for Molecular Biology & Evolution (SMBE) to bring together researchers at the intersection of Molecular Evolution and Genomic Medicine (Phylomedicine). Scientific program is now available online.

The deadline for new requests for registrations is on February 7, 2012. To present a poster, complete the registration form indicating you are presenting a poster, and email the form and the title of your poster to [phylomedicine@asu.edu](mailto:phylomedicine@asu.edu)

Sudhir Kumar and Ananias Escalante

[s.kumar@asu.edu](mailto:s.kumar@asu.edu)

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### Athens SEEuropeEvolution Jun18-22

Dear colleagues,

It is our pleasure to announce that the registration and the abstract submission of the International Congress on the Zoogeography, Ecology and Evolution of South-eastern Europe and the Eastern Mediterranean (Place: Athens-Greece, Date: 18-22 June, 2012) are open. The deadline for receipt of abstracts is March 15 2012 and for early registration is April 15, 2012. This congress, which is the 12th of the "International Congress on the Zoogeography and Ecology of Greece and Adjacent Regions" series (12th ICZEGAR) includes all issues related to animal systematics, phylogeny, phylogeography, and ecology in the Southeastern Europe and the Eastern Mediterranean.

Visit our meeting website (<http://www.zoologiki.gr/-12iczegar/index.php>) for the most current information.

Sessions will convene in the mornings and early afternoons and will include lectures by invited speakers, as well as talks and poster presentations selected

from submitted abstracts. The invited key speakers are: – François Bonhomme (Université Montpellier, FR) – Salvador Carranza (Institut de Biologia Evolutiva - CSIC/UPF, ES) – Johannes Foufopoulos (University of Michigan, USA) – Shai Meiri (University of Tel Aviv, IL) – Nikolaos Schizas (University of Puerto Rico, PR) – Thomas Schmitt (Universität Freiburg, DE) – Katerina Trantalidou (Ephorate for Palaeoanthropology-Speleology, Min. of Culture, GR) We would greatly appreciate your assistance in disseminating this information among your colleagues and encourage them to participate. We look forward to welcoming you in Athens (Greece) for a scientifically stimulating and socially enjoyable meeting.

With Best regards, On behalf of the Organizing Committee Aris Parmakelis

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### Avignon PetitPoisDeride Aug28-31

Never been to Avignon? Good news: the 34th “Petit Pois Deridã” (Ha-pea meeting\*) will take place next August 28-31, 2012, in Avignon. This a yearly meeting of the French community of evolutionary biologists, population biologists and ecologists. Emphasis is on having students and postdocs present their work and exchange with more senior scientists. The event is organized by the INRA research groups in Avignon and Sophia-Antipolis, and the University of Avignon. Book these dates! (even if you’ve been to Avignon before)

A website will open in late January with all practical facts.

The organizers \* Its purpose is to bring together smooth and wrinkled... evolutionary biologists.

Bonjour à tous,

Vous n’avez jamais vu le pont d’Avignon ? Super : la 34eme édition du Petit Pois Déridé sera organisée

par les équipes INRA de Sophia et Avignon ainsi que l’Université d’Avignon et des Pays du Vaucluse et se tiendra du 28 au 31 aout 2012 à Avignon. Bloquez ces dates sur vos agendas !

Le site internet ouvrira fin janvier avec toutes les informations pratiques.

Les organisateurs PS si vous avez déjà vu le pont, venez quand même !

vincent.calcagno@sophia.inra.fr

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### Avignon PetitPoisDeride Aug28-31 registration

Never been to Avignon? Good news: the 34th “Petit Pois Deridé” (Ha-pea meeting\*) will take place next August 28-31, 2012, in Avignon. This a yearly meeting of the French community of evolutionary biologists, population biologists and ecologists. Emphasis is on having students and postdocs present their work and exchange with more senior scientists. The event is organized by the INRA research groups in Avignon and Sophia-Antipolis, and the University of Avignon. Book these dates! (even if you’ve been to Avignon before)

Online registration is now open at <http://www.ppd2012.fr> (you’ll have to create a user account in order to submit abstracts)

Contact us: [ppd2012@avignon.inra.fr](mailto:ppd2012@avignon.inra.fr)

Hoping to see you soon, The organizers

\* Its purpose is to bring together smooth and wrinkled... evolutionary biologists.

vincent.calcagno@sophia.inra.fr

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### Dublin SMBE Jun23-26 registration

SMBE - the Society for Molecular Biology and Evolution - will hold its annual conference in Dublin on 23-26 June 2012. Registration is now re-open, with discounted rates available until Feb 20th due to the precedented demand. The conference will include 25 symposia and plenary talks by Profs. Hopi Hoekstra (Harvard), Belinda Chang (U. Toronto), Martin Emb-

ley (Newcastle U.) and Chip Aquadro (Cornell). For details see [www.smb2012.org](http://www.smb2012.org) Emma Teeling (on behalf of the Organising Committee)

Emma Teeling <Emma.Teeling@ucd.ie>

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## Durham Recombination Jul14-17

The 2012 annual meeting of the American Genetic Association will be held from 14-17 July at the Durham Convention Center in Durham, North Carolina, USA. The conference is entitled "Recombination: Molecular Mechanisms & Evolutionary Consequences".

\*\*We are also planning an NSF- (and Duke University-) funded graduate student/ postdoc preconference workshop on 14 July, with a focus on communicating science to the public and mass-media. A subset of students & postdocs attending the workshop will receive funding that can be used to defray their conference expenses. Sign up before May 1 to avail yourself of this funding!\*\*

Registration and conference information are online (<http://www.theaga.org/2012/>), and we invite contributed talks & posters. Early bird registration rates end May 13, 2012. If you would like additional information about these exciting events, please email [noor@duke.edu](mailto:noor@duke.edu). Hope to see you there!

Brian Charlesworth- University of Edinburgh, UK  
 Adam Auton- Albert Einstein College of Medicine  
 Justin Blumenstiel- University of Kansas  
 Francesca Cole- Sloan Kettering  
 Greg Coperhaver- University of North Carolina  
 Justin Fay- Washington University (St Louis)  
 Bret Payseur- University of Wisconsin  
 Tom Petes- Duke University  
 Jeff Sekelsky- University of North Carolina  
 Nadia Singh- North Carolina State University  
 John Willis- Duke University

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## Edinburgh Evolution Maternal Effects May9

Dear Colleagues,

We are pleased to announce that the CIIE/NERC Symposium on Maternal effects on health and fitness: perspectives from the biomedical and evolutionary sciences will be held on Wednesday, 9th May 2012 in Lecture Theatre 3, Ashworth Laboratories, University of Edinburgh. You can now register via our website: <http://ciie.bio.ed.ac.uk/node/336> This will be a one-day symposium designed to connect evolutionary biology to infection research and gain an interdisciplinary perspective on challenges to global health.

Maternal effects on health arise when the infection status or condition of mothers influences the health or immune responsiveness of offspring. This is an area of much active research, but maternal effects have also been broadly studied outside the context of health, and in particular evolutionary biologists have addressed the possibility of adaptive maternal effects, i.e. when mothers take cues from the environment and resource their offspring to be well-suited to the conditions they will be born into. This symposium will explore the potential for cross-fertilisation between the evolutionary biology and medical perspectives on maternal effects.

Confirmed speakers: Laura Galloway (Virginia, USA) Sylvain Gandon (Montpellier, France) Romain Garnier (Montpellier, France) Phillip Heeb (Toulouse, France) Alasdair Leslie (Oxford, UK) Ariel Lindner (Paris, France) Tessa Roseboom, (Amsterdam, NL) Per Smiseth (Edinburgh, UK) Tom Little (Edinburgh, UK)

You can download the Symposium poster here. <http://tinyurl.com/ciienrcposter> If you'd like to attend, you need to register using the online registration form on our website <http://ciie.bio.ed.ac.uk/node/336>. Lunch will be provided for all registered attendees.

You can contact the organisers by e-mailing [ciie@ed.ac.uk](mailto:ciie@ed.ac.uk)

We look forward to welcoming you on 9th May.

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<http://www.biology.ed.ac.uk/research/groups/tlittle/>

Tom Little <[tom.little@ed.ac.uk](mailto:tom.little@ed.ac.uk)>

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## Edinburgh QuantGenetics Jun17-22 reminder

4th International Conference on Quantitative Genetics Edinburgh 17-22 June 2012 <http://www.icqg2012.org.uk/> REMINDER: DEADLINE 3 FEBRUARY 2012 for submission of abstracts for consideration for oral presentation and for early registration discount

Abstracts for poster presentation only can be submitted up to 6 April 2012

Organising Committee

Loeske Kruuk <Loeske.Kruuk@ed.ac.uk>

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## Frankfurt MammalianDiversity Sep4-8

Dear colleagues,

I am pleased to announce the first circular of the annual conference of the German Society of Mammalogy. This year, this international conference will be hosted at the Senckenberg Institute and Natural History Museum in Frankfurt (Main), Germany. Main organiser is the Conservation Genetics Group, and several other Senckenberg and BIK-F groups are involved as well.

The conference theme is “The Past, Present and Future of Mammalian Diversity”, and hence all topics in Mammalian Biology are covered in a modern and multidisciplinary atmosphere. There will be three days of conference with talks and poster sessions, divided into the (non-exclusive) topics:

- past (palaeontology, ancient DNA, phylogeny, phylogeography, evolution ...) - present (population structure and distribution, behaviour, physiology, morphology, current policy, other open topics ...) - future (conservation, policy making, predictive modelling, climate change, evolution again ...)

We have invited three plenary speakers to cover and introduce cutting-edge research in each of these groups of topics:

- Michael Hofreiter (<http://www.york.ac.uk/biology/-research/ecology-evolution/michael-hofreiter/>) - Phil Stephens (<http://www.dur.ac.uk/philip.stephens/-welcome.htm>) - Herbert H.T. Prins (<http://www.reg.wur.nl/UK/Staff/Prins/>)

We are now building the content of the conference website but the main info is already available. Please go to <http://www.senckenberg.de/dgs2012> to have a look. You can already register without commitment, and submit abstracts. Deadlines are indicated on the conference website.

We are looking forward to a major event this late summer, and hope to welcome participants from a diverse range of topics and backgrounds.

With best regards, on behalf of the organising committee,

Robert

Dr. Robert H.S. Kraus Conservation Genetics Group Senckenberg Research Institute Research Station Gelnhausen Clamecystrasse 12, D-63571 Gelnhausen, Germany tel. 0049-(0)-6051-61954-3130 fax. 0049-(0)-6051-61954-3118 [robert.kraus@senckenberg.de](mailto:robert.kraus@senckenberg.de) [www.senckenberg.de](http://www.senckenberg.de) “Chance favours a prepared mind”

Senckenberg Gesellschaft für Naturforschung Rechtsfähiger Verein gemäß §22 BGB Senckenberganlage 25 60325 Frankfurt Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Michael Türkay, Dr. Johannes Heilmann, Prof. Dr. Pedro Martinez Arbizu, Prof. Dr. Georg Zizka, Prof. Dr. Uwe Fritz Vorsitzender des Präsidiums: Dietmar Schmid Aufsichtsbehörde: Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

[Robert.Kraus@senckenberg.de](mailto:Robert.Kraus@senckenberg.de)

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## Glasgow AppliedConservationGenetics Aug28-Sep1

This is an invitation to the applied conservation genetics symposium and workshop that will be held as part of the ECCB 2012, Glasgow, 28th August- 1st September 2012

1. Conservation Genetic Applications Symposium Hosted by the WildGenes Laboratory, Royal Zoological Society of Scotland, Edinburgh

2. Beyond Aichi Workshop: Promoting the Use of Genetic and Genomic Data in Conservation Planning and Legislation Hosted by Prof. Michael Bruford, Cardiff University/ConGRESS project and Dr Gernot Segelbacher, University of Freiburg/ConGenomics ESF Program

Will be taking place at the 3rd European Congress of Conservation Biology, Glasgow between 28th August-1st September 2012 (the exact days on which the symposium and workshop will be taking place will be confirmed soon)

Symposium & workshop speakers include: Jann Th. Martinsohn, European Commission, Per Sjögren-Gulve, Swedish Environmental Protection Agency, Dave Goulson, University of Stirling, Paul O'Donoghue, Chester University, Lucy Webster, Scottish Government, Rob Ogden and Ross McEwing, Royal Zoological Society of Scotland

Deadline for early conference registration: 30th April 2012

For queries regarding the submission of talk abstracts to the symposium, after the 31th of January conference submission deadline, please contact Helen Senn (hsenn@rzss.org.uk) in the first instance.

<http://www.rzss.org.uk/research/applied-conservation-genetics-symposium-workshop-eccb-2012>

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hsenn@rzss.org.uk

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**KansasCity**  
**2012ArthropodGenomics**  
**May30-Jun2 2**

Registration is OPEN for the Arthropod Genomics Symposium and i5k Workshop, May 30-June 2, Kansas City. Please register online today at: <http://www.k-state.edu/agc/symp2012/register.html> !

<Download this announcement as a PDF: <http://www.k-state.edu/agc/symp2012/images/-Announcement#3.pdf> >

\*\_\*\_\*\_\*\_\* Sixth Annual Arthropod Genomics Symposium\*\_\*\*\_\*\_\*\_\*\_ MAY 31, 2012 (Thursday evening) to JUNE 2, 2012

Marriott on the Country Club Plaza, Kansas City Symposium website: <http://www.k-state.edu/agc/-symp2012> Keynote Speaker: + Gene E. Robinson, Entomology and Institute for Genomic Biology, University of Illinois at Urbana-Champaign; Understanding the Relationship between Genes and Social Behavior: Lessons from the Honey Bee

Featured Speakers (confirmed): + William E. Browne, Biology, University of Miami + Angela E. Douglas, Entomology, Cornell University; From Metagenomes to Function in Animal-Microbial Symbioses + Giles E. Duffield, Biological Sciences and Eck Institute for Global Health, University of Notre Dame; Circadian and Light Regulation of the Mosquito Transcriptome + Miodrag Grbic, Biology, The University of Western Ontario, London, Canada and Research Center of Vine- and Wine-related Science, Logroño, Spain;The Genome of the Two Spotted Spider Mite Tetranychusurticae: New Model for Plant-pest Interactions + Marc S. Halfon, Biochemistry, University at Buffalo-State University of New York and NY State Center of Excellence in Bioinformatics & Life Sciences; Regulatory Element Discovery in Sequenced Insect Species + Michel R. Kanost, Biochemistry, Kansas State University; Initial Insights from the Manducasexta Genome + Karl Kjer, Entomology, Rutgers University;Bernhard Misof, Zoological Research Museum Alexander Koenig, Bonn, Germany; Xin Zhou, BGI, Shenzhen, Guangdong Province, China; The 1KITE Insect Transcriptomics Initiative + S. R. Palli, Entomology, University of Kentucky; Functional Genomics of Juvenile Hormone Action + Jason L. Rasgon, Entomology, The Pennsylvania State University + David W. Severson, Eck Institute for Global Health and Department of Biological Sciences, University of Notre Dame; "Dengue Virus Vector Competence and Functional Genomics in Aedes aegypti" + Additional speakers will be announced soon!

The symposium focuses on new insights gleaned from analyzing arthropod genomes and is designed for scientists interested in genomic studies of Arthropods, both model organisms and those of agricultural or health relevance. The program will include platform presentations, a welcome reception, a bioinformatics-related workshop and arthropod genomics-related poster sessions. A few poster abstract submissions will be selected for oral platform presentations. Postdoctoral, graduate, and undergraduate students are also encouraged to attend.Sessions conclude Saturday evening, followed by an optional Kansas City Barbecue banquet.

\*\_\*\_\*\_\*\_\* New this year: i5k Community Workshop\*\_\*\*\_\*\_\*\_\*\_ MAY 30, 2012 (Wednesday morning) to MAY 31, 2012 (Thursday afternoon)



i5k Community Workshop: An international effort to sequence 5,000 of the world's key arthropod species. The Workshop will aim to bring together biologists, informaticists, and policy-makers to discuss and contribute to advance planning for the i5k initiative. Plans for the i5k Workshop include presentations by top genomics and bioinformatics researchers and representatives from the primary sequencing centers, followed by training and breakout sessions focused on i5k and other successful insect genome projects. The Workshop will conclude with a discussion of white papers and programmatic steps needed to enact i5k projects. <Download Flyer at <http://arthropodgenomes.org/w/images/b/bd/i5kFlier122011.pdf> >.

POSTER ABSTRACT DEADLINES IN 2012: Wednesday, February 29 If you DO wish your poster abstract to be considered for a General Session talk. Friday, March 30 - If you do NOT wish for your poster abstract to be considered for oral presentation during the General Session.

TENTATIVE PROGRAM for SYMPOSIUM & i5k WORKSHOP Wednesday, May 30 i5k Community Workshop 7:15-8:15 am Registration 8:30 am -5:30 pm Speaker sessions 7:30 pm-10:00 pm Poster session Thursday, May 31, 8:30 am-5:00 pm i5k Workshop continues with breakout groups, common session, and report-backs Thursday evening, May 31, 7:30 pm Arthropod Genomics Symposium begins with keynote presentation and welcome reception Friday, June 1 Arthropod Genomics Symposium Platform and Poster Sessions 5:30-7:30 pm - Symposium Workshop Evening, June 1 Dinner on your own

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**LundU**  
**EvolutionPredationAvoidance**  
**Aug18**

For anyone potentially attending the 14th International Behavioral Ecology Congress (ISBE 2012) in Lund, Sweden ([www.isbe2012lund.org](http://www.isbe2012lund.org)):

We invite abstract submissions for short talks at the Post-conference Symposium on THE EVOLUTION OF

MECHANISMS FOR AVOIDING PREDATION', being held on Saturday 18 August 2012.

Predation is a major source of mortality for many organisms. Faced with this threat, prey animals should adjust their foraging activity across situations of high and low risk; but to do so adaptively they need mechanisms for storing energy, for assessing the threat from a potential predator and for learning about temporal and spatial variation in risk. Anti-predator behaviour may also be associated with emotional states such as fear, anxiety and stress. It is unclear, however, whether the psychological and physiological response to predation risk is important for avoiding predators, or an unavoidable constraint that sometimes generates biased estimates of risk and apparently maladaptive behaviour. For example, depression may be characterized as a failure to be active when the environment is benign. This symposium will bring together researchers from both functional and mechanistic traditions to explore the evolutionary basis of behavioural, psychological and physiological responses to predation risk.

We plan to have short talks by 4-6 speakers, to stimulate open discussion around specific points of debate. If you would like to contribute a talk, please e-mail your title, an abstract of no more than 150 words and your contact details to [madorganiser@gmail.com](mailto:madorganiser@gmail.com). The deadline for submissions is 15 March 2012.

We hope to see you in Lund!

Tim Fawcett, Andy Higginson & Pete Trimmer Modelling Animal Decisions (MAD) Group, University of Bristol, UK [madorganiser@gmail.com](mailto:madorganiser@gmail.com)

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**MichiganStateU ArtLife Jul19-22**

Artificial Life 13 || Extended Deadline for Submissions  
DEADLINE EXTENSION FOR PAPER & PRESENTATION SUBMISSIONS

Announcing a submission deadline extension for ALife 13. Prospective speakers and authors must submit the

title, authors with affiliations, and draft abstract (for full paper submissions) or first paragraph (for extended abstract submissions) by February 29th to allow us to get the review process started. However, the final submission deadline will be March 11th.

Artificial Life 13 The Thirteenth International Conference on the Synthesis and Simulation of Living Systems “Evolution in Action”

July 19-22, 2012, Michigan State University East Lansing, Michigan, USA

[www.alife13.org/](http://www.alife13.org/) You are invited to submit papers to the upcoming Thirteenth International Artificial Life Conference. Please forward this call responsibly.

**I. OVERVIEW** It is a great pleasure for the BEACON Center for the Study of Evolution in Action at Michigan State University to host the 13th International Artificial Life Conference. Artificial life (ALife) refers to the synthesis and simulation of living systems as these occur in nature and also to possible alternative life forms and concepts that may not have occurred in natural evolution—that is, not only in “life-as-we-know-it”, but also “life-as-it-might-be”. ALife research may use not only biochemical models, but also computer models and robotics. The Artificial Life conference is held every other year under the auspices of the International Society for Artificial Life (ISAL), alternating with the European Conference on Artificial Life.

This year’s major conference theme is “Evolution in Action.” Life is shaped by evolutionary processes, and ALife models are a powerful way to investigate and utilize this key characteristic of living systems. We encourage submissions by biologists as well as by computer scientists and engineers, especially interdisciplinary papers that explore the many ways that evolution and artificial life research intersect. Other tracks this year include Behavior & Intelligence, Collective Dynamics, Synthetic Biology, and The Humanities and ALife. See the list of tracks below for examples of topics that may fall under these headings.

**II. KEYNOTE SPEAKERS** - Steven Benner, Foundation for Applied Molecular Evolution, Synthetic Biology - Oron Catts, University of Western Australia, Biotechnology & Art - Benjamin Kerr, University of Washington, Experimental Evolution - Radhika Nagpal, Harvard University, Self-Organizing Systems - Jack Szostak, 2009 Nobel Laureate in Physiology or Medicine, Massachusetts General Hospital, Evolution in Action

**III. IMPORTANT DATES** - Full paper/abstract submission deadline: 26 February 2012 (Now extended until 11 March) - Notice of acceptance for full papers:

22 April 2012 - Early Registration deadline (required for presenting authors): 14 May 2012 - Camera-ready deadline: 14 May 2012 - Conference: 19-22 July 2012

**IV. SUBMISSIONS** A submission can either be in the form of a full paper or an extended abstract. Full papers have an 8 page maximum length, while abstracts are limited to two pages. Graphics and figures are encouraged. All submissions must be made using a preformatted MS Word or LaTeX template, which is available from the conference site.

All submissions will be subject to peer review. Submissions may be accepted as either a talk or as a poster, with no distinction being made between the two submission formats.

Every accepted full paper will be published by the MIT Press in an online open-access proceedings volume. The top 10 accepted papers will have the opportunity to publish a revised and expanded version in the Artificial Life journal.

**NOTE:** In addition to the main conference, ALIFE 13 will host related workshops and tutorials. Details on proposing such events can be found on the conference web site.

**V. TRACKS** - Evolution in Action - Including evolutionary dynamics, simulations of evolution, developmental systems, experimental evolution, viral and bacterial evolution, evolution of drug resistance.

- Behavior & Intelligence - Including animal behavior; evolution of cognition and intelligence; evolutionary robotics; embedded systems.

- Collective Dynamics - Including group selection; evolution and stability of ecosystems; network dynamics; social dynamics; evolution of cooperation and conflict; collective motion and swarming in animals and animats.

- Synthetic Biology - Including synthetic cells, synthetic organisms, biological engineering, artificial genetic systems, artificial chemistry, origin of life, paleogenetics

- The Humanities and ALife - Including art, music, history and philosophy of artificial life.

See the conference web site [www.alife13.com](http://www.alife13.com) for more detailed descriptions of each of the tracks.

**VI. LOCATION & LOGISTICS** The conference will be held in East Lansing, Michigan, home of

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## MichiganStateU EvolutionInAction Jul19-22

Call for papers on “Evolution in Action” ALife 13 conference, East Lansing, MI, July 19-22, 2012

We solicit submissions to the “Evolution in Action” track of this year’s Artificial Life Conference (“ALife 13”). ALife 13 will be organized by members of the BEACON center for the Study of Evolution in Action at Michigan State University. We expect an exciting scientific program, broadly centered around evolutionary topics in natural and man-made systems. Confirmed keynote speakers are Steven Benner, Oron Catts, Benjamin Kerr, Radhika Nagpal, and 2009 Nobel Laureate Jack Szostak.

For the “Evolution in Action” track, we specifically solicit contributions that throw light on evolutionary dynamics in general, including but not limited to concepts such as epistasis, pleiotropy, modularity, genotype-environment interactions, evolvability, robustness, speciation, evolution of sex, and the structure of fitness landscapes. We hope to see contributions that illustrate the conference theme: understanding evolution as it happens and throughout time.

The deadline for submission is Feb. 26. Authors will be notified about their contributions on April 22. Please see the conference web site <http://www.alife13.org> for more details.

Kind regards, Claus Wilke Track chair, Evolution in Action track, ALife 13 conference

– Claus Wilke Section of Integrative Biology Center for Computational Biology and Bioinformatics Institute for Cell and Molecular Biology The University of Texas at Austin 1 University Station A4800 Austin, TX 78712 [wilke@austin.utexas.edu](mailto:wilke@austin.utexas.edu) 512 232 2459 (voice) 512 232 3432 (fax)

[wilke@austin.utexas.edu](mailto:wilke@austin.utexas.edu)

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## Montpellier EvolutionCancer Apr11

Evolution and Cancer Conference - 11 April 2012

A one day conference on “Evolution and Cancer” will take place at < <http://www.agropolis.fr/pratique/-acces.php> > Agropolis international in Montpellier, France on the 11th of April. The objective is to foster interdisciplinary research on the emergence, progression and therapies of cancer from a Darwinian perspective.

The conference will include 8 presentations and a round table discussion. Please consult [http://www.darevcan.univ-montp2.fr/?page\\_id=221](http://www.darevcan.univ-montp2.fr/?page_id=221) for the final program (which will be posted shortly).

Attendance is by registration only at [http://www.darevcan.univ-montp2.fr/?page\\_id=335](http://www.darevcan.univ-montp2.fr/?page_id=335)

For additional information, please contact <[fadela.tamoune@univ-montp2.fr](mailto:fadela.tamoune@univ-montp2.fr)> Fadela Tamoune

Michael Hochberg <[mhochber@univ-montp2.fr](mailto:mhochber@univ-montp2.fr)>

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## Montpellier MathEvolBiol Jun18-22 registration

SECOND ANNOUNCEMENT REGISTRATION  
WILL BE CLOSED BY THE END OF FEBRUARY

Mathematical and Computational Evolutionary Biology June 18-22, 2012, Hameau de l’Etoile (France) <http://www.lirmm.fr/mceb2012/> The subject is evolution, which is considered at different scales, from genes to populations. The focus is on the mathematical and computational tools and concepts, which form an essential basis of evolutionary studies. The meeting will bring together researchers originating from various disciplines: mathematics, computer science, phylogenetics and population genetics. Ten keynote speakers will introduce a field of research and discuss their own work in this field. Afternoon will be for short presentations and posters, with plenty of time for discussions, hiking and visits. The number of attendees will be limited (~60) to favor exchanges.

The meeting will take place at Hameau de l’Etoile, in the Montpellier region (France). The dates are June 18-22, that is, just before SMBE 2012 that starts June 23 in the evening at Dublin (Ireland). Conference fees including accommodation (4 nights, 18 to 22), meals, coffee breaks, buses, etc., will range from ~300 to ~425 depending on the room type. Some financial support will be available for local fees of PhDs and postdocs

Keynote speakers:

\* Michael Blum (CNRS - TIMC, FR). Approximate

Bayesian Computation: theory, algorithms and applications.

\* Oliver Eulenstein (Iowa State University, US). Supertrees and phylogenomics.

\* Arnaud Estoup (INRA - CBGP, FR). ABC (Approximate Bayesian Computation) methods to make inference about population history from molecular data: principles and applications.

\* Vincent Moulton (University of East Anglia, UK). Recent progress on phylogenetic networks.

\* Rasmus Nielsen (Berkeley, US). Models and methods to reveal molecular adaptation.

\* Noah Rosenberg (University of Michigan, US). Models and methods at the intra/inter species frontier.

\* Alexandros Stamatakis (Heidelberg, DE). High Performance Phylogenetics.

\* Mike Steel (University of Canterbury, NZ). Probabilistic models of evolutionary trees.

\* Edward Susko (Dalhousie University, CA). Testing phylogenies.

\* Simon Tavaré (Cambridge University, UK). From evolutionary biology to development and cancer.

Organizers: Olivier Gascuel and Jean-Michel Marin

See the web site for more details and pre-registration (before Feb 25)

Gascuel Olivier <gascuel@lirmm.fr>

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## New Brunswick EvoDevo May7-11

The Comparative Morphology & Development (CMD) section of the Canadian Society of Zoologists (CSZ) invites you to attend the following symposia at the annual CSZ meeting:

May 7 - 11, 2012, in Sackville, New Brunswick, Canada (near the shores of the world-famous Bay of Fundy and the Joggins Fossil Cliffs- a UNESCO World Heritage Site)

MAIN CMD SYMPOSIUM (\*\*May 10, 2012)\*\*: Metamorphic Transitions in Animals: An Evolutionary Developmental Perspective

Speakers:

Jim Truman (HHMI, Janelia Farm) “/Nervous System

Restructuring During Insect Metamorphosis: A Lineage Perspective/”

Rick Elinson (Duquesne) “/Thyroid Hormone Actions in the Development of a Frog That Lacks a Tadpole/”

Mike Hadfield (Hawaii) “/External Stimulants and Internal Transitions in Metamorphosis of Marine Invertebrate Animals/”

[organized by Andreas Heyland, University of Guelph]  
STUDENT SATELLITE CMD SYMPOSIUM (\*\*May 10, 2012)\*\*: Form and Function: Integration of Biology and Technology

Lead speaker:

David Sheets (SUNY Buffalo & Canisius College) “/Life Imprints: Epigenetic modifications and the development of behavior/”

[organized by Karyn Jourdeuil and Megan Dufton, Dalhousie University ]

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://csz2012.com/en/> EARLY REGISTRATION DEADLINE:\*\_ March 16, 2012

CONTRIBUTED PAPERS: Spaces are also available for contributed papers in sessions organized by the CMD section. The deadline for submitting abstracts is coming soon, so don't delay:

ABSTRACT SUBMISSION DEADLINE:\*\_ February 24, 2012

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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## Novosibirsk Bioinformatics Regulation Jun25-29

Call for papers

The 8th International Conference on the Bioinformatics of Genome Regulation and Structure/Systems Biology (GRS\SB-2012) [Novosibirsk, Russia, June 25-29, 2012]

This year BGRS/SB-2012 conference will be held in the frames of multi-conference “New biology” (see <http://www.bionet.nsc.ru/mcnb2012/>)

BGRS/SB-2012 Conference concerns bioinformatics and systems biology. The principal task of systems biology is integrated experimental and computer-assisted investigation of the organization and functions of biologic systems at the molecular, cell, tissue, organ, and body level on the basis of the information encoded in genomes. The Conference will feature high-level experts in the fields.

GRS\SB is a biennial event held since 1998 by the Institute of Cytology and Genetics of the Siberian Branch of the Russian Academy of Sciences. This conference has biologists, computer scientists, physicists, mathematicians and chemists working on an interdisciplinary basis in systems biology and genetics come to Novosibirsk Akademgorodok. The previous event, BGRS\SB-2010, hosted 300 scientists, post-graduate students and engineers from 160 research organizations, universities and companies.

The BGRS\SB-2012 program will include the following scientific sessions:

1. New methods of high-throughput sequencing and data analysis
2. Bioinformatics and systems biology of gene expression regulation
3. Computational inference of networks from high-throughput experimental data
4. Gene function discovery and search for new pharmaceutical targets
5. Integrative Bioinformatics and Intelligent Knowledge Discovery/Management
6. Evolutionary bioinformatics
7. Computer biology of development
8. Gene networks modeling
9. Supercomputer applications in bioinformatics

Important dates

Deadline for registration and for abstract submission: April 06, 2012

Notification of acceptance: May 4, 2012

Conference Dates: June 25-29, 2012

Young Scientist's School “Bioinformatics and System

Biology”: June 30 - July 01, 2012

The Young Scientists' School “Bioinformatics and Systems Biology” [June 30 - July 01, 2012]

Eminent scientists will lecture on modern topics in bioinformatics, systems biology and mathematical modeling of gene regulatory networks. The School's program will include oral presentations by young scientists, post-graduate students and students, of which the best will be nominated.

The Conference will take place in the House of Scientists, Akademgorodok, Novosibirsk, Russia.

Registration fee for the GRS\SB-2012 conference and School for young scientists.

Please note early bird rate before 04 May.

For participants from Russia: [http://conf.nsc.ru/BGRSSB2012/ru/reg\\_fee](http://conf.nsc.ru/BGRSSB2012/ru/reg_fee) For international participants: [http://conf.nsc.ru/BGRSSB2012/en/reg\\_fee](http://conf.nsc.ru/BGRSSB2012/en/reg_fee) Please indicate the payment destination “BGRS\SB-2012 Registration fee from (your full name)”

After the registration fee payment please send us scanned copy of the payment document (the check) to the Organizing committee address [bgrs2012@bionet.nsc.ru](mailto:bgrs2012@bionet.nsc.ru)

To prepare the payment documents (agreement) on behalf of the institute please contact [zub@bionet.nsc.ru](mailto:zub@bionet.nsc.ru)

Contacts

Official address of the Organizing committee of the conference: [bgrs2012@bionet.nsc.ru](mailto:bgrs2012@bionet.nsc.ru)

All questions relatively visa application, please contact the Head of the International Office: Galina Kiseleva.  $\mu$ l. +7(383) 363-4987 (\*1338) [kiseleva@bionet.nsc.ru](mailto:kiseleva@bionet.nsc.ru)

All questions relatively Young Scientists' School “Bioinformatics and System Biology”, please contact the Chairperson of Organizing committee Young Scientist School: Victoria Mironova [kviki@bionet.nsc.ru](mailto:kviki@bionet.nsc.ru).  $\mu$ l. +7 (383) 363-4922 (\*3408)

All questions regarding hotels and accommodation: [bgrs2012@bionet.nsc.ru](mailto:bgrs2012@bionet.nsc.ru)

For more information and registration, please visit the GRS\SB-2012 official website at <http://conf.nsc.ru/BGRSSB2012> The International Conference on the Postgenomic Technology for Biomedicine (PTB-2012) [June 25-29, 2012]

This Conference, organized by the Institute of Chemical Biology and Fundamental Medicine of the Siberian Branch of the Russian Academy of Sciences, will be held in parallel with GRS\SB-2012. PTB-2012 concerns cutting-edge postgenomic experimental technolo-

gies and their uses in biomedicine. Special focus will be given to studies that use modern high-throughput technologies in DNA sequencing and mass spectrometry. Other topics in focus concern cell biology, synthetic biology and bionanotechnology.

The PTB-2012 program will include the following scientific sessions:

1. High-throughput approaches to sequencing in biology and medicine

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## Ottawa EvolutionaryBiol Jul6-10

1st Joint Congress on Evolutionary Biology July 6-10, 2012; Ottawa, Canada [www.evolution2012.org](http://www.evolution2012.org) REGISTRATION IS NOW OPEN (along with accommodation booking and talk/poster submission).

The 1st Joint Congress is a merging of the traditional 'Evolution meeting' (the annual meeting of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists) with the annual meeting of the Canadian Society for Ecology and Evolution, and the (normally biennial) meeting of the European Society for Evolutionary Biology. Along with a full range of topics in evolutionary biology, with the joint participation of the CSEE and the ASN, we look forward to increased representation of our ecologists.

Important points: - DEADLINE FOR EARLY REGISTRATION DISCOUNT: 30 APRIL 2012 - Ottawa is a tourist city and accommodation is often in high demand. Booking accommodations early is STRONGLY RECOMMENDED. - Coming from outside CANADA? You WILL need a passport (INCLUDING IF YOU'RE DRIVING OR FLYING FROM THE USA). - Most people will not require a visa; check here to find out for sure: <http://www.cic.gc.ca/english/visit/visas.asp#exemptions> Highlights: - The meeting will be held at the state-of-the-art, newly opened Ottawa Convention Centre, situated in the heart of downtown Ottawa. - Child care will be available onsite at the congress venue. - Affordable residence accommodation at the University of Ottawa, only a short walk from the

congress venue, along with an array of hotel options. - A plenary address and two symposia sponsored by each society. - Various optional pre- and post-congress workshops/symposia, along with the iEvoBio satellite conference (July 10-11). - Final congress dinner and farewell party (no speeches) at the spectacular Canadian Museum of Civilization. - Travel support available for graduate students and for researchers working in countries with low GDP (Note: deadlines imminent for the latter).

For more details, visit [www.evolution2012.org](http://www.evolution2012.org). We look forward to seeing you in July.

Conference organizers:

Howard Rundle (uOttawa) Andrew Simons (Carleton University)

Howard D. Rundle, Associate Professor Department of Biology, 30 Marie-Curie Priv. University of Ottawa, Ottawa, ON, K1N 6N5, CANADA

Ph: +1 613-562-5800 x2835; Fax: +1 613-562-5486; Skype: howardrundle <http://www.science.uottawa.ca/~hrund050> <http://www.evolution.uottawa.ca> [www.evolution2012.org](http://www.evolution2012.org)  
howard.rundle@uottawa.ca

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## Prague PolyploidyBiodiversity May7-10 reminder

Hello all,

As a member of the Scientific Committee for the International Conference on Polyploidy, Hybridization, and Biodiversity taking place in Pruhonice (near Prague), Czech Republic on 7-10 May 2012, I am writing to remind potential attendees to submit their abstracts in time for the early registration deadline of 31 January, 2012. Abstracts from all relevant areas are encouraged, but we are particularly interested in abstract submissions from studies involving animal, fungal, or microbial systems.

You can learn more about the conference at the official website: <http://icphb2012.ibot.cas.cz/index.html>

Please email me ([maurine-neiman@uiowa.edu](mailto:maurine-neiman@uiowa.edu)) or the main conference organizers (<http://icphb2012.ibot.cas.cz/contacts.html>) with any questions.

Sincerely, Maurine Neiman

Maurine Neiman Assistant Professor Department of Biology University of Iowa 143 BB, Iowa City IA, 52242, USA [maurine-neiman@uiowa.edu](mailto:maurine-neiman@uiowa.edu) <http://www.biology.uiowa.edu/neiman/> “Neiman, Maurine” <[maurine-neiman@uiowa.edu](mailto:maurine-neiman@uiowa.edu)>

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## Tokyo ClimatePlantEvolution Aug23-30

International Palynological Conference (23-30th of August, 2012; Tokyo, Japan); <http://www.psj3.org/ipc-iopc2012/Welcome.html> Theme: Cenozoic plants and biosphere surrounding them

Symposium SS42: Neogene global tectonic and climatic change as drivers in plant evolution: linking the palynological, palaeobotanical and molecular records

The Neogene period represents the transition to our modern world, when crucial geographical features such as topographic relief, drainage patterns and oceanic currents were laid out. It also represents the run-up to the ‘icehouse’ world with final bleeps of a ‘greenhouse’ during the Middle Miocene (c. 15 Ma) and Middle Pliocene (c. 4 Ma). The combined effects of global tectonic and climatic change was critical for floral and faunal evolution, but also determined present biodiversity patterns, particularly this latter aspect was only identified by scientists in recent years. Interdisciplinary studies that include the geological history, palynology, palaeobotany and molecular phylogeny potentially can offer new insights into our understanding of plant evolution and diversification. In this session we encourage palynologists, palaeobotanists and molecular biologists who work at the interface of their disciplines to present their research on the Neogene evolution of plants and algae in geologically dynamic regions from all over the globe and from both marine and/or continental settings. The insights gained from this type of research are relevant when modeling the impact of future climatic change, but also where it concerns drafting guidelines for conservation policies in regions of high biodiversity.

Organizers:

Dr. Carina Hoorn Palaeo-ecology and Landscape Ecology, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Science Park 904, 1098 XH Amsterdam, The Netherlands Email: [M.C.Hoorn@uva.nl](mailto:M.C.Hoorn@uva.nl)

Dr. Andre Pardo Universidad de Caldas, Facultad

de Ciencias, Departamento de Ciencias Geológicas, Calle 65 No. 26-10, Manizales, Colombia Email: [apardo66@yahoo.com](mailto:apardo66@yahoo.com)

Dr. Alexandre Antonelli Gothenburg Botanical Garden, Carl Skottsbergs gata 22A, 413 19 Göteborg, Sweden & University of Gothenburg, Department of Biological and Environmental Sciences, Carl Skottsbergs gata 22B, 413 19 Göteborg, Sweden Email: [alexandre.antonelli@dpes.gu.se](mailto:alexandre.antonelli@dpes.gu.se)

“Hoorn, Carina” <[M.C.Hoorn@uva.nl](mailto:M.C.Hoorn@uva.nl)>

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## ULiverpool EvolutionaryEcol Mar29-30

NEYEES : North Of England Young Evolutionary Ecologists Symposium 2012

Register soon to guarantee a place!

University of Liverpool 29-30th March 2012

Registration for NEYEES 2012 will be closing on the 19th February, but spaces are going fast. Register soon to guarantee a place.

NEYEES is a small, informal symposium aimed at all non-tenured (post-grad - fellow) researchers working in the Evolutionary Ecology field in the North of England. The aims to bring together early career researchers for a fun 2 day meeting to promote the sharing of ideas and approaches between neighbouring institutions.

The symposium will span 2 days, with a total of 20 talks. As a guideline, sessions will be divided up into 5 themes; Molecular Evolution, Symbiont Evolution, Sex and Life Histories, Population Biology and Adaptation to changing environments

These themes are guidelines however, and any talks not fitting into these subjects will not be disadvantaged.

Confirmed speakers: Chris Wilson (Imperial College London) Kayla King (University of Liverpool) Penny Haddrill (University of Edinburgh)

All attendees are invited to submit an abstract, and registration and abstracts should be submitted by the 19th February. To register and for more details, please visit <http://pcwww.liv.ac.uk/~eharriso/> We have capped attendance at 40 people to make sure that we maintain an intimate atmosphere, so be sure to register early to be sure there is space!

We hope to see you there



Ellie Harrison and Ewan Minter

ellie.harrison@liverpool.ac.uk

Dr. Ellie Harrison School of Biological Sciences University of Liverpool Crown Street Liverpool L69 7ZB

Ellie.Harrison@liverpool.ac.uk

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## ULiverpool EvolutionaryEcol Mar29-30 registration

NEYEES : North Of England Young Evolutionary Ecologists Symposium 2012

Register by the 19th and one very distinguished speaker....

University of Liverpool 29-30th March 2012

Registration for NEYEES 2012 will be closing on Monday (19th February), and we have just a few spaces left.

We are also excited to announce that Geoff Parker FRS will be joining us as one of our invited speakers to discuss his early career and the history of the field of evolutionary ecology and behaviour.

NEYEES is a small, informal symposium aimed at all non-tenured (post-grad - fellow) researchers working in the Evolutionary Ecology field in the North of England. The aims to bring together early career researchers for a fun 2 day meeting to promote the sharing of ideas and approaches between neighbouring institutions.

All attendees are invited to submit an abstract, and registration and abstracts should be submitted by the 19th February. To register and for more details, please visit <http://pcwww.liv.ac.uk/~eharriso/> We hope to see you there

Ellie Harrison and Ewan Minter

ellie.harrison@liverpool.ac.uk

Dr. Ellie Harrison School of Biological Sciences University of Liverpool Crown Street Liverpool L69 7ZB

Ellie.Harrison@liverpool.ac.uk

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## UMichigan EvolutionInfectiousDiseases May23-24

EEID 2012: The 10th Annual Ecology and Evolution of Infectious Disease Conference and Workshop will be held at the University of Michigan.

Workshop: May 19-22, 2012 Conference: June May 23-24, 2012 Hike/Field Trip: May 25, 2012

For more information, please see the EEID Workshop and Conference web page: <http://www.eeidconference.org> Disease modeling workshops (May 19-22) cover both ecology and evolutionary biology. Topics and schedules will be similar to those in previous years.

For graduate students and post-docs who are US citizens or resident aliens, scholarships funded by the National Science Foundation are available that cover the \$500 workshop fee and up to \$500 in travel support.

Applications (form attached) for the workshops are due by March 16, 2012, with notification of acceptance (and financial aid, if requested) by April 1, 2012.

Local hosts are Aaron King, Pej Rohani, and Mercedes Pascual.

Michael F. Antolin

Professor, Department of Biology Director, Shortgrass Steppe Research and Interpretation Center (<http://sgsric.colostate.edu>) 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

Colorado State University Laramie Foothills CWD Project <http://www.nrel.colostate.edu/projects/-modelingCWD/> Flexible and Extendible Scientific Undergraduate Experience (FEScUE) NSF Undergraduate Biology and Mathematics Program <http://www.fescue.colostate.edu> [michael.antolin@colostate.edu](mailto:michael.antolin@colostate.edu)



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## Virrat Finland PhDStudentsEvolBiol Sep25-30

Event: EMPSEB 18 (European Meeting of PhD Students in Evolutionary Biology) Date: 25-30 September, 2012 Location: Virrat, Finland

The the 18th EMPSEB meeting will take place from 25-30 September 2012 in Virrat, Finland. The event aims to bring together PhD students studying Evolutionary Biology to let them present their research, get feedback from the top scientists in the field, and develop collaborations with their peers. There will also be a special symposium (speaker and discussion) about ethics and philosophy in science.

The meeting will consist of plenary sessions, symposia, and posters covering a variety of topics in evolution-ary biology. More information will be available at

[www.empseb18.com](http://www.empseb18.com). Registration and abstract submission will be open in March 2012. Students will have a possibility to apply for travel grants.

Confirmed plenary speakers include:

Frank Ryan (University of Sheffield- United Kingdom) Martine Maan (University of Groningen- Netherlands) Mikael Fortelius (University of Helsinki- Finland) Hanna Kokko (Australia National University- Australia) Marc Johnson (University of Toronto at Mississauga- Canada) Thomas Flatt (University of Veterinary Medicine Vienna- Austria) Craig Primmer (University of Turku- Finland) Naomi Pierce (Harvard University- United States) Leena Lindström (University of Jyväskylä- Finland)

Organization committee: Robert Hegna, Ossi Nokelainen, Philipp Lehmann, Venera Tyukmaeva, Gaia Francini, Janne Valkonen, Veronica Chevasco, Aapo Kahilainen and Anni-Maria Örmälä

Robert Hegna PhD student University of Jyväskylä Dept. of Biology & Env. Science FINLAND [www.empseb18.com](http://www.empseb18.com) < <http://www.robertheгна.com> > [president@empseb18.com](mailto:president@empseb18.com)

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## BielefeldU QuanGenet SexualSelection

Two PhD positions: Quantitative genetics of sexual selection

Bielefeld University, Departments of Evolutionary Biology and of Animal Behaviour

Salary: E13/65% (approx. 2200 Euro before tax) for 36 months

Starting time: May 2012 or as soon as possible thereafter

Application deadline: 25th March 2012 (or until the positions are filled)

Two PhD positions (funded by the German Research Foundation, DFG) are available at the Departments of Evolutionary Biology and Animal Behaviour at the Bielefeld University, Germany, starting in May 2012 or as soon as possible thereafter. The positions are initially funded for three years. The PhD students will work in a newly established junior research group (Emmy Noether program) and the planned research will be highly collaborative. The research will be largely empirical using a Siberian locust *Gomphocerus sibiricus* as a model species. Most of the work will be laboratory-based, but field projects are also possible.

The first PhD project will be focused on the quantification of mating preferences of female grasshoppers and sexual ornamentation of males. Quantification of preferences and ornaments will allow the estimation of sources of variation (in particular additive genetic variation) and the genetic correlations between the sexes. This allows clarifying a long-standing question in the study of evolution, the evolution of highly elaborate sexual ornamentation by mate choice.

The second PhD project will focus on the quantification of indirect genetic effects in a context of sexual conflict over investment in reproduction. Indirect genetic effects estimate heritable variation that is only expressed in interacting individuals. They can be estimated along with direct genetic effect from extensive

measurement of related individuals. Indirect genetic effects are highly relevant for our understanding of evolution, because they can give rise to unexpected dynamics when the environment coevolves with the trait of interest.

We seek highly motivated students with a strong interest in the study of evolution, sexual selection and quantitative genetics. Ideal candidates should be motivated to work with a laboratory population of grasshoppers, should have an interest in statistical modeling and in the analysis of complex datasets. Experiences with field work (preferentially with insects), bioacoustical analyses, advanced statistical methods (generalized linear mixed models), linear algebra and an affinity to statistical computing and programming are beneficial. Experience with bioinformatics and genomic analysis will also be helpful and could open avenues to more genomic analyses. Excellent writing skills are highly desirable.

Our department has a main focus on the ecology and evolution of behavior and sexual selection using a variety of model systems, including long-standing experience with studying mating preferences in grasshoppers. The newly founded Emmy Noether research group will put a strong focus on modern quantitative genetic tools for the analysis of data from pedigreed populations. The aim is to understand the evolutionary dynamics of coevolution when traits are sex-differentially expressed.

The Departments of Animal Behaviour and Evolutionary Biology at Bielefeld University offer a stimulating international environment and an excellent research infrastructure with access to state-of-the-art techniques; the working language is English. Successful candidates will receive training in quantitative genetics, biostatistics, experimental designs and molecular genetics. Results will be presented in peer-reviewed journals and at international conferences.

Applications should include a concise statement of research interests and skills and experiences relevant to the project (one page), curriculum vitae, publication list and contact details of 2-3 academic referees and should be submitted before 25th March 2012. Please send your application as a single pdf file to Dr Holger Schielzeth (holger.schielzeth AT uni-bielefeld.de). This email address is also valid for requests for further information.

Bielefeld University is an equal opportunity employer. We welcome applications from severely handicapped people. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement women will be given preference, unless particular circumstances pertaining to a male applicant predominate.

Dr. Holger Schielzeth Bielefeld University  
holger.schielzeth@ebc.uu.se

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### EasternKentuckyU InvertDiversity

MS Opportunity, Freshwater Invertebrate Diversity, Eastern Kentucky University

I am seeking one or two MS degree seeking students to join my lab at Eastern Kentucky University, Department of Biological Sciences in the Fall of 2012. Specific project topic is flexible but will focus on exploring ecology and conservation of freshwater invertebrates using next generation sequencing techniques. Opportunities for some field and lab work exist but the main focus will be in bioinformatics.

Required qualifications: Bachelor's degree in biology or related field. Some computer programming experience (e.g. Perl) or other bioinformatics experience.

Desired (but not required) qualifications: Experience with molecular techniques such as DNA extraction, PCR, or next generation sequencing.

Interested candidates should contact Dr. David M. Hayes (david.hayes@eku.edu) with a CV/resume including relevant experience, GPA, and GRE scores. Information about our program may be found on the Department of Biological Science's website (<http://www.biology.eku.edu/master-science-biology>). Applications are due by March 15 to be considered for a departmental assistantship.

"Hayes, David" <David.Hayes@eku.edu>

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### HelsinkiU Evolutionary Sequence Analysis

Ph.D. position in evolutionary sequence analysis

I am looking for a Ph.D. candidate to work on evolutionary sequence analysis. Depending on his/her background, the candidate can either participate on the methods development or focus on the application of these methods in research topics of special interest. The candidate should minimally be familiar with Linux/Unix systems and working with the command-line interface but also candidates with a pure computational background are encouraged to apply.

In the past, the group has created the PRANK alignment software (<http://tinyurl.com/prank-msa>) and is now working on its successor, PAGAN (<http://tinyurl.com/pagan-msa>). In addition to phylogenetic sequence alignment and its applications in comparative analyses, we are interested in the use of next-generation sequencing (NGS) data in evolutionary analyses of non-model organisms and in metagenomic analyses. More information of our current research topics can be found on the group's home page at <http://blogs.helsinki.fi/sa-at-bi>. The group's working language is English.

The group is based at the Institute of Biotechnology ([www.biocenter.helsinki.fi/bi/](http://www.biocenter.helsinki.fi/bi/)), an independent research institute within the University of Helsinki. The institute is an international workplace with staff coming from 30 different countries and exceeding 300 in total. In addition to 28 research groups, the institute has seven core facilities, the DNA sequencing lab hosting e.g. 454, Illumina, Solid and (soon) PacBio DNA sequencing devices. The group has access to a supercomputer and high-performance clusters at the national computer centre. Helsinki itself is a lively city with a metropolitan area of 1.2 million inhabitants.

Depending on their background, the Ph.D. students at the institute participate on different graduate schools. In addition to graduate schools in biotechnology and molecular biology, there are ones e.g. in computational sciences and in informational and structural biology.

Applications are accepted from 1 Feb onwards and until the position is filled. Please send your application, together with a full CV, copies of publications or relevant certificates, and the names of two referees to Ari Löytynoja ([ari.loytynoja@helsinki.fi](mailto:ari.loytynoja@helsinki.fi)).

Ari Löytynoja

– Ari Löytynoja Institute of Biotechnology University of Helsinki, Finland <http://blogs.helsinki.fi/sa-at-bi>  
[ari.loytynoja@helsinki.fi](mailto:ari.loytynoja@helsinki.fi)

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## Imperial EvolutionBacteriaCommunities

PhD Studentship: Evolutionary dynamics of microbial communities

Imperial College London, UK. Department of Life Sciences (Silwood Park campus).

Supervisor: Prof. Tim Barraclough

Funding: BBSRC studentship, full support for tuition fees, all project costs, and an annual tax-free stipend of £15,740.

Duration: 3 years.

Requirements: You should hold, or realistically expect to obtain, at least an Upper Second Class Honours degree or equivalent and a Masters degree or equivalent experience. You should have a strong academic background in biological or mathematical sciences.

Project outline: Evolutionary theory and experiments have mostly considered single species or perhaps pairs of interacting species. Yet, all species live in communities with many other species, and the direction and amount of evolution is likely to depend greatly on interactions with other species. Microbial communities offer a perfect opportunity to test such ideas, because of their potential for rapid evolution and the ease with which community membership can be manipulated. Furthermore, understanding evolution in microbial communities is vital for many human activities, including predicting ecosystem responses to climate change and managing complex gut communities. You will use field and laboratory experiments, molecular labwork and/or mathematical modeling, to test theories for how species interactions shape evolutionary dynamics. Possible topics include the importance of recombination and horizontal gene transfer for determining which species adapt to new conditions, and whether selection tends to increase specialization and positive interactions among species.

Eligibility: UK nationals, EU nationals who have spent at least 3 years prior to the application resident in the UK. Non-UK residents might be considered if the research organization can demonstrate a shortage of high-quality UK candidates.

To apply: Please send a CV and a covering letter explaining why you are interested and what skills and

abilities you could bring to the studentship to Tim Barraclough (t.barraclough@imperial.ac.uk) by the 16th March 2012.

Further information: Tim Barraclough (t.barraclough@imperial.ac.uk). Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berkshire, SL5 7PY, UK. Telephone: +44 (0)207 594 2247.

t.barraclough@imperial.ac.uk

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## Imperial EvolutionGutBacteria

PhD Studentship: In vitro and in silico models of gut bacterial diversity and evolution

Imperial College London, UK. Department of Life Sciences (Silwood Park campus), with Department of Medicine (Hammersmith), and the University of Reading (Department of Food and Nutritional Sciences).

Supervisors: Prof. Tim Barraclough, Prof. Gary Frost, Prof. Glenn Gibson

Funding: NC3R studentship (<http://www.nc3rs.org.uk/page.asp?id=3D1485>), full support for tuition fees, all project costs, and an annual tax-free stipend of £15,740.

Duration: 1 + 3 years, the first year comprising an MRes programme.

Requirements: You should hold, or realistically expect to obtain, at least an Upper Second Class Honours degree or equivalent. You should have a strong academic background in biological or mathematical sciences.

Project outline: Gut bacteria play a vital role in human digestion and protection from disease, yet understanding of how these communities influence host function is limited, and has been reliant on experiments on rodents. This project will devise new in vitro and in silico models to replace the use of rodents and to increase understanding of interactions between gut bacterial diversity and human cell function, focusing on the fermentation of fibre and its effects on human cells. The project aims to understand the evolutionary and ecological dynamics of gut bacterial communities and their interactions with the host, then to apply that knowledge to managing impacts on human health. You will work at the interface of microbial ecology and evolution, medicine and nutritional sciences. You will learn a range of techniques in microbiology, evolutionary ecol-

ogy, molecular biology, metabolomics, genomics, mathematical modeling and statistics.

Eligibility: UK nationals, EU nationals who have spent at least 3 years prior to the application resident in the UK. Non-UK residents might be considered if the research organization can demonstrate a shortage of high-quality UK candidates.

To apply: Please send a CV and a covering letter explaining why you are interested and what skills and abilities you could bring to the studentship to Tim Barraclough (t.barraclough@imperial.ac.uk) by the 16th March 2012.

Further information: Tim Barraclough (t.barraclough@imperial.ac.uk). Division of Biology, Imperial College London, Silwood Park Campus, Ascot, Berkshire, SL5 7PY, UK. Telephone: +44 (0)207 594 2247.

t.barraclough@imperial.ac.uk

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## IndianaStateU 2 BehavioralGenomics

Two PhD opportunities in Ecological Genomics

We are looking for two motivated students interested in behavioral, evolutionary, and ecological genomics to join our laboratory at Indiana State University (ISU). These graduate positions are part of an exciting new interdisciplinary initiative at ISU, The Center for Genomic Advocacy (TCGA), which is focused on the application of genomic technology to the betterment of society. Graduate research will be expected to combine traditional behavioral ecology studies with modern next-generation sequencing to examine the evolution of polymorphism in the white-throated sparrow. Please send a letter of intent, curriculum vitae, and the names and email addresses of 3 references. Applications will be accepted until March 30, 2012.

For more information about the positions, please feel free to contact Dr. Elaina M. Tuttle (Elaina.Tuttle@indstate.edu) or Dr. Rusty A. Gonser (Rusty.Gonser@indstate.edu), at The Center for Genomic Advocacy (TCGA), Indiana State University, Terre Haute, IN 47809.

For more information about the lab, the department, and the university, see:

[www.whitethroatedsparrow.org](http://www.whitethroatedsparrow.org)

[http://](http://www.indstate.edu/biology/)

[/www.indstate.edu/biology/](http://www.indstate.edu/biology/)

[www.indstate.edu/home.php](http://www.indstate.edu/home.php)

[www.indstate.edu/sogs/](http://www.indstate.edu/sogs/)

Dr. Elaina M. Tuttle  
Professor Department of Biology Indiana State University Science 287E, 403-25 North 6th Street Terre Haute, IN 47809, USA

office phone: 812-237-2838 fax: 812-237-3378 email: [elaina.tuttle@indstate.edu](mailto:elaina.tuttle@indstate.edu)

<http://www.whitethroatedsparrow.org>

<http://biology.indstate.edu> Elaina.Tuttle@indstate.edu

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## IowaStateU FigwaspDynamics

Graduate position: PhD Research on Fig - Fig Wasp Dynamics

I am recruiting a Ph.D. student to collaborate in research integrating ecological, evolutionary, and genetic approaches to investigate the basis of geographic variation in a highly coevolved fig - fig wasp mutualism and its associated community of highly specialized insect and nematode parasites. This National Science Foundation (NSF) funded project is described in greater detail below.

If you are interested in Ph.D work on this study system please email a description of your research interests and interest in this project, curriculum vitae, and the names of three references to Dr. John Nason, [jnason@iastate.edu](mailto:jnason@iastate.edu). A complete description of this project is also available upon request.

The successful applicant will join a team of postdocs and students in field research in the Sonoran Desert of Baja California and lab research at Iowa State University. The field work will be conducted over the course of multiple, approximately 8 wk trips to Baja. These trips will involve hiking over rough terrain and occasional camping in remote settings. The lab work includes the analysis of field collected data, microsatellite analysis of fig mating patterns and effective population size, and, potentially, simulation modeling.

In addition to research funding and 100% tuition coverage, full graduate student support is available through a combination of fellowships and research and teaching assistantships. Students can major in either Ecology and Evolution, or Genetics. The Nason Lab is located in the Department of Ecology, Evolution, and Organismal Biology ([www.eeob.iastate.edu](http://www.eeob.iastate.edu)) at Iowa State University, a large and interactive group of faculty and stu-



dents focusing on ecological and evolutionary research.

#### Project Description:

Understanding the costs and benefits of mutualism and its persistence over time requires both an ecological and geographical context. The goal of this NSF-supported project is to understand how plant population size and reproductive traits are influenced by environmental gradients and how their variation influences local- and geographical-scale dynamics in a pollination mutualism subject to parasitism.

Our research focuses on a fig-fig wasp mutualism composed of *Ficus petiolaris* and its species-specific fig wasp pollinator. Characteristic of fig-fig wasp interactions, this fig species is completely dependent on its fig wasp for pollination while female wasps oviposit in a subset of fig flowers and their offspring feed on developing fig seeds. Associated with this mutualism is a well-defined community of parasites comprised of seed-eating fig wasps that do not function as pollinators, and a nematode parasite of the pollinator. The geographical setting for this system, the Sonoran Desert of Baja California, Mexico, represents the latitudinal and environmental limits of the fig-fig wasp mutualism in North America. Here, *F. petiolaris* populations are often small and spatially isolated and simulation studies have shown that where fig population size is small, reliance on species-specific, short-lived pollinators combined with the unusual, among-tree flowering asynchrony (but within-tree flowering synchrony) typical of figs, leads to a high risk of local pollinator extinction and mutualism failure. Commonly cited, though rarely tested, is the hypothesis that where host populations are small mutualism may be stabilized by reproductive adjustments in the fig; namely increased intra-crown asynchrony in flower and fruit production and longer receptivity of individual flowers to pollinators. We suspect, however, that these reproductive adjustments by the plant may prove costly by potentially benefiting to parasites that negatively impact fig seed and pollinator production. The patchy distribution of *F. petiolaris*, its high within-crown flowering asynchrony (atypical of figs) and high parasite loads, as well as potential interactions among these factors, make this an interestingly complex yet well-defined system for evaluating these predictions and the impact of environmental and biotic stressors on the fitness and persistence of mutualism.

We will determine the relationship between fig population size and bio-climatic variables related to precipitation and temperature, to test hypotheses concerning the benefits (to pollinators) and costs (of parasites) of fig reproductive trait variation as a function of popula-

tion size, and to quantify how these variables interact to influence plant-pollinator-parasite interactions and mutualism fitness. This research includes a graphical modeling component to infer conditional interactions among species, and a simulation modeling component to evaluate the relative importance of variation in fig population size, reproductive traits, and parasite abundance on local pollinator persistence. This project will have important implications

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## IowaStateU LivestockGenomics

PhD Fellowships at Iowa State University

USDA NATIONAL NEEDS Ph.D. FELLOWSHIPS:

An Integrated Educational Approach (IDEA): Combined Computational and Genomics Education for Livestock

Three USDA National Needs Fellowships are available at Iowa State University (<http://www.genetics.iastate.edu/usda2011.html>). The training program emphasizes the integration of genomics, statistics and computational biology in the genetic improvement of food-producing animals, which will realize the promises of the New Biology, NIFA, and Feed the Future. Fellows can major in either GENETICS or BIOINFORMATICS AND COMPUTATIONAL BIOLOGY. Fellows would be joining members of an extremely active and vibrant group of animal breeders, geneticists, computer scientists, and statisticians.

Each Fellowship has an annual stipend of \$24,500 for 3 years as well as covering 100% of Tuition and Health Insurance. In addition to course work and experiential learning at Iowa State University, internships with breeding companies and international research experiences are encouraged.

Fellowships are restricted to U.S. citizens. Individuals from under-represented groups are highly encouraged to apply.

Contacts. If you have additional questions about the application process please contact Linda Wild, 1-800-



499-1972, lmwild@iastate.edu. For further information on the research program and training plan please contact Jim Reecy, jreecy@iastate.edu , 515-294-9269; Sue Lamont sjlamont@iastate.edu, 515-294-4100; or Dorian Garrick dorian@iastate.edu, 515-294-2080.

kdorman@iastate.edu

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## MaxPlanck Berlin ComputationalBiology

There are fully funded PhD positions in bioinformatics available at the International Max Planck Research School for Computational Biology and Scientific Computing (IMPRS-CBSC) in Berlin, Germany, starting September 2012.

We invite applications for a 3-year PhD program aimed at students holding a master's or comparable degree in bioinformatics, mathematics, physics, computer science, or biology. Students with a degree in mathematics, computer science and physics are expected to have some knowledge of the biological background, whereas students with a degree in biology should be able to demonstrate profound knowledge in mathematics and computer science. The degree should be awarded before August 2012.

Areas of research include mathematical modelling, evolutionary genomics, computational systems biology, proteomics. For further details visit our website [www.imprs-cbsc.mpg.de](http://www.imprs-cbsc.mpg.de) or email [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de). Please apply online before March 2nd, 2012. The IMPRS-CBSC is a joint program between the Max Planck Institute for Molecular Genetics, the Freie Universität Berlin and the CAS-MPG Partner Institute for Computational Biology, Shanghai. The program language is English. International applicants and women are especially encouraged to apply.

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Kirsten Kelleher, PhD IMPRS-CBSC Coordinator Max Planck Institute for Molecular Genetics Ihnestrasse 73 14195 Berlin

Tel: +49 30 8413-1154 Fax: +49 30 8413-1152 Email: [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de) [www.imprs-cbsc.mpg.de](http://www.imprs-cbsc.mpg.de) [kelleher@molgen.mpg.de](mailto:kelleher@molgen.mpg.de)

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## MaxPlanckInst RavenEvolution

Master thesis: Object exploration and object play in ravens (*Corvus corax*) We are looking for an enthusiastic student who is interested in investigating object exploration and object play in ravens (*Corvus corax*) to enable a better understanding of raven's physical and social cognitive skills. Interestingly, especially young individuals show a predisposition to explore and manipulate almost every kind of object they encounter. In addition, ravens often use non-food items in social interactions to attract the attention of recipients. The present study aims to investigate object exploration and object play during ontogeny in six hand-raised ravens by carrying out observations in combination with controlled behavioural experiments. The study will start in June 2012.

We seek a highly motivated person with organizational skills, able and willing to work independently. You will learn to work with six hand-raised ravens, set up the observation schedule, film the behavior and experiments, design and develop a coding scheme and analyze the behavioral interactions.

We offer the opportunity to work at one of the leading institutes for bird research in Germany and Europe and to learn methods in comparative research and behavioural biology.

For further information please contact:

Dr. Simone Pika Max-Planck-Institut für Ornithologie Humboldt Research Group "Comparative Gestural Signalling" Max-Planck-Institut für Ornithologie Eberhard-Gwinner-Str. Gänsehaus D-82319 Seewiesen E-mail: [spika@orn.mpg.de](mailto:spika@orn.mpg.de) Webpage: [www.orn.mpg.de/cgs](http://www.orn.mpg.de/cgs) Simone Pika <[spika@orn.mpg.de](mailto:spika@orn.mpg.de)>

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## Netherlands planktonic gastropods

Starting May 1st 2012, the Netherlands Centre for Biodiversity (NCB) Naturalis has a position available for a PhD student (4 years).

You are an energetic and enthusiastic biologist with in-

terest in systematics in general and the project specifically (see below). You are eager to join our new institute and to study the NCB Naturalis natural history collections.

PhD project: Evolution in marine planktonic gastropods

As a consequence of increasing atmospheric CO<sub>2</sub>, the world's oceans are warming and slowly becoming more acidic. Understanding the implications of these changes for marine organisms and ecosystems is still in its infancy, but recent studies have shown that calcification is one of the physiological processes that is severely impacted. Euthecosomes (shelled holoplanktonic gastropods) have delicate aragonite shells and have been identified as exceptionally vulnerable to rising CO<sub>2</sub>. It is well-known that intraspecific variation is important for a species adaptive potential, but virtually nothing is known about critical intraspecific genetic or phenotypic variation in this group. For selected species the PhD student will examine intraspecific morphological and molecular variation. Using naturally occurring gradients in the degree of ocean acidification across spatial and temporal scales, he/she will examine vulnerability to ocean acidification, historical population demography, and molecular signatures of selection.

General requirements and skills The successful candidate should have a Master's degree in biology with an interest in oceanography, marine biology, ecology & evolution or a related field. Excellent command of the English language (written and verbal) is required. He/she has a scientific and critical attitude, excellent time management and organizational skills, and the ability to work independently. Experience in molecular genetics, genomics and/or knowledge of NGS approaches and analyses is a distinct advantage. The ideal candidate will be highly motivated with a demonstrated capacity for multidisciplinary research.

We offer A fulltime contract (36 hours per week) for a period of four years. A maximum salary of circa 39,000 gross per year. All our employees are incorporated into a pension fund. The successful candidate will be employed by NCB Naturalis in Leiden. The candidate will also be affiliated to the University of Amsterdam. The appointment must lead to the completion of a PhD thesis. During your appointment you will be supervised by Dr. Katja T.C.A. Peijnenburg. Feel free to contact Dr. Peijnenburg with questions about the research or position (K.T.C.A.Peijnenburg@uva.nl).

Procedure You are invited to submit your application including your curriculum vitae, and the names and e-mail addresses of at least two persons who can be contacted for reference (and who have agreed to be

contacted) before April 1th 2012 by e-mail to; sollicitaties@ncbnaturalis.nl, or by mail; NCB Naturalis, HR department, PO box 9517, 2300 RA Leiden, the Netherlands.

For more information on the current research and facilities, see the websites of the founding partners of the NCB Naturalis, on [www.ncbnaturalis.nl](http://www.ncbnaturalis.nl) - [www.nhn.leidenuniv.nl](http://www.nhn.leidenuniv.nl) - [www.science.uva.nl/zma](http://www.science.uva.nl/zma) - [www.bis.wur.nl/UK/Organisation/Herbarium](http://www.bis.wur.nl/UK/Organisation/Herbarium) Any additional information can be requested from: Dr. Bert W. Hoeksema, Head dept. of Marine Zoology Netherlands Centre for Biodiversity Naturalis E-mail: [bert.hoeksema@ncbnaturalis.nl](mailto:bert.hoeksema@ncbnaturalis.nl) Phone: +31 71 5687 631

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Dr. Katja T.C.A. Peijnenburg Institute for Biodiversity and Ecosystem Dynamics (IBED) University of Amsterdam Postal address: P.O. Box 94248, 1090GE Amsterdam Visiting address: Sciencepark 904, Room C3.209, 1098XH Amsterdam The Netherlands Tel: +31 20 5257856

[K.T.C.A.Peijnenburg@uva.nl](mailto:K.T.C.A.Peijnenburg@uva.nl)

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## NewcastleU 2 Evolutionary Biol

Applications are invited for a 3-year PhD studentship based in the School of Biology, funded by the RB Cooke Studentship endowment. The studentship will commence on 1 May 2012 and will be awarded for one of five topics, one of which is in the area of evolutionary biology. Application deadline: 15 March 2012.

In addition, applications are also invited for a 3-year NERC-funded PhD studentship based in the School of Biology to start in September 2012. The studentship will be awarded for one of five topics, again one of which is in the area of evolutionary biology. Application deadline: 15 March 2012.

The two evolutionary biology PhD projects are:

I: Molecular Ecology of Lime (*Tilia*) Populations: Indicators of Ancient Woodland

The United Nations declared 2011 as the Year of Forests to highlight the importance of woodlands. Lime (both small-leaved lime, *T. cordata* and large-leaved lime, *T. platyphyllos*) was one of the dominant woodland trees across much of lowland Britain and north-west Europe by 6000 yr BP, but is now one of Britain's rarest na-

tive tree species. Lime trees provide the key habitat for many rare species of plants, fungi and animals, forming unique communities reliant on lime woods for long-term survival. In the face of future climate change it is vitally important that the current status of lime woodland is understood to enable informed decision-making about how best to preserve this unique and ecologically important part of the landscape. More information on the project: <http://www.ncl.ac.uk/biology/study/postgrad/wolff-cooke.pdf> The project builds on current research and collaboration with Dr Ashton (Edge Hill University) and Dr Roseff (Birmingham University). Molecular methods may encompass available microsatellite markers, DNA sequencing and Next Generation Sequencing, using excellent facilities in Newcastle.

Skills gained during the PhD: This project delivers excellent research training in a wide range of specific and general skills: it involves field observations, collection of material, development and use of DNA methods, population genetic data analysis and bioinformatics.

How to apply: This project is suitable for a student with a solid background in ecological genetics, while some experience in DNA techniques and/or bioinformatics is desirable. A degree in bioinformatics with experience and interest in biodiversity research is highly suitable as well. The project can be developed in the direction of the specific interests of the student. You are strongly recommended to contact Dr Kirsten Wolff (Kirsten.wolff@ncl.ac.uk, or 0191 222 5626) for further information regarding the project. If you wish to apply and for further financial details: <http://www.ncl.ac.uk/biology/study/postgrad/phds2012cooke> II: The evolutionary genetics of cytoplasmic male sterility in *Plantago*

This project investigates mechanisms involved in the maintenance of diversity in a mating system called gynodioecy, the co-occurrence of hermaphroditic and male sterile plants in populations. "Evolutionary arms races" between mutations in plant mitochondrial DNA (causing male sterility) and nuclear genes (restoring male fertility) is a classic example of the biology of "selfish genetic elements", an expanding field of basic and cutting edge research in evolutionary genetics. Theoretical models for the maintenance of gynodioecy predict either long-term balancing selection maintaining variation, or successive turnover events of the genomes. By using cutting edge technologies and excellent research facilities in Newcastle this project will make a big step forward understanding which of these two mechanisms is more important in the maintenance of gynodioecy.

The student will investigate the evolutionary genetics and dynamics of male sterility at the population level

to improve our understanding of the factors involved in the maintenance of gynodioecy in *Plantago*. The genus harbours many gynodioecious species and has an exceptionally high rate of mt DNA evolution making this an optimal model genus for this research. The project can be adapted to the student's interests. More information on the project:

[http://www.ncl.ac.uk/biology/study/postgrad/wolff\\_nerc.pdf](http://www.ncl.ac.uk/biology/study/postgrad/wolff_nerc.pdf) Skills gained during the PhD: This project delivers excellent research training in a wide range of specific and general skills: it may involve field observations, collection of plants, plant growth and crossing, development of DNA markers, genotyping, sequencing, Next Generation Sequencing, population genetic data analysis and the use of bioinformatics.

How to apply: This project is suitable for a student with a good knowledge of evolutionary and population genetics, with some experience

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## Norway EvolutionaryBiology

deadline approaching

NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (NTNU)

NTNU - Innovation and Creativity The Norwegian University of Science and Technology (NTNU) in Trondheim represents academic eminence in technology and the natural sciences as well as in other academic disciplines ranging from the social sciences, the arts, medicine, architecture to fine arts. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.

Faculty of natural science and technology - Department of Biology

PhD POSITION IN EVOLUTIONARY BIOLOGY

A PhD position in evolutionary biology focusing on effective population sizes in vertebrates is available at the Centre for Conservation Biology, Department of Biology. The fellowship is financed by an Advanced Research Grant by the European Research Council to the

project Stochastic Population Biology in a Fluctuating Environment for three years with the possibility of up to four years including teaching duties to the Department of Biology. The position is within the NTNU Evolution, Ethology and Ecology group (EEE): <http://www.ntnu.no/biologi/eee> The fellowship runs under the doctoral programme at the Faculty of Natural Sciences and Technology. The faculty is the employer, and working place is Department of Biology. The Department of Biology has 36 members of faculty (professors and associate professors), 22 research scientists and about 66 PhD students and post docs. The department has research programs in evolutionary biology, population genetics, aquatic and terrestrial ecology, conservation biology and biodiversity, ethology, molecular biology, cell biology, plant and animal physiology and ecophysiology, aquaculture, and marine biology. There is considerable collaboration between the disciplines. More information about the Department of Biology can be found at: <http://www.ntnu.no/biologi/english> The position requires a Master degree or similar within evolutionary biology, ecology and/or biomathematics. The applicant must be qualified for the doctoral program within any of these three disciplines. Background in population genetics, statistics and evolutionary biology will also be considered advantageous. We are looking for a hard-working candidate, highly motivated to conduct fundamental scientific research. Ability to carry out goal-oriented work, ability to deliver, oral and written presentation of research results, and good co-operation abilities will be emphasized.

In order to be accepted as a PhD student the grades of the MSc degree has to be sufficiently high (in Norway: B/2.5, or better), or the applicant has to document a similar level through later scientific work. Candidates from universities outside Norway are requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree: [http://ec.europa.eu/education/policies/rec\\_qual/recognition/diploma.en.html](http://ec.europa.eu/education/policies/rec_qual/recognition/diploma.en.html) The application must contain information on education, exams and previous practice. Publications and other scientific work which the applicant wishes to be taken into consideration must be attached. Multi-authored publications require a brief description of the applicant's contribution, and should be enclosed.

The appointment of the PhD fellow will be made according to national guidelines for appointment of PhD fellows at universities and university colleges. Applicants are obliged to engage in an organized PhD training program, and an educational plan will be drafted that includes the attendance of courses and na-

tional/international meetings. The PhD student will also be expected to assist in the teaching of undergraduates. A contract regarding the period of appointment and the obligations of the PhD fellow must be signed by the fellow and the University. Appointment requires approval of the applicant's plan for a PhD study, and should lead to a dissertation (PhD thesis).

The appointment will be made according to the general regulations regarding university employees. The government work force of Norway should reflect the diversity of the population, and this is an "Equal Opportunities position".

The annual salary of the PhD position is NOK 391 100, - per year (code 1017, level 48 according to the government pay-scale for university employees). There is 2 % deduction for superannuation.

Questions regarding the position and a more detailed project description can be obtained by contacting Professor Bernt-Erik Sæther (Bernt-Erik.Sather@bio.ntnu.no) tlf. +47 73 59 0584 or +4790578544.

Application with CV, certified copies of certificates of education

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## NottinghamTrentU YersiniaEvolution

Vice Chancellor's PhD Studentships - School of Science and Technology

PhD Studentship in Determining the impact of recombination on *Yersinia enterocolitica* evolution

A previously funded Vice Chancellor studentship has led to the creation of a comprehensive genome data set for *Y. enterocolitica*, from which the evolution of this pathogen has been extensively characterised. However, the role of recombination in this evolutionary process is still unclear. This project will utilise novel phylogenetic methods developed by Professor Mark Achtman to unravel recombination signatures in the phylogeny, and assist in a clearer picture of the molecular epidemiology of *Y. enterocolitica* human infection.



**Entry requirement** The minimum qualification for entry is a First or Upper Second Class Honours degree (or equivalent) or an MSc / MRes with merit or distinction in a biological discipline with heavy bioinformatics or computational biology content or a related discipline.

**Award** The studentships will pay UK / EU fees and provide a maintenance stipend linked to the RCUK rate (currently £13,590 per annum) for up to three years. Applications from non-EU students are welcome, but a successful candidate would be responsible for paying the difference between non-EU and UK / EU fees. (Fees for 2011 / 12 are £10,950 for non-EU students and £3,732 for UK / EU students.)

**Eligibility** Applications can be accepted from UK / EU and also International students. The minimum English language proficiency requirement for candidates who have not undertaken a higher degree at a UK HE institution is IELTS 6.5 or TOEFL 560 / iBT 94 - 95.

**Applying** For informal enquiries about the studentship, please email Dr Alan McNally <alan.mcnally@ntu.ac.uk>.

Get more information and download an application pack < <http://www.ntu.ac.uk/apps/ResearchForms/UI/pages/researchdegreeenquiry.aspx?syssection=1> > or telephone +44 (0)115 848 6321.

Please return completed application forms, with copies of academic certificates, via email to the School <gradschool@ntu.ac.uk>.

The closing date for receipt of completed application forms is Friday 23 March 2012 at 9 am. Application by CV only will not be accepted.

Dr Alan McNally Senior lecturer molecular microbiology Nottingham Trent University Clifton Lane Nottingham NG11 8NS 0115 8483324

“McNally, Alan” <alan.mcnally@ntu.ac.uk>

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## QueensU AvianGenomics

I am looking for a PhD student to study genomics of speciation in band-rumped storm-petrels (BRSP). BRSP represent an exciting case of repeated sympatric speciation (i.e. speciation with gene flow) by allochrony (separation of populations by breeding time). Initial studies in my lab documented the pattern of divergence. We now want to investigate the mechanisms. The project will entail application of functional gene

analysis and comparative genomics to an existing large sample collection. Field work on barren tropical islands may be required. Applicants must have a background in evolutionary genetics. Practical experience with genomics and bioinformatics is an asset. The successful applicant will join a dynamic group of faculty and students studying ecology and evolution at Queen's University. Please send a resume or curriculum vitae, transcript, and contact information for two academic references to Dr. Vicki Friesen

vlf@queensu.ca

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## Spain AmphibianEvolution

A 4-year PhD position in evolutionary ecology and genomics is available under the supervision of J. M. Cano < [http://www.unioviado.es/JM\\_Cano](http://www.unioviado.es/JM_Cano) > and in collaboration with researchers in other European and North American labs. The general scope of the thesis is to understand the evolutionary potential of amphibian populations to withstand rapid warming and emerging diseases. The position is associated with the project “Tracking thermal and disease induced selection on the amphibian genome” (CGL2011-23443), and the FPI Programme from the Spanish Government. A suitable candidate will have a good knowledge of molecular genetics (eg. experience in the processing and analysis of genetic markers and/or transcriptomic projects) and/or statistical analysis of generalized linear models (preferably using R software).

The position will start in the second half of 2012; the salary is approx. 1100 euros per month. The candidate will carry out her/his PhD based at the Research Unit of Biodiversity < <http://www.unioviado.es/icab/index.en.html> >, Mieres, Spain, and frequent travelling to UK, Finland and USA is expected. Field-work will be performed in the Cantabrian Mountains < [http://en.wikipedia.org/wiki/Cantabrian\\_Mountains](http://en.wikipedia.org/wiki/Cantabrian_Mountains) >, northern Spain and also common-garden experiments breeding and raising amphibians in controlled laboratory conditions will be also duties of the candidate.

Instructions about the application process, general requirements and eligibility will be soon published in the BOE (official Spanish bulletin of announcements) and the Ministry web page. < <http://goo.gl/y1N06> >

Prospective candidates should send an e-mail to J.M. Cano (canojose@uniovi.es), including two items (in En-

glish): 1) a statement letter about their motivation to pursue a PhD in the field of evolutionary genetics and what she/he expects from her/his PhD training period and 2) a CV detailing their academic career, experience and publications if any. Please, highlight the skills relevant to the scope of this project and provide specific examples of cases where you have used them. Applicants should have a degree in Biology/Natural Sciences/Environmental Sciences and a Master degree in equivalent subjects. Driving license is helpful but not mandatory.

\*Brief summary of the project:\*

This project merges genomic, evolutionary and ecological approaches, having an emphasis on amphibian populations in montane habitats. The model species are the common frog - *Rana temporaria* and common toad - *Bufo bufo*), which are very sensitive to rapid warming and vulnerable to the occurrence of novel pathogens (i.e. *Ranavirus* and *Batrachochytrium dendrobatidis*). The general aim is at establishing a research program to characterize biodiversity at the intraspecific level.

Multiple angles will be tackled (i.e. quantitative genetic breeding designs, population genetics, 454 transcriptome sequencing and comparative linkage/QTL-mapping), aiming at providing molecular tools to track adaptation to thermal conditions and strong disease-induced selection in the wild.

The identification and monitoring of adaptive genetic polymorphisms with respect to environmental conditions will be used in the assessment of conservation value and capacity to adapt to climate change in wild populations.

José Manuel Cano Arias <canoarias@gmail.com>

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## StockholmU EvolutionarySystemsBiol

Discover secrets of life locked in animal genomes!

GOOD PROJECT! GOOD ATMOSPHERE! GOOD SUPERVISION! GOOD PLACE TO LIVE! GOOD PLACE TO WORK! GOOD CAREER PROSPECTS!

PhD position in evolutionary systems biology (Ref. No. DBB 7-12), apply by February 29

Fully-funded PhD position in EVOLUTIONARY SYSTEMS BIOLOGY!!! Please, quote "Ref. No. DBB 7-12" in the email subject line when applying The ap-

plication should be labelled with "Ref. No. DBB 7-12", and should be received no later than February 29, 2012 by the department. email: haidi@dbb.su.se (please combine all your documents into a single pdf file) cc: Lukasz.Huminiecki@ki.se

!!! quote "Ref. No. DBB 7-12" in the email subject line !!!

COMPUTATIONAL ANALYSIS OF GLOBAL PATTERNS OF GENE AND GENOME DUPLICATIONS IN VERTEBRATES We are looking for an exceptionally talented and motivated PhD student in evolutionary systems biology to work and study under joint supervision of Dr. Lukasz Huminiecki and Prof. Arne Elofsson at the Department of Biochemistry and Biophysics, Stockholm University.

You will live in STOCKHOLM, a beautiful and international city with high standard of life and social services, the Home of the Nobel Prize, offering a vibrant scientific environment and rich opportunities for collaborations, postdoctoral fellowships, or employment in the technology sector. You will work within the newly created bioinformatics and computational biology cluster at the Science for Life Lab, a joint venture between Sweden's three top research universities: Karolinska Institutet, KTH Royal Institute of Technology, and Stockholm's University.

The project focuses on computational analysis of global patterns of gene and genome duplications in vertebrates, and their consequences for signal transduction, and microRNA (miRNA) network evolution, as well as expression pattern evolution. We will use pathway databases and freely available genomic, expression, and miRNA datasets, to infer architectural changes of the animal signal transduction and miRNA networks after small scale duplications (SSDs) and whole genome duplications (WGDs). Quantification of the patterns of nonfunctionalization, subfunctionalization, and neofunctionalization will enhance our understanding of the evolutionary forces driving duplicate retention. The identification of the shared animal developmental toolkit is one of the most significant and fundamental discoveries in biology, and we designate the toolkit to be a focus area investigated besides the global perspective.

The methodological toolkit necessary for the project will consist of phylogenetics and other molecular evolution methods, R statistical package, Bioconductor, MySQL, and Perl. Unix or Linux experience is highly desired. Candidates will have undergraduate degree background in biology, biotechnology, biophysics, molecular biology, mathematical biology, bioinformatics, mathematics, or computer science. Good command



of English is required. This is not a pipeline bioinformatics project: the chosen candidate will have a natural aptitude to flexibly and creatively tackle complex and abstract problems, using a dynamic mixture of procedural programming, SQL, statistics, bioinformatics, and evolutionary theory.

REFERENCES: 2R and remodeling of vertebrate signal transduction engine. Huminiecki L, Heldin CH. BMC Biol. 2010 Dec 13;8:146.

Emergence, development and diversification of the TGF-beta signalling pathway within the animal kingdom. Huminiecki L, Goldovsky L, Freilich S, Moustakas A, Ouzounis C, Heldin CH. BMC Evol Biol. 2009 Feb 3;9:28.

Divergence of spatial gene expression profiles following species-specific gene duplications in human and mouse. Huminiecki L, Wolfe KH. Genome Res. 2004 Oct;14(10A):1870-9.

APPLICATION The application should contain a letter of intent (one to two pages that explain why you are interested in working on this project, why you are interested in studying for a PhD, what you hope to accomplish during your PhD studies, and what skills you can bring to this project), curriculum vitae, copies of degree certificates and transcripts of academic records, a list of two persons who may act as referees (with telephone numbers and e-mail addresses), and one copy of your undergraduate thesis and articles, if any.

About the Department of Biochemistry and Biophysics, Stockholm University More than 20 research groups are active at the Department of Biochemistry and Biophysics. The research projects span across a broad range of topics covering various aspects of structure and function of biological systems. A major fraction of these topics are centered on biological membranes, where many groups working within this area are part of the Center for Biomembrane Research, which is hosted by the department. Also the Stockholm Bioinformatics Centre and the Science for Life Laboratory are closely linked to the department. The combination of the highly interdisciplinary expertise and research projects at the department

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## Sweden InsectChemicalEvolution

PhD position in Chemical Ecology

EMPLOYER The division of Chemical Ecology, Swedish University of Agricultural Sciences, Alnarp, consists of around 50 people of 18 nationalities and with all career stages represented. In 2006 the division received a prestigious Linnaeus grant for research on Insect chemical Ecology, Ethology and Evolution, IC-E3. The program will run until 2016.

POSITION DESCRIPTION Within the framework of IC-E3 we are performing research on how insects use chemical signals to recognize their hosts and how their behavioural response is modulated by short-term and long-term events, and from receptor neuron to CNS. We are now recruiting a PhD student whose research will focus on modulation of olfactory-mediated behaviour in *Drosophila*. The project includes an analysis of factors that are involved in steering the fly's behaviour in connection to its physiological state (feeding and mating status), and/or ecological niche (evolution). Factors (olfactory, neuromodulatory, genetic and molecular) involved in modulation will be identified. The work includes behavioural, physiological, genetic and molecular analyses.

QUALIFICATIONS: Candidates should hold an MSc, preferably with knowledge in insect behaviour, chemical ecology, and molecular biology. Candidates should be fluent in spoken and written English.

STARTING DATE: As soon as possible, but before September 2012.

APPLICATIONS AND FURTHER INFORMATION Applications, including a letter of motivation, a CV and 3 referees should be sent before March 15, 2012 by email to: [registrar@slu.se](mailto:registrar@slu.se), or by regular mail: Registrar of SLU, PO Box 7070, SE-750 07, Uppsala, Sweden, subject (in both cases): Application for PhD position, Chemical Ecology, Dnr ua 297/2012.

More information can be found on our website: <http://-ice3.se/> and <http://www.slu.se/en/shortcuts/jobs-and-vacancies/> or can be requested by writing an email to [teun.dekker@slu.se](mailto:teun.dekker@slu.se) and [mattias.larsson@slu.se](mailto:mattias.larsson@slu.se).

Teun Dekker <[Teun.Dekker@slu.se](mailto:Teun.Dekker@slu.se)>

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## TexasAMU EvolutionGeneFlow

Wanted: Ph.D. Students, Applied Marine Molecular Ecology and Evolution

Texas A&M University Corpus Christi Marine Biology Program Department of Life Sciences College of Science and Engineering

Start Date: Fall 2012 or Spring 2013.

I'm starting up a research lab and am going to take 2 graduate students between Fall 2012 and Spring 2013. Your degree will be from Texas A & M: students at Corpus Christi, College Station, and Galveston all receive same degree from the same institution.

Description: Research in the lab is focused on the evolution of gene flow restrictions via natural selection, population connectivity, local adaptation, and evolution on ecological time scales. I prefer projects to have at least one applied aspect: marine conservation, fisheries management, alien species, climate change, etc. My background is in Community Ecology, Population Genetics, and Phylogenetics and thus research in the lab is typically cross-disciplinary. Field research will consist of designed surveys of benthic organisms and pelagic larvae and experimental manipulations and lab research will focus on DNA/RNA sequencing and analysis, as well as sperm-egg compatibility trials and larval rearing.

My current research program is focused on the marine flora and fauna of the Hawaiian Islands. Ongoing projects involve genome-wide DNA sequencing in non-model species, endemic Hawaiian limpets (*Cellana*), the Hawaiian rocky intertidal community, *Acanthaster planci* crown-of-thorns sea stars, and the ReefChip microarray for identifying species composition mixed samples such as plankton tows. Additional key words: genomics, speciation, adaptive radiation, diversification, hybridization, admixture, larval dispersal, biostatistics, molecular tool development, population genetic simulation models Lab Resources: Staffed high-throughput genomics core lab with capacity to prepare samples for Sanger, 454, Ion Torrent, or Illumina sequencing of DNA or cDNA (genome scans, transcriptomes, etc). High throughput microarray processing. Real time PCR. Microsats, etc. On campus high performance computing facility, access to Texas A&M College Station high performance computing facility. In lab desk-

top supercomputers: Mac and Linux/Windows.

In Hawaii, I collaborate with the ToBo Lab (Rob Toonen & Brian Bowen) at the Hawaii Institute of Marine Biology/University of Hawaii, and will have access to their facilities at HIMB which are similar to that described for TAMUCC above.

Funding: 9mo TA positions are available and you will receive two months of summer salary for the first three years. Salary is dependent upon experience and progression through the PhD program. Upon achieving candidacy, TA's are paid \$2200 per month. I will encourage and assist all students in acquiring funding for salary and research.

What you can expect: Until course requirements are completed, Fall and Spring semesters will be spent in Texas. Summers will likely be spent in Hawaii. In addition to Corpus Christi, you can take classes at Galveston or College Station either in person or via tele-conferencing system.

Requirements: At least a BS degree in a related field of science. A desire to apply molecular technology to ecological and evolutionary questions of consequence in the ocean. If you are ecology focused and want molecular experience or vice-versa, you've found the right laboratory. Good GPA and GRE's help you get into the department but there are no specific cutoffs.

Application: Deadline for Spring is June 1, time is of the essence for Fall. The official application deadline for the Marine Biology Program has past, but since I was just hired I can get some students in late for fall admission. If you are interested in applying, in a single email send me your CV, list of at least three references and your relationship with the reference, unofficial transcripts, publications, and a brief statement of interests. This is not your official application, I will review the materials and will request an official application to the graduate school. Please address the email to [cbird@hawaii.edu](mailto:cbird@hawaii.edu) and insert of the following two subject lines in the email: TAMUCC PHD FALL or TAMUCC PHD SPRING.

For information on Texas A & M Corpus Christi and the Marine Biology Program, please consult the following websites.

<http://www.tamucc.edu/> <http://-gradschool.tamucc.edu/index.html>  
<http://marinebiology.tamucc.edu/> <http://lsci.tamucc.edu/>

Dr. Chris Bird Asst. Prof. Marine Molecular Biology Marine Biology Program, Department of Life Sciences Texas A&M University-Corpus Christi 6300 Ocean Drive Corpus Christi, Texas 78412-5869

cbird@hawaii.edu www2.hawaii.edu/~cbird  
Chris Bird <cbird808@gmail.com>

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## TexasTechU PlantPopulationGenomics

Masters and PhD positions are available for studying plant population genomics in the Olson lab at Texas Tech University. We are currently developing systems in multiple species of poplars and, in the near future, tropical Asian trees. For more information about the lab contact Matt Olson <matt.olson@ttu.edu> and visit <http://www.faculty.biol.ttu.edu/olson/Welcome.html> and <http://www.popgen.uaf.edu/> Matt Olson Associate Professor Biological Sciences Texas Tech University matt.olson@ttu.edu <http://www.biol.ttu.edu/facultylist.aspx?id=matt.olson@ttu.edu> "Olson, Matt" <matt.olson@ttu.edu>

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## UAlaska Fairbanks SmallMammalPhylogeography

One master's and one PhD position are available to study phylogeography of the Alaskan hare and Malagasy tenrecs, respectively, at the University of Alaska Fairbanks/University of Alaska Museum. More information can be found at:

<http://linkolson.org/Opportunities> Link Olson <<http://linkolson.org/>> Curator of Mammals University of Alaska Museum <<http://www.uaf.edu/museum/collections/mammal/>> 907 Yukon Drive Fairbanks, AK 99775-6960 tel: (907) 474-5998 link.olson@alaska.edu

See the UAM Mammal Collection database: [http://arctos.database.museum/uam\\_mamm/](http://arctos.database.museum/uam_mamm/) le-olson@alaska.edu

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## UAuckland 3 CulturalEvolution

Applications are invited for three fully-funded 3-year PhD studentships based in the Department of Psychology at the University of Auckland to begin in 2012. The students will be supervised by Dr Quentin Atkinson and Professor Russell Gray.

PhD Studentship 1: Cultural evolution of cooperation in the Pacific Cooperating to sustainably manage shared resources is vital for our long-term survival. Yet our ability to cooperate in large groups of non-kin remains an evolutionary puzzle. Recent research indicates that human cooperation is inherently cultural. Cultural norms and institutional features have been shown to promote cooperative behaviour and successful resource management. However, the way these systems evolve and interact through time and their importance relative to other contextual factors remains poorly understood. This project will use experimental methods together with ethnographic data and comparative phylogenetic analysis to trace how cooperative norms and institutions have evolved over the course of Pacific history. This work promises a better understanding of how cooperative cultural features emerge and co-evolve and their importance in human evolution.

The successful applicant will have experience in experimental economics and a strong background in evolutionary theory. The applicant will also have (or be demonstrably able to acquire) proficiency in computational modelling and comparative phylogenetic methods. Fieldwork experience and familiarity with Pacific language/culture is also desirable. Although the project is based in Auckland, preparedness to spend periods in the field at locations across the Pacific is essential. Willingness to work as part of a team is also important. The studentship is part of a larger interdisciplinary project examining cultural evolution in the Pacific and involves visits to two labs in North America.

PhD Studentship 2: Cultural evolution of religion in the Pacific One important aspect of human culture that may function to promote cooperation is religion. To fully understand the role that religion plays in the emergence of human societies we need to be able to track the evolution of religious features through time. This project will use ethnographic data to document variation in religious traits across the Pacific. Combining this data with tools from cultural phylogenetics and findings from the project above, this studentship will test hypotheses about how religious beliefs and practices evolve and their co-evolution with ecology and social morphology.

The successful applicant will have experience working with cross-cultural ethnographic data and a strong background in evolutionary theory. The applicant will

also have (or be demonstrably able to acquire) proficiency in computational modelling and comparative phylogenetic methods. Familiarity with Pacific ethnography and experience in database construction is desirable. Willingness to work as part of a team is also important. The studentships form part of larger interdisciplinary projects examining cultural evolution in the Pacific.

PhD Studentship 3: Cultural evolution of religion A key function of religion is the codified transmission of social and cultural knowledge. This studentship will test hypotheses about how religious texts and practices evolve using computational phylogenetic methods.

The successful applicant will have experience working with databases and a strong background in evolutionary theory. The applicant will also have (or be demonstrably able to acquire) proficiency in computational modelling and comparative phylogenetic methods. Willingness to work as part of a team is also important.

Host institution: The University of Auckland is New Zealand's leading university ranked 82 in the world in the 2011 QS survey. The Psychology Department is ranked 27th in the world. The University of Auckland has a strong international focus and is the only New Zealand member of Universitas 21 and the Association of Pacific Rim Universities - international consortia of research-led universities. Auckland is ranked third out of 221 world cities for quality of living in the 2011 Mercer Quality of Living Survey (see [www.mercer.com/qualityofliving](http://www.mercer.com/qualityofliving)).

Studentship Entitlement: Each studentship covers international student fees, a monthly stipend, and research and travel expenses associated with the projects. There are also opportunities for paid teaching assistantships within the Psychology Department.

Any enquiries should be directed to Dr Quentin Atkinson (please see: <http://www.fos.auckland.ac.nz/~quentinatkinson/>) or Professor Russell Gray (please see: <http://language.psy.auckland.ac.nz/>).

q.atkinson@auckland.ac.nz

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## UAuckland Metagenomics

PhD position in Molecular Ecology and Evolution  
Metagenomics in a model ecosystem

Supervisors: Assoc. Prof. Richard Newcomb, Plant

& Food Research and University of Auckland Assoc. Prof. Alexei Drummond, University of Auckland Assoc. Prof. Thomas Buckley, Landcare Research and University of Auckland

The development of metagenomic techniques have begun to allow the testing of many fundamental questions in ecology and evolution across all phyla simultaneously. Such questions include: What species are at a site? Where are species distributed? and What factors impact species distribution? Fundamentally: Why are species where they are? While metagenomic techniques are becoming routinely used for soil microbes in terrestrial ecosystems, the extension of this approach to other groups of organisms is yet to be rigorously examined.

We have been establishing Hauturu (Little Barrier Island) in New Zealand's Hauraki Gulf as a model ecosystem in which to develop new genomic tools for addressing both fundamental and applied questions within ecology. To evaluate the drivers of species distribution we are investigating many abiotic factors, such as, temperature, altitude, and humidity, as well as biotic factors, such as the distribution of other species. Particular applications of these new metagenomic technologies include effective and efficient evaluation of species compositions and distributions in order to understand the impacts of climate change, biological invasions, disturbance and restoration. This strategic initiative is funded by the Allan Wilson Centre for Molecular Ecology and Evolution. Stakeholders for the project include Department of Conservation, Auckland Council, and local iwi (Ngati Manuhiri), and internationally this project is part of the Network of Genomic Observatories.

This PhD programme will address whether a metagenomic approach can be extended from microbes into invertebrates, plants and perhaps even vertebrates through next generation amplicon sequencing of DNA extracted from common environmental substrates such as soil and leaf litter. We already have a significant database of sequences from classically-collected and Sanger-sequenced invertebrates and plants from a set of sites across Hauturu, with further sampling underway. The candidate, if eligible, will enrol for a PhD within the School of Biological Sciences, University of Auckland, but be based for a majority of their time at Plant & Food Research in Mt Albert, Auckland and to a lesser extent at Landcare Research in Tamaki, Auckland and the University of Auckland for bioinformatics. The Allan Wilson Centre for Molecular Ecology and Evolution through the University of Auckland will provide a stipend of NZ\$25K plus university fees p.a. for three years. The candidate should have proven skills in molecular ecology techniques and analysis of molecular



data, with a keen interest in next generation sequencing technologies, bioinformatics and ecology.

If you are interested please contact Richard Newcomb (Richard.Newcomb@plantandfood.co.nz). Please include a cover letter, CV, copy of your academic record and the names of at least two potential referees. Please refer to the University of Auckland website for information on applying for admission into the PhD programme. <http://www.auckland.ac.nz/ua/home/-about/admission-and-enrolment/ae-postgraduate-students/ae-applying-for-a-doctorate> Richard D. Newcomb (PhD) Science Team Leader, Molecular Sensing, Food Innovation, Plant & Food Research & Associate Professor of Evolutionary Genetics, School of Biological Sciences, University of Auckland & Principal Investigator, Allan Wilson Centre for Molecular Ecology and Evolution

Phone: +64 9 9257127; Fax: +64 9 9257001; Mobile: +64 21 2268127 Mail: Plant & Food Research, Private Bag 92169, Auckland 1142, New Zealand Courier: Plant & Food Research, 120 Mt Albert Rd, Sandringham, Auckland 1025, New Zealand

Plant & Food Research website: <http://www.plantandfood.co.nz/page/our-research/-food-innovation/capabilities/molecular-olfaction/>  
University of Auckland website: <http://www.bioscienceresearch.co.nz/staff/richard-newcomb/> Allan Wilson Centre website: <http://www.allanwilsoncentre.ac.nz> Personal website: <http://linkedin.com/pub/richard-newcomb/b/5b2/281> Richard Newcomb <Richard.Newcomb@plantandfood.co.nz>

## UBern EvolutionCooperation

### PhD POSITION IN BEHAVIOURAL ECOLOGY

Institute of Ecology and Evolution, University of Bern, Switzerland

'GENETIC BASIS OF COOPERATION': The aim of this PhD-project is to investigate the genetic basis of cooperative behaviour in highly social African cichlids. These fish breed cooperatively in large family groups and have turned into a model species for studies of social evolution based on detailed information about their ecology and behaviour, excellent possibilities for behavioural experiments and recent sequencing of their full genome. We shall pursue a multidisciplinary ap-

proach to study the genetic control of cooperative behaviour. This involves behavioural experiments with offspring obtained from a large-scale breeding experiment, analysis of the behavioural data using quantitative genetics tools and identifying candidate genes responsible for variation in cooperative behaviour by an ecological genomics approach. Eligible candidates will have a master's degree (or Diplom) in Biology and research experience in animal behaviour and a genuine understanding of evolutionary theory. Practical skills in molecular genetics techniques, the application of statistical models and empirical work with fish would be beneficial, but they are not a precondition. The project will be mostly based in Bern, but will involve collaboration with two co-supervisors, Nadia Aubin-Horth (University Laval, Canada) and Mathias Kölliker (University of Basel, Switzerland). The position is part of the Doctoral Research Program ("ProDoc") funded by the Swiss National Science Foundation SNF on "Proximate and ultimate causes of cooperation" and will connect up to 30 PhD students working on animal cooperation by a research network. Supervisor: Barbara Taborsky.

The position is for three years and should preferably start in spring 2012.

The successful candidate will join a bustling research environment consisting of ca. 15 PhD-students and advanced research staff, five technicians and a varying number of master's students and guest scientists. Besides this Behavioural Ecology group, the Institute of Ecology and Evolution at the University of Bern comprises research groups in Aquatic Ecology (Ole Seehausen), Community Ecology (Wolfgang Nentwig), Conservation Biology (Raphael Arlettaz), Evolutionary Ecology (Heinz Richner) and Population Genetics (Laurent Excoffier). Salaries will follow the schemes of the national funding organization of Switzerland.

Closing date: Open until filled, but all application materials, including CV, a summary of research experience, copies of any published or in-press papers, and two letters of recommendation should be received by 15 March 2012 to ensure full consideration. Candidates should indicate in a cover letter when they could take up the position. Please send all application material to the secretary's office, c/o Marlis Gerteis, Dept. Behavioural Ecology, University of Bern, Wohlenstrasse 50A, CH-3032 Bern, Switzerland; or as e-mail attachments to marlis.gerteis@iee.unibe.ch. Please consult our web-page for information on our research: <http://behav.zoology.unibe.ch/> For inquiries please contact barbara.taborsky@iee.unibe.ch

"Taborsky, Barbara (IEE)"  
<barbara.taborsky@iee.unibe.ch>

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## UBielefeld AvianConservationBiol

PhD position (E13/50%, 36 months): Wind power and birds of prey

A phd position (funded by the German Ministry for the Environment, BMU) is available at the Department of Animal Behaviour at the University of Bielefeld, Germany, starting in May 2012 or as soon as possible thereafter. The aim is to study the effects of wind farms on birds of prey with regard to mortality and population growth.

We seek a highly motivated student with a strong interest in population ecology, conservation biology and evolutionary ecology. Ideal candidates should have experience in the fields of population ecology, behavioural ecology or evolutionary ecology. They should have experience with time series modelling, matrix models, mark-recapture survival analyses and generalized linear (mixed) models. Knowledge of computer programmes such as Matlab, Mark and R would be advantageous. Excellent writing skills are highly desirable. We expect the successful candidate to make a significant positive contribution to the research and social environment of the Department.

Our department has a main focus on the ecology and evolution of behaviour using a variety of model systems. The research on birds of prey is based on exceptional long-term population studies lasting over several decades. The main target species of this phd project will be white-tailed eagle (*Haliaeetus albicilla*), red kite (*Milvus milvus*) and common buzzard (*Buteo buteo*). Our aim is to understand the ecological and evolutionary factors influencing collision rates and how these collision rates influence population dynamics and demography. The work will involve time series analyses, survival rate estimation and matrix modelling.

The Department of Animal Behaviour at the University of Bielefeld offers a stimulating international environment and an excellent research infrastructure with access to state-of-the-art techniques. The working language of the Department is English. Those who previously applied to this position will automatically be reconsidered.

The position is funded for three years, starting in May 2012 or as soon as possible thereafter. Applications should include a concise statement of research inter-

ests and work experiences relevant to the project, curriculum vitae, publication list and contact details of 2-3 academic referees and should be submitted before March 20th 2012. Please send your application as a single file (Word or pdf) to [oliver.krueger@uni-bielefeld.de](mailto:oliver.krueger@uni-bielefeld.de). For further information please do not hesitate to contact Prof. Dr. Oliver Krüger at [oliver.krueger@uni-bielefeld.de](mailto:oliver.krueger@uni-bielefeld.de)

The University of Bielefeld is an equal opportunity employer. We welcome applications from severely handicapped people. We particularly welcome applications from women. Given equal suitability, qualifications and professional achievement women will be given preference, unless particular circumstances pertaining to a male applicant predominate.

Prof. Dr. Oliver Krüger Department of Animal Behaviour VHF University of Bielefeld PO Box 10 01 31 33501 Bielefeld Germany Tel: +49-521-1062842 Fax: +49-521-1062998 [oliver.krueger@uni-bielefeld.de](mailto:oliver.krueger@uni-bielefeld.de) [www.uni-bielefeld.de/biologie/vhf/OK](http://www.uni-bielefeld.de/biologie/vhf/OK) "Education is the most powerful weapon you can use to change the world"

Nelson Mandela

"\Oliver Krüger\" <[oliver.krueger@uni-bielefeld.de](mailto:oliver.krueger@uni-bielefeld.de)>

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## UDarmstadt EvolutionCuckooWasps

Technical University of Darmstadt, Institute of Zoology, Synthetic Ecological Networks

PhD position - Evolution of cuticular hydrocarbon profiles in cuckoo wasps and their hosts

We obtained funding for a research project that aims to elucidate whether or not positive Darwinian selection on females to mimic the cuticular hydrocarbon (CHC) profile of their host is a major force that drives the evolution of CHC profiles in a group of cleptoparasitic and parasitoid insects: cuckoo wasps (Hymenoptera: Chrysididae). We intend to combine behavioral experiments with a phylogeny-based statistical analysis that compares CHC profiles of cuckoo wasps and their distantly related hosts. The behavioral experiments are meant to demonstrate whether or not host-parasite CHC profile similarity is causally interrelated with the host's behavior against cleptoparasites and parasitoids.

The project is coordinated by the Evolutionary Chem-



ical Ecology group (PD Dr. Thomas Schmitt) at the TU Darmstadt and the Center for Molecular Biodiversity Research (Dr. Oliver Niehuis) at the Zoological Research Museum Alexander Koenig in Bonn. The successful candidate will chemically analyses CHC profiles of cuckoo wasps and their hosts and will conduct behavioral experiments. In addition, the successful candidate will apply phylogenetic and advanced statistical methods to evaluate competing hypotheses.

We seek a highly motivated student with a strong background in evolutionary biology and chemical ecology. The ideal candidate should already have experience in the analysis of hydrocarbons using gas chromatography coupled with mass spectrometry and in conducting behavioral experiments. Advanced statistical skills and experience in using statistical software, such as R, would be advantageous. Excellent writing skills in English are highly desirable. We expect the candidate to have good communication and organization skills and the ability to work in a team.

The German Research Foundation (DFG) funds the project and the PhD position for a total of three years. Payment will be according to the German standard tariff (50 % TVöD-E13). The research project will start in Mai 2012. Applicants for the advertised PhD position should send a cover letter with concise statement of research interests and experience relevant to the project, a CV, a list of his/her publications, and contact details of 2-3 academic referees. The deadline for the application is March 23, 2012. Please submit your application as a single PDF file to [thomas.schmitt@biologie.uni-freiburg.de](mailto:thomas.schmitt@biologie.uni-freiburg.de) and [o.niehuis.zfmk@uni-bonn.de](mailto:o.niehuis.zfmk@uni-bonn.de).

We advocate gender equality. Women are therefore strongly encouraged to apply. Equally qualified severely handicapped applicants will be given preference.

For further information, please do not hesitate to contact PD Dr. Thomas Schmitt ([thomas.schmitt@biologie.uni-freiburg.de](mailto:thomas.schmitt@biologie.uni-freiburg.de); 0761 / 203-2591) and Dr. Oiver Niehuis ([o.niehuis.zfmk@uni-bonn.de](mailto:o.niehuis.zfmk@uni-bonn.de); 0228 / 9122-356).

Best wishes,

Thomas

Thomas Schmitt <[thomas.schmitt@biologie.uni-freiburg.de](mailto:thomas.schmitt@biologie.uni-freiburg.de)>

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## UEdinburgh PlasticitySociality

Hello,

I have just advertised a funded PhD position on Findaphd, deadline 16 March (funding for UK students only). (see <http://www.findaphd.com/search/-ProjectDetails.aspx?PJID=36260>)

The advertisement focuses on the 'evolution of virulence' question, however I want to stress that the focus will be very much on the bacterial traits that underlie virulence, with a big emphasis on social, cooperative traits (expression of secreted virulence factors), and on plasticity (regulatory control of virulence factors). For more general info on what we do, see [brown.bio.ed.ac.uk](http://brown.bio.ed.ac.uk). Any questions, please email.

best wishes, Sam Brown

Findaphd advert: Molecular, ecological and evolutionary dynamics of bacterial virulence.

Bacterial pathogens are overwhelmingly opportunistic and typically grow in distinct environments causing no harm to humans. The major challenge in this proposal is to build new theory for virulence evolution in opportunistic pathogens, with a focus on food-borne pathogens, in particular pathogenic strains of *E. coli*.

The evolution of virulence is a major focus in evolutionary biology, and has resulted in a large body of theory based on the assumption that virulence is a result of selection for virulence factors (VFs) that enhance within-host growth, survival or between-host transmission. While this theory has met with success for specialist pathogens (e.g. malaria), for many opportunistic pathogens these proposed countervailing growth/transmission benefits of VF expression are difficult to identify in hosts, casting a large body of theory into doubt. To answer this challenge, we will develop and test a novel theoretical framework for virulence dynamics across multiple environments (from farm to fork). This project promises to deliver a significant redirection of virulence evolution theory, to capture the environmental and regulatory complexity of virulence in bacterial opportunistic pathogens.

In addition to a core theoretical component, experimental investigations will also be encouraged, to foster an integrative training spanning molecular microbiology, systems biology, ecology and evolution.

Funding Notes: This project is eligible for the EAST-BIO Doctoral Training Partnership. This opportunity is only open to UK nationals (or EU students who have been resident in the UK for 3+ years) due to restrictions imposed by the funding body.

For application procedure, see <http://www.findaphd.com/search/ProjectDetails.aspx?PJID6260>.  
<sam.brown@ed.ac.uk>

– Sam Brown Centre for Immunity, Infection and Evolution University of Edinburgh West Mains Road, Edinburgh EH9 3JT <http://brown.bio.ed.ac.uk/> <http://ciie.bio.ed.ac.uk/> sam.brown@ed.ac.uk

<sam.brown@ed.ac.uk>

sampaulbrown@gmail.com

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## UEdinburgh RNAvirusEvolution

We will shortly be advertising a funded, 4-year PhD project at the Institute of Evolutionary Biology, University of Edinburgh. This studentship is only open to UK nationals and EU citizens who have been resident in the UK for 3 years (including those studying for undergraduate degrees). Please pass this on to any students with an aptitude and interest in computational biology with application to infectious disease. Contact me in the first instance.

[http://www.ed.ac.uk/schools-departments/biology/postgraduate/phdproj?tags=2&cw\\_xml=projects\\_institute.php](http://www.ed.ac.uk/schools-departments/biology/postgraduate/phdproj?tags=2&cw_xml=projects_institute.php) This project is eligible for the EASTBIO Doctoral Training Partnership: <http://www.eastscotbiotp.ac.uk/> By 16th March interested individuals should send a pdf - one document of 3 pages which should include their CV (2 pages - include the email addresses of 2 academic referees) and a statement of research interests (1 page) directly to a.rambaut@ed.ac.uk

Description: Advances in molecular evolutionary dynamics (termed phylodynamics') has transformed our understanding of many of the most serious viral diseases of humans and animals (e.g., Smith 2009; Rambaut 2008). The rapid transition to next generation sequencing technologies has offered an opportunity to increase the level of detail of these studies by orders of magnitude. However, although new computational technologies bring benefits (multi-core GPGPUs; Suchard & Rambaut, 2009), current inference frameworks are

languishing behind the deluge of data and we are at a juncture where urgent analytical advances are required to use it effectively.

This project would involve developing computational advances to apply evolutionary dynamical model to these data in novel and imaginative ways to apply the strengths of next generation sequencing to the unique properties of RNA virus - namely, very small genomes and very rapid rates of evolution. Of specific need are methods to study the evolving diversity within individual infections of human immunodeficiency virus to understand clinical outcomes like the evolution of drug resistance and interactions with host immune response. Theoretically related problems will be studied at the level of populations where unprecedented genomic data is available for influenza A virus of humans and livestock, challenging our analytical ability.

References:

Smith GJD, Vijaykrishna D, Bahl J, Lycett SJ, Worobey M, Pybus OG, Ma SK, Cheung CL, Raghwani J, Bhatt S, Peiris JSM, Guan Y & Rambaut A (2009) Origins and evolutionary genomics of the 2009 swine-origin H1N1 influenza A epidemic. *Nature* 459, 1122-1125.

Rambaut A, Pybus OG, Nelson MI, Viboud C, Taubenberger JK & Holmes EC (2008) The Genomic and Epidemiological Dynamics of Human Influenza A Virus. *Nature* 453, 615-619.

Suchard MA & Rambaut A (2009) Many-Core Algorithms for Statistical Phylogenetics. *Bioinformatics* 25, 1370-1376.

Andrew Rambaut Institute of Evolutionary Biology University of Edinburgh Ashworth Laboratories Edinburgh EH9 3JT EMAIL - a.rambaut@ed.ac.uk TEL - +44 131 6508624

a.rambaut@ed.ac.uk

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## UExeter BumblebeeViruses

Project title: Virulence and host-specificity of bumblebee viruses We are inviting applications for this NERC funded PhD studentship to commence October 2012. For eligible students the award will cover UK/EU tuition fees and an annual stipend (in 2011/12 this was £13,590 for full-time students, pro rata for part-time students) for at least three years. This project is one of a number that are in competition for funding. Stu-

dentships will be awarded on the basis of merit. Successful applicants will benefit from working within a lively research environment within the Centre for Ecology and Conservation, Biosciences, Cornwall Campus, near Falmouth at the College of Life and Environmental Sciences, University of Exeter.

School: University of Exeter, Cornwall campus, Bio-Sciences in the Centre for Ecology & Conservation

Supervisor: Dr Lena Wilfert

Project description: Bumblebees are among the most important pollinating insects. Many species and populations have recently suffered drastic declines, with impacts on plant biodiversity and agriculture. Next to habitat loss, parasite pressure is one of the potential causes of these species declines. In particular rapidly adapting viral diseases, which might readily jump between host species, may drive host population dynamics. Viruses are important parasites of honeybees, but have so far been little studied in bumblebees. The aim of this project is to investigate the virulence and host specificity of newly identified bumblebee viruses. The project will combine fieldwork with experimental infection experiments to determine the effects of viral infections on bee health. From this starting point, the degree of host-specificity - and thus the risk for disease emergence - may be assayed directly through experimental evolution. Using phylogenetic methods, experimental results can be compared to the demographic history of viruses in the field to test whether experimental evolution recapitulates natural evolution. This project will combine fieldwork in the UK with experimental infection assays in the lab. The work will heavily rely on molecular techniques, such as quantitative PCR and sequencing, for quantifying infections and for studying viral sequence evolution. The student will be trained in these methods and will be closely involved with the disease group at Tremough, including Prof. Mike Boots, Prof. Angus Buckling, Dr. Britt Koskella and Dr. Michiel Vos. Please contact Dr. Lena Wilfert ([lena.wilfert@ed.ac.uk](mailto:lena.wilfert@ed.ac.uk)) for informal enquiries. More information can be found at <http://www.biology.ed.ac.uk/research/groups/wilfert> Funding notes: You must have obtained, or be about to obtain, a First or Upper Second Class UK Honours degree, or the equivalent qualifications gained outside the UK, in a relevant subject. The studentship is only available to UK and other EU nationals (due to funding criteria, EU nationals who have not been resident in the UK for the three years prior to the start of their studentship will be restricted to a fees-only award). If you have not always lived in the UK refer to the NERC Studentships Handbook, section B for more information (<http://www.nerc.ac.uk/funding/application/studentships/>).

Application procedures: In order to apply you will need to complete an online 'Funding application' web form where you must submit some personal details, including the names and contact details of two referees, and upload the following documents (preferred format for uploaded files is .pdf and preferred filename should start with your last name): - CV - Covering letter (please clearly identify which project you would like to be considered for and outline your academic interests, prior research experience and reasons for wishing to undertake the project. - Transcript (this should be an interim transcript if you are still studying) - 2 references (if your referees prefer, they can email the reference direct to [cles-studentships@exeter.ac.uk](mailto:cles-studentships@exeter.ac.uk))

If you have any general enquiries about the application process please email [cles-studentships@exeter.ac.uk](mailto:cles-studentships@exeter.ac.uk) or phone +44 (0)1392 725150/723706/723310. Project specific queries should be directed to the individual project supervisors.

The closing date for applications is midnight on Sunday 4 March 2012. We expect to hold interviews in the week commencing 12 March 2012.

Dr. Lena Bayer-Wilfert Royal Society Research Fellow  
Institute of Evolutionary Biology University of Edinburgh

currently: ETH Zürich IBZ - Experimentelle Oekologie/GDC ETH Zentrum CHN J14 Switzerland

Tel. + 41 44 62 3993

[v1lbwilf@staffmail.ed.ac.uk](mailto:v1lbwilf@staffmail.ed.ac.uk)

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## UExeter CoevolutionaryDynamics

UExeter.CoevolutionaryDynamics

We are inviting applications for a NERC-funded PhD studentship to commence October 2012. For eligible students the award will cover UK/EU tuition fees and an annual stipend (in 2011/12 this was £13,590 for full-time students, pro rata for part-time students) for at least three years. Applicants with a strong academic record and interest in species interactions within natural and agricultural settings are encouraged to apply.

Project title: It's a phage-eat-bacterial world: Testing coevolutionary dynamics within a tri-trophic plant-bacteria-phage system

School: University of Exeter, Cornwall campus, Bio-

Sciences in the Centre for Ecology & Conservation

Supervisor: Dr Britt Koskella

Project details: Coevolution between hosts and parasites is fundamental to both biodiversity and ecosystem functioning. Most coevolutionary studies have examined the interaction between two players (e.g., a predator and its prey), but it is clear that these interactions typically happen within a network of species interactions. Microbial systems provide an exciting opportunity to examine these more realistic but intrinsically complex dynamics. As well as excellent model systems, microbial systems are themselves of major importance to the health of human, agricultural, and natural populations. A key challenge is to understand how microbial communities are influenced by interactions with both their eukaryotic hosts and their viral parasites (bacteriophages).

This project focuses on a natural association among plants, bacteria (including a prevalent and devastating tree pathogen), and parasitic phages. This tri-trophic interaction is ideal for examining multi-player coevolutionary dynamics in that adaptation to one antagonist might critically alter the interaction with the other. The approach will be to combine studies of natural population dynamics with experimental coevolution to test how bacterial communities change as a function of seasonality, selection by phages, and the plant immune response. The results will be of both basic and applied interest, as understanding these interactions is key to predicting disease outbreaks in natural and agricultural systems.

Training: The student will gain training in novel techniques relevant to both academic research and biotechnology, ranging from experimental evolution of microbes both in vitro and in vivo, to bioimaging of plant responses to bacterial pathogens, to metagenomics and bioinformatic analysis of bacterial and phage communities. The studentship will include lab, greenhouse, and field work across the UK and Europe, and will benefit from previous frozen libraries of natural bacteria and phage populations for a quick start to the project. The student will join a lab group, co-supervised by Prof Angus Buckling, of 3 post-doctoral researchers and 3 PhD students, all working on the evolution and ecology of microbes. In addition, they will benefit from lab meetings with the disease group at Tremough, including Prof Mike Boots and Dr Michiel Vos.

Eligibility: You must have obtained, or be about to obtain, a First or Upper Second Class UK Honours degree, or the equivalent qualifications gained outside the UK, in a relevant subject. The studentship is only available to UK and other EU nationals (due to funding criteria,

EU nationals who have not been resident in the UK for the three years prior to the start of their studentship will be restricted to a fees-only award). If you have not always lived in the UK refer to the NERC Studentships Handbook, section B for more information (<http://www.nerc.ac.uk/funding/application/studentships/>).

How to apply: Complete an online 'Funding application' web form where you must submit some personal details, including the names and contact details of two referees, and upload the following documents (preferred format for uploaded files is .pdf and preferred filename should start with your last name): CV, Cover letter (please clearly identify which project you would like to be considered for and outline your academic interests, prior research experience and reasons for wishing to undertake the project), Transcript (this should be an interim transcript if you are still studying), 2 references (if your referees prefer, they can email the reference direct to [studentships@exeter.ac.uk](mailto:studentships@exeter.ac.uk))

Application Deadline: midnight on Sunday 4 March 2012

For further details please contact Dr Britt Koskella [B.L.Koskella@exeter.ac.uk](mailto:B.L.Koskella@exeter.ac.uk)

If you have any general enquiries about the application process please email [cles-studentships@exeter.ac.uk](mailto:cles-studentships@exeter.ac.uk) or phone +44 (0)1392 725150/723706/723310. Project specific queries should be directed to the individual project supervisors.

Dr Britt Koskella Centre for Ecology & Conservation Biosciences, College of Life & Environmental Sciences University of Exeter, Cornwall Campus Tremough, Penryn, TR10 9EZ UK

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## UExeter *Drosophila*TE Evolution

PhD Project - Centre for Ecology & Conservation, University of Exeter, Cornwall Campus

Sex, selfish genes, and insecticide resistance

Insecticide resistance is rapidly reaching global fixation in many pest populations, but we know little about



how resistance is achieved and spread. We will examine the mechanism and fitness consequences of insecticide resistance in the fly *Drosophila melanogaster*, where resistance is conferred by an Accord retrotransposon (TE) inserted into a cytochrome P450 genes (the Cyp6g1 gene). TE's are jumping genes that selfishly replicate within a host genome. The Accord TE up-regulates Cyp6g1 gene expression facilitating detoxification of DDT and it also causes females to pack eggs with more RNA, which increases egg survival. However there are sexually antagonistic effects of the allele because in males, up-regulation of Cyp6g1 can decrease male mating-success and alter male aggression.

Recently, several new TE insertions and duplications of Accord alleles have been discovered with a clear evolutionary progression. So we now have additional jumping genes inserting into older jumping genes, indicating this genomic region is a hot-spot for TE-insertions. Intriguingly, these new insertions and duplications are associated with large sex differences in resistance to DDT, but we do not understand how a single insertion can have such different impacts on males and females. Our previous work has shown that there are large sexually antagonistic effects of Accord and that there are large epistatic effects as well, such that the fitness consequences of resistance depends on genetic background and fly gender. Understanding how resistance alleles spread requires a complete understanding of these sex-specific and background effects. To that end, this project will build on previous results to further investigate the mechanisms underlying these differences, while also characterising the fitness effects of recent novel TE-alleles discovered in our lab. This is a unique opportunity to examine the impact of multiple jumping genes inserting into the promoter region of a single P450 gene.

The impact of these additional TE-insertions on the level of up-regulation of Cyp6g1 in male and female *D. melanogaster* will be assessed. In addition, the amount RNA deposited in eggs by females carrying resistance alleles, and the impact on male aggressive behaviour and mating success will be quantified in relation to the different TE-insertions. Finally, the proposed link between DDT-resistance and juvenile hormone will be investigated to see if this causes the sex differences noted previously. This novel and exciting project would suit a student with interests in the molecular basis of sexual conflict and how changes in single genes gave can have massive phenotypic effects.

This project will be undertaken at the Centre for Ecology & Conservation at the Cornwall Campus (<http://biosciences.exeter.ac.uk/cec/>), and a background in evolutionary or molecular biology would be advanta-

geous. Applicants must be from the EU and will work with DJ Hosken & N Wedell. Closing date for applications is 24th Feb 2012. Contact David Hosken - [d.j.hosken@exeter.ac.uk](mailto:d.j.hosken@exeter.ac.uk).

Prof DJ Hosken Chair in Evolutionary Biology Director, Centre for Ecology & Conservation Biosciences, College of Life & Environmental Sciences University of Exeter, Cornwall Campus Tremough, Penryn, TR10 9EZ UK

[d.j.hosken@exeter.ac.uk](mailto:d.j.hosken@exeter.ac.uk) 01326 371843 [http://biosciences.exeter.ac.uk/staff/index.php?web\\_id=-david\\_hosken](http://biosciences.exeter.ac.uk/staff/index.php?web_id=-david_hosken) DJ Hosken <[D.J.Hosken@exeter.ac.uk](mailto:D.J.Hosken@exeter.ac.uk)>

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## UExeter InsectFitnessMaximization

A fully funded NERC PhD position is available from October 2012 at the Centre for Ecology and Conservation at the University of Exeter's Cornwall Campus.

Social networks in wild insects

This project will investigate the possibility that wild insects have networks of places and/or other individuals that they interact with in a non-random fashion. An important issue in animal reproduction is to identify a mate that will maximise the fitness of the searching individual or their offspring. Many different cues have been identified that are used for both mate finding and mate choice, but we have no idea whether non-social invertebrates may preferentially interact with a group of preferred conspecifics rather than simply encountering other individuals at random. This study will be integrated with a project we have to record the lives of every individual in a natural population of field crickets (*Gryllus campestris*) in a field in Northern Spain. All individuals are tagged and DNA fingerprinted and a network of video cameras records their movements and interactions (see [www.wildcrickets.org](http://www.wildcrickets.org)). The studentship will test hypotheses about movement, social interactions and behaviour in this unique study system. It requires a highly self motivated, resourceful and ambitious student with a strong interest in evolution and behaviour, prepared to work in Spain for several weeks a year and not afraid of using quantitative techniques to analyse data.

Supervisors: Professor Tom Tregenza Dr Rolando Rodríguez-Muñoz <http://www.selfishgene.org/Tom/-Opportunities.htm> Available now, will close when an offer is made, get in touch now!



Tom Tregenza Professor of Evolutionary Ecology Centre for Ecology & Conservation School of Biosciences University of Exeter Cornwall Campus Penryn TR10 9EZ

T.Tregenza@Exeter.ac.uk Tel: (+44) 1326 371862 Fax: (+44) 871 528 2950

Reprints of publications can be downloaded from my website: <http://www.selfishgene.org/Tom/> “Tregenza, Tom” <T.Tregenza@exeter.ac.uk>

## UGroningen Evolutionary Theory

PhD (4 years) or Post-doc (3 years) position in Theoretical Evolutionary Ecology

“Causes and consequences of variation in dispersal behaviour”

### Organization

This research project is a collaborative effort of the research groups Theoretical Biology and Behavioural Ecology and Self-organization (BESO), which both are part of the Centre for Ecological and Evolutionary Studies at the University of Groningen (The Netherlands). The research is funded by a TopGrant (ALW-TOP/11.017) allocated to Prof. Jan Komdeur from the Netherlands Science Foundation (NWO).

### Job description

In many organisms individuals differ systematically in their dispersal behaviour. Moreover, individual variation in dispersal is correlated with other traits, including metabolism, activity, aggressiveness, boldness, sociability, behavioural flexibility and learning ability. Although such correlation structures (“dispersal syndromes”) have been described for many species, neither their evolutionary emergence nor their ecological, evolutionary and genetic consequences are well understood. By means of a theoretical approach (using analytical models and individual-based computer simulations) the project will address questions such as: Why are the dispersal syndromes in different species remarkably similar in some respects and remarkably different in others? What are the consequences of variation in dispersal for social evolution (e.g., cooperative breeding) and the mating system? What are the implications of non-equilibrium dynamics for the genetic structure of a population and for the estimation of pedigrees, relatedness and fitness?

The project is designed as a 4-year PhD project; however, we also welcome applications from exceptional post-doctoral researchers for a 3-year position. The close collaboration between theoretical and behavioural researchers, along with access to the long-term Seychelles warbler dataset, provides a unique opportunity to forge a link between conceptual models and real-world data.

### Qualifications

- MSc in Theoretical Biology, Behavioural Ecology, Evolutionary Biology or related discipline (for a PhD candidate) or a PhD in any of these disciplines (for a postdoc).
- Research experience in areas related to model development and analysis, individual-based simulations or dynamical systems (desired for a PhD candidate; essential for a postdoc).
- Working knowledge of programmes like C++, Maple/Mathematica/Matlab or R; excellent programming skills (desired for a PhD candidate; essential for a postdoc).
- Excellent academic record (as shown by a list of examination marks); proven ability to plan and prioritize work and to work to and meet deadlines; strong commitment to excellence in research and teaching.
- Ability to develop creative approaches to problem solving; creativity, curiosity, and ambition; proactive attitude; ability to implement new methods and ideas.
- Excellent organisational and interpersonal skills; ability to work in a team consisting of scientists, students and technical assistants with different backgrounds.
- Excellent communication skills: effective paper writing skills (demonstrated by publications) and ample experience with delivering presentations.
- Good command of the English language (oral and written).

### Conditions of employment

#### For the PhD

The University of Groningen offers a salary of 2042 (scale 50, number 0) gross per month in the first year, up to a maximum of 2612 (scale 50, number 3) gross per month in the final year, based on a full-time position. The position requires residence in Groningen and must result in a PhD thesis within the 4-year contract period. A PhD training program is part of the agreement and the successful candidate will be enrolled in the Graduate School of Science. The successful candidate will first be offered a temporary position of 1.5 years with the perspective of prolongation for another 2.5 years.

After the first year, there will be an evaluation on the perspectives of the successful completion of the PhD thesis within the next three years. If these perspectives are poor, the contract may not be renewed.

For the Post-Doc

The university offers a gross salary depending on qualifications and experience, ranging between 2744 gross (scale 10, number 3) per month and a maximum of 3755 (scale 10, number 12) gross per month for a full-time post-doctoral job. This position is defined according to the UFO function profile 'researcher'. After the first year there is an assessment interview; continuation of the project for the next two years is dependent on successful performance during the first year.

Starting date

The preferred starting date is June 1, 2012. The position will be filled as soon as suitable candidates have been found.

Additional information

Information about the University of Groningen can be found at the website [www.rug.nl](http://www.rug.nl). Detailed information about the Theoretical Biology and the

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## UGuelph StatPopGenetics

University of Guelph - Statistical Population Genetics

An M.Sc. position beginning in September 2012 is available in the area of statistical population genetics. A student can attain the degree either through the Department of Integrative Biology ([www.uoguelph.ca/-ib](http://www.uoguelph.ca/-ib)) or the Graduate Program in Bioinformatics ([www.bioinf.uoguelph.ca](http://www.bioinf.uoguelph.ca)). The project will involve developing a novel approach to understand protein evolution using multivariate statistical methods that are nonparametric. The approach will be initially applied to proteins involved in calcium signalling, but is a general technique applicable to all types of sequence data.

Applicants should have a strong quantitative background, such as in statistics, computer science, physics, engineering, mathematics or biology (with courses

taken in multivariate calculus, linear algebra, population/quantitative genetics and/or statistics). Priority will be given to applicants with Canadian citizenship or permanent residency, although outstanding international students are also encouraged to apply.

In your introductory email, please send a statement of research interests and career goals, a brief CV including an official or unofficial summary of grades and contact information of two references. This information is to be sent to Dr. Cortland Griswold at [cgriswol@uoguelph.ca](mailto:cgriswol@uoguelph.ca).

Applications will be evaluated on a first come, first served basis and the absolute deadline for applications is June 15, 2012.

Cortland Griswold Assistant Professor Department of Integrative Biology University of Guelph Guelph, ON N1G 2W1 Canada

[cgriswol@uoguelph.ca](mailto:cgriswol@uoguelph.ca) Telephone: 519-824-4120 x56240 <http://sites.google.com/site/griswoldlab/>  
[cgriswol@uoguelph.ca](mailto:cgriswol@uoguelph.ca)

## UHelsinki EvolutionaryGenetics

PhD studentship in evolutionary genetics

University of Helsinki, Finland. Department of Biosciences, Ecological Genetics Research Unit

Supervisors: Prof. Juha Merila and Dr. Takahito Shikano.

Funding: Salary of approximately 2230 EUR/month including all standard pension benefits, insurances and occupational health care that are provided for University employees.

Duration: 3-4 years, with a four month trial period.

Requirements: An ideal candidate would have a broad interest in evolutionary biology and a background in one or several of the following fields: evolutionary genetics, statistical or population genetics/genomics, animal or plant breeding sciences. Basic skills or interest in developing bioinformatics competence are highly desirable. The candidate should be highly self-motivated and able to work both independently and in a team. Capacity to face intellectual challenges, willingness to learn new skills and to explore new intellectual territories are qualities expected from all candidates.

Project outline: Understanding patterns, processes and

genetic pathways to local adaptation in systems subject to varying degrees of genetic drift and migration are the focus of an Academy of Finland funded project on population differentiation in nine-spined sticklebacks (*Pungitius pungitius*). By using controlled inter- and intra-population crosses the project aims to explore the genetic basis of a suite of phenotypic traits using various genomic approaches in genetically divergent populations. The student to be enrolled in this project can expect to get hands-on experience in breeding fishes, genetic and genomic analyses of inter-population crosses, as well as different gene-mapping methods. A certain amount of leeway will be given to pursue personal and collaborative side-projects.

Eligibility: Masters degree or equivalent in Biology, Animal/plant breeding or Genetics. Proven skills in English are required for admission to the post graduate study program (minimum 580 points from TOEFL PBT, grade A, B or C from CAE/CPE or score of 6.5 from IELTS).

To apply: Please send (i) a CV, (ii) publication list (if available), (iii) copy of academic transcript, (iv) max. 2 page statement of research interests and motivation for applying this position and (v) two reference letters to [egru-mail@helsinki.fi](mailto:egru-mail@helsinki.fi) by March 30th 2012.

Further information: Prof. Juha Merila, Department of Biosciences, Viikinkaari 1, 00014 University of Helsinki, [juha.merila@helsinki.fi](mailto:juha.merila@helsinki.fi).

Juha Merila 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) Gsm: +358-40-8374165 Fax: +358-9-19157694 www: <http://www.helsinki.fi/-biosci/egru/> Blog: <http://blogs.helsinki.fi/egru-blog/> Juha Merilä <[juha.merila@helsinki.fi](mailto:juha.merila@helsinki.fi)>

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## UKaiserslautern CiliateBiodiversityBiogeography

Ph.D. position in ciliate biodiversity and biogeography in Kaiserslautern, Germany

A three-year Ph.D. position is available in the newly established DFG-Emmy-Noether Independent Junior Research Group for Microbial Diversity at the University of Kaiserslautern. This work is part of a 5-year study of the diversity and biogeography of soil-inhabiting ciliates in Neotropical rainforests using 454 pyrosequenc-

ing. The aim is to evaluate the number of ciliate species, and their phylogenetic diversity, in lowland forests in Costa Rica, Panama, and Ecuador, and to uncover biogeographical patterns among these forests.

Requirements: bioinformatics skills; experience in DNA amplification and sequencing; ability to handle Neotropical fieldwork; M.S., Diplom, or equivalent in the fields of biology or computer science; good working knowledge of English, both written and verbal; motivation and ability to work independently. Salary follows DFG guidelines (E13/2).

The Microbial Diversity research group is headed by Dr. Micah Dunthorn. Other work in the group includes using Illumina whole genome sequencing to evaluate putative asexuality in ciliates and other microbial eukaryotes, and ciliate molecular phylogenetics. This group is located in the Department of Ecology, headed by DFG-Heisenberg Professor Dr. Thorsten Stoeck.

If interested, please send an e-mail with a single pdf containing your C.V., a description of your motivation and research interests, reprints of published papers, and contact details of two academic references. Applications will be screened until the position is filled. Starting date: June 2012, or soon thereafter.

Micah Dunthorn

[dunthorn@rhrk.uni-kl.de](mailto:dunthorn@rhrk.uni-kl.de)

<http://www.bio.uni-kl.de/microbialdiversity/>  
[colpodea@gmail.com](mailto:colpodea@gmail.com)

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## UppsalaU FloralEvolutionEco

PhD opportunity in evolutionary ecology

I am looking for a motivated student interested in floral evolutionary ecology to join my lab at Uppsala University, Sweden. The studies will focus on the evolutionary ecology of floral scent and understanding male reproductive success. You will have the opportunity to do field work in both North America and in Sweden and to develop research projects base on your interests. Please feel free to contact me for more information. Applications will be accepted until March 15, 2012.

Contact information: Amy Parachnowitsch ([amyparachnowitsch@gmail.com](mailto:amyparachnowitsch@gmail.com) or [amy.parachnowitsch@ebc.uu.se](mailto:amy.parachnowitsch@ebc.uu.se))

for more details about the position and the appli-

cation (you must apply through the university): <http://www2.personalavd.uu.se/ledigaplatser/-286phd.html> for more information about the lab and department: <http://www.ebc.uu.se/-Research/IEG/Plant+Ecology+and+Evolution/-Research+Groups/Parachnowitsch-group/> Amy Parachnowitsch <amyparachnowitsch@gmail.com>

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## UppsalaU Sexually Antagonistic Variation

Uppsala University hereby invites applications for a Postgraduate PhD position in Animal Ecology - sexually antagonistic genetic variation

at the Department of Ecology and Genetics, Evolutionary Biology Centre (EBC) with a tentative starting date being May 1<sup>st</sup>, 2012, or as soon as possible after this date. The Evolutionary Biology Center hosts one of the world's largest aggregations of evolutionary biologists, and is a prime research environment for a wide range of fields in evolutionary biology (see "<http://www.ebc.uu.se/>" for more information). The working atmosphere is very international with English as our operational language. Our graduate school offers a creative and stimulating environment and is very rich in seminars, courses and possibilities to interact with other scholars and students (see "<http://www.ebc.uu.se/education/>") – graduate students recently ranked Uppsala University in first place among all institutions in Europe in the subject of biology (CHE European ranking). Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful surroundings conveniently situated 35 minutes by train from Stockholm.

**\*Brief research outline:** **\*\*Although males and females share much of the same genome, selection can be distinct in the two sexes. Sexually antagonistic loci are those loci where selection acts in opposing directions in the two sexes. This PhD student position is aimed at improving our emerging understanding of the **\*\*architecture of sexually antagonistic genetic variation\*\***. Insects (seed beetles and/or fruit flies) will serve as main model systems and the research will primarily employ quantitative genetic techniques. The research will establish a series of discrete genotypes and use crosses between these to analyse, describe and understand the architecture of sexually antagonistic genetic variation. Traits in focus are sex specific measures of**

life history traits (especially metabolism) and integrative traits such as life-time fitness. **\*\*\***

**\*This PhD \*position forms a part of a new project on genetic conflict, funded by the European Research Council and the Swedish Research Council. The entire project will employ some 6-8 PhD students and postdocs, apart from a full time TA and the PI, and will strongly encourage interactions and collaborations within the group.**

**\*Salary and appointment\*:** The duration of the PhD training period is four full years. The successful candidate will receive a postgraduate fellowship the first year (currently 15.500 SEK/month) and a postgraduate position year 2-4 (currently 23.300 – 26.400 SEK/month) including full social benefits.

**\*Eligibility\*:**The successful candidate should have a relevant MSc degree (or equivalent) in biology/ecology.

**\*Qualifications and merits\*:** We seek highly motivated candidates with a documented and strong interest in evolutionary biology and/or evolutionary genetics, preferably also with past experience of quantitative genetic analyses and an understanding of life history theory and sexual selection. Experience of laboratory work with insects is a merit as is previous experience of scientific writing and publishing. Because the holder of this position will collaborate and interact closely with other members of the group, we will put emphasis on both independence and ability to collaborate. The applicant is expected to have a good knowledge (spoken and written) of the English language.

**\*To apply\*:**Applications should include (1) personal information/background, (2) complete CV (3) a description of undergraduate training, (4) an authorized copy of the undergraduate degree and (5) the names and email addresses of three referees. Applications should be sent either by regular mail to: Göran Arnqvist, Animal Ecology, Dept. of Ecology and Genetics, Norbyvägen 18D, University of Uppsala, SE-752 36 Uppsala, Sweden; or electronically as PDF files via email to: [Goran.Arnqvist@ebc.uu.se](mailto:Goran.Arnqvist@ebc.uu.se). **\*Closing date for applications is March 20, 2012\*.**

**\*For further information\*about the position, please contact the main supervisor and PI of the group: Professor Göran Arnqvist (phone +46 18 471 2645, e-mail [Goran.Arnqvist@ebc.uu.se](mailto:Goran.Arnqvist@ebc.uu.se)).**

Prof. Göran Arnqvist Animal Ecology Department of Ecology and Evolution Evolutionary Biology Centre University of Uppsala Norbyvägen 18d SE - 752 36 Uppsala Sweden

Email: [Goran.Arnqvist@ebc.uu.se](mailto:Goran.Arnqvist@ebc.uu.se) Phone: +46-(0)18-

471 2645 Cell phone: +46-(0)70-2935032 Fax: +46-(0)18-471 6484 NEW homepage with PDF reprints and more at: <http://www.anst.uu.se/goarn789/index.html>  
Goran.Arnqvist@ebc.uu.se

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## UReading PerennialCycleEvolution

Dear all,

A PhD studentship is available at Reading University and East Malling Research. We are looking for applicants with a strong academic record and an interest in evolution, population genetics, bioinformatics and crop improvement.

Project title: Mapping deciduousness in diploid strawberry - insights into the evolution of the perennial cycle

School: School of Biological Sciences

Supervisors: Professor Nick Battey (University of Reading) and Dr Richard Harrison (East Malling Research)

Abstract: Next generation sequencing (NGS) technologies are revolutionising the study of non-model systems. It is now possible to understand the genetic architecture underpinning some of the most agriculturally important aspects of plant growth and development in a comparatively short amount of time. This project will use an NGS approach, combined with genetic linkage mapping to understand the molecular mechanisms controlling deciduousness, a key trait in the perennial cycle, utilising the diploid strawberry as a model system for Rosaceous crops. There is a strong emphasis on bioinformatics, including sequence assembly and comparative genomics as well as practical laboratory work involving the use of a new Illumina sequencer at East Malling Research.

Eligibility: Applicants should hold or expect to gain a minimum of a 2:1 Bachelors Degree in a relevant subject. Due to restrictions on the funding this studentship is only open to candidates from the UK/EU.

Funding Details: The studentship commences in October 2012, is three years in duration and will cover Tuition Fees and Research Council minimum stipend.

How to apply: To apply for this studentship please submit a PhD application to the University V see <http://www.reading.ac.uk/Study/apply/pg-applicationform.aspx> Application Deadline: 16 March 2012

For further details please contact n.h.battey@reading.ac.uk or richard.harrison@emr.ac.uk

Potential candidates should be aware that applications for the following PhD project are being considered alongside two other advertised projects with East Malling Research. Only two of the three projects will receive funding.

Dr Richard Harrison

Genetics and Crop Improvement East Malling Research  
New Rd, East Malling, ME19 6BJ

East Malling Research registered office: New Road, East Malling, Kent ME19 6BJ. Tel. 01732-843833. Registered in England No. 5019373. Charity registration No.1102243.

Richard Harrison <richard.harrison@emr.ac.uk>

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## UTulsa PopulationGenetics

Graduate research opportunity in Population Genetics/Molecular Ecology Department of Biological Sciences - University of Tulsa

A graduate student at the M.S. or Ph.D level is sought to work with Dr. Warren Booth in the Department of Biological Sciences at the University of Tulsa, Oklahoma. The successful applicant will develop a thesis research project in the field of Population Genetics and Molecular Ecology. The main focus should be towards the impact of habitat fragmentation/urbanization on genetic diversity and/or reproductive life history traits, and may focus on a single species, or be a multi-species project. My current research includes mammals, reptiles, and insects, therefore the student is not constrained to a single group.

Applicants for this position should have a strong background in population genetics/molecular ecology, be willing to undertake field research for sample collection, and meet the admission requirements for the Department of Biological Sciences graduate program. (<http://www.utulsa.edu/academics/colleges/college-of-engineering-and-natural-sciences/departments-and-schools/Department-of-Biological-Science.aspx>)

For more information about this opportunity, contact Warren Booth at [wbooth@ncsu.edu](mailto:wbooth@ncsu.edu). Additional information regarding my research can be found at my current webpage - <http://www.cals.ncsu.edu/>



entomology/booth . I will be moving to Tulsa in August, 2012.

– Dr Warren Booth Research Associate North Carolina State University Department of Entomology 3312 Gardner Hall Raleigh, NC 27695-7613

Tel. (919) 515-1662 - lab (919) 758-9481 - cell Webpage: <http://www.cals.ncsu.edu/entomology/-booth> United States Association of Reptile Keepers (USARK) - Director WWW.USARK.ORG

Warren Booth <wbooth@ncsu.edu>

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## UWindsor Aquatic Genomics

University of Windsor; Ecological Genomics

One Ph.D. position beginning September 2012 or January 2013 is available at the Great Lakes Institute for Environmental Research (GLIER), University of Windsor. The project will involve a combination of ecological and genomics techniques and approaches to address broad environmental and evolutionary questions. The candidate will study multiple stressors in aquatic environments with special emphasis on the metal-induced mutation process from genomes to populations and will gain broad interdisciplinary perspective.

We are looking for highly motivated graduate students. Candidates should have a strong background in biology. Successful applicants must demonstrate interest and/or experience in team-based and interdisciplinary projects. International students with strong credentials and publication record are also considered.

Interested student should send their CV, a brief statement of research interest, and a list of 3 references to Dr. Melania Cristescu at Email: [mcris@uwindsor.ca](mailto:mcris@uwindsor.ca)

Melania E. Cristescu Associate Professor Director, NSERC CREATE Training Program in Aquatic Ecosystem Health University of Windsor Great Lakes Institute for Environmental Research 401 Sunset Ave Windsor Ontario Canada N9B 3P4

Phone: (519) 253-3000 Ext. 3763 FAX: (519) 971-3616 E-Mail: [mcris@uwindsor.ca](mailto:mcris@uwindsor.ca) [www.uwindsor.ca/glier/-melania-cristescu](http://www.uwindsor.ca/glier/-melania-cristescu) [www.uwindsor.ca/erasmus-create](http://www.uwindsor.ca/erasmus-create) Melania Cristescu <[mcris@uwindsor.ca](mailto:mcris@uwindsor.ca)>

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## U Zurich Physiological Evolution

Physiological flexibility as an evolved trait to adapt to changing environments

Position available immediately 6 months trial period plus two additional years of funding.

Key words: respirometry; animal handling; blood sampling; AVP; hormone assays; physiological adaptation; social flexibility; ecology and evolution

I am looking for a PhD candidate to study physiological flexibility as an evolved trait. Changes in physiology enable adaptation to changing environments (physiological adaptation) and regulate behavioral adaptation. The main aim of our research group is to understand the evolved physiological mechanisms that allow animals to behave adaptively in a changing environment. (See full project summary at end of email).

The student will be supervised by Dr. Carsten Schradin and be part of the research group studying African striped mice (*Rhabdomys pumilio*; see [www.stripedmouse.com](http://www.stripedmouse.com) and [www.ieu.uzh.ch/-research/behaviour/endocrinology.html](http://www.ieu.uzh.ch/-research/behaviour/endocrinology.html)).

I am seeking a highly-motivated, independent candidate with excellent organizational skills. Strong intellectual skills are desired. Technical skills are mandatory to run the respirometry field laboratory.

The ideal candidate has a background in eco-physiology, behavioral endocrinology or behavioral ecology. Of advantage is experience with animal handling, with respirometry, with hormone analyses, in experimental design and statistical analysis of data. The working language in my group is English.

The student will be based at the Department of Animal Behavior, Institute of Evolutionary Biology and Environmental Studies at the University of Zurich. In Zurich the PhD student has to work in the hormone laboratory, visit courses (12 ECS) and give lectures to fulfill the conditions of the PhD program in evolutionary biology: <http://www.evobio.uzh.ch/-index.html>. Zurich is a highly attractive city in beautiful surroundings, with a multinational population, and many educational and recreational opportunities (<http://www.zuerich.com>).

Data will be collected in the field in South Africa, where the PhD student has to spend two field seasons of ap-

prox. 9 months each. In the field, the candidate has to run independently the respirometry laboratory and conduct field experiments with the help of field assistants.

The first 6 months will be a trial period during which time the student has to visit courses in Zurich and develop a research proposal. After the trial period the position can be extended for another 2 years. This will depend on 1. the quality of the student, and 2. which position the supervisor (Dr. Schradin) will have in 2013.

The salary follows the Swiss National Science Foundation scale and is very competitive, especially for somebody spending significant time in South Africa (CHF 41 000 for the first year, CH 44 400 for the second year; this is 34 000 Euro during the first and 37 000 Euro during the second year). The student is expected to apply for funding for an additional year, for example from the Forschungskredit in Zurich ([http://www.researchers.uzh.ch/promotion/-forschungskredit\\_en.html](http://www.researchers.uzh.ch/promotion/-forschungskredit_en.html)).

The position can be filled immediately.

Deadline for application is the 20th of February, and interviews will take place in March.

Please send your application by email and as PDF to [carsten.schradin@ieu.uzh.ch](mailto:carsten.schradin@ieu.uzh.ch). Your application should include: \* a letter outlining your past research and particular motivation for this position, information on when you could start and contact details of two referees (max. 2 pages) \* your CV \* PDFs of publications (published, in press or in preparation) \* PDF of your master thesis (if not published yet)

PD Dr. Carsten Schradin Group Leader Behavioral Endocrinology and Eco-Physiology

Institute of Evolutionary Biology and Environmental Studies Department of Animal Behavior University of Zurich, Winterthurerstrasse 190, 8057 Zurich, Switzerland. Tel: +41 - (0)44 635 5486

Tel. secretary: +41 - (0)44 635 5271 Fax: +41 - (0)44 635 5490

Honorary Associate Professor

School of Animal, Plant and Environmental Sciences  
University of the Witwatersrand, Johannesburg, South Africa

Head

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

<http://www.stripedmouse>

<http://www.ieu.uzh.ch/research/behaviour/-endocrinology.html>

Summary of the entire project, into which the PhD project will be incorporated.

The proposed project will study how evolved endocrine mechanisms allow animals to behave adaptively in their changing natural environment. The

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## WrightStateU InsectPhylogenetics

Ph.D. student opportunity at Wright State University: Insect phylogenetics and evolution

I am seeking a Ph.D. student to join my laboratory studying the evolution and ecology of parasitoid flies ([www.wright.edu/biology/department/directory/-faculty/stireman/](http://www.wright.edu/biology/department/directory/-faculty/stireman/)). While the specific focus of the dissertation research is negotiable, the research assistantship will require contributing to a collaborative, NSF funded project focused on understanding the phylogenetics and evolution of parasitoid flies in the family Tachinidae. This important and fascinating group of insects has experienced a recent explosive radiation in diversity and exhibits an incredible diversity of reproductive strategies and host associations. However, the origins, relationships, and biogeography of the family are poorly understood (See the NSF project summary below for a brief overview of our general goals). The successful applicant will develop a thesis research project on insect evolution and systematics using phylogenetic, genomic, and comparative methods and will have the opportunity to participate in international collecting expeditions to Australia, S. Africa, SE Asia, and elsewhere.

At least four years of support are available through a combination of graduate research and teaching assistantships, and the student may start as early as Summer 2012. The student will be enrolled in Wright State's Interdisciplinary Environmental Sciences Ph.D. Program. Application requirements include: Bachelors degree in Biology, Entomology, or related field; GRE scores within the last 5 y; minimum IBT TOEFL score of 100 and ability to pass a verbal English test (for-

eign students only). Preferred qualifications include: Masters degree or equivalent experience; a strong background in Entomology, with interest and/or experience in insect systematics and evolution; good communication skills. The current stipend is approx. \$23,000 on a 12 month basis.

See <http://www.wright.edu/academics/envsci/> for further information on the Environmental Sciences Ph.D. program at Wright State University, including program requirements, application procedures and stipends. Please contact John Stireman ([john.stireman@wright.edu](mailto:john.stireman@wright.edu)) for more information about research in the lab and the program prior to submitting an application.

John O. Stireman III Department of Biological Sciences  
3640 Colonel Glenn Highway 235A, BH, Wright State University Dayton, OH 45435

Phone: 937-775-3192 email: [john.stireman@wright.edu](mailto:john.stireman@wright.edu)

Project Summary: Collaborative Research: Phylogeny and Evolution of World Tachinidae (Diptera)

Tachinidae are the most diverse and important group of insect parasitoids outside the Hymenoptera. They are also among the youngest and most rapidly diversifying families of flies. All tachinids are endoparasitoids, attacking as a group at least 14 arthropod orders. They parasitize this diversity of hosts with a remarkable array of oviposition and reproductive strategies. As enemies of other insects, particularly herbivores, tachinids play important ecological roles in both natural and managed ecosystems. Despite their diversity and importance, there has never been a comprehensive phylogenetic study of the family. Relationships among tribes and subfamilies are obscure and the family is among the

most taxonomically difficult of Diptera. The lack of a robust and predictive classification of Tachinidae has hindered both basic and applied research on the family. The goals of the proposed research are: (1.) Robust reconstruction of phylogenetic relationships among major tachinid lineages. (2.) Production of a stable, predictive classification of Tachinidae. (3.) Focused phylogenetic analyses of two biologically interesting and agronomically important groups, the tribe Blondeliini and the subfamily Phasiinae. (4.) Analysis of the evolution of reproductive traits, oviposition strategy, and host associations and their effects on diversification and biological control success. And (5.), dissemination of taxonomic and biological information on Tachinidae.

Intellectual Merit: A sound tachinid phylogeny and a reliable taxonomic infrastructure are necessary to understand their roles as enemies, the evolution of their diverse attack strategies, and the causes of their rapid evolutionary diversification. With the aid of a network of collaborators, relationships of world Tachinidae (200+ genera, 50+ tribes, all four subfamilies) will be inferred using 8-10 genes and a large (150+) array of morphological characters. RNAseq methods will permit new markers to be developed, establish robust basal relationships, and provide a foundation for future genomic research on the family. We will provide an unprecedented, broad scale phylogeny of Tachinidae with which we can revise existing classifications and analyze the evolution of key

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## ArizonaStateU WebProgrammer

The Center for Evolutionary Medicine and Informatics at Arizona State University's (ASU) Biodesign Institute invites qualified individuals to apply for open positions: web application developer and computer programmer assistant. Please go the ASU employment site at <http://cfo.asu.edu/hr-applicant> and click on jobs - staff. Select job ID 27817 (Computer Programmer Assistant) and 27819 (Web Application Developer) for more information and to apply.

Carol Williams Evolutionary Medicine and Informatics The Biodesign Institute at Arizona State University Tempe, Arizona 85287-5301 [cemi.asu.edu](mailto:cemi.asu.edu)

Carol Williams <Carol.Williams.1@asu.edu>

## AustralianNatIU VertDiversity

\*Multiple research positions: Craig Moritz lab @ ANU\*

Four positions (two 5yr Postdocs, one Lab manager, one 4 yr PhD scholarship) are available in a new lab being established by Craig Moritz at the Australian National University ([http://biology.anu.edu.au/Craig\\_Moritz/](http://biology.anu.edu.au/Craig_Moritz/)). The project, supported by the Australian Research Council, aims to develop and apply novel approaches to prediction and discovery of biodiversity hotspots, with emphasis on the poorly known vertebrate (especially reptile) diversity of the monsoonal tropics of northern Australia. The overall project

will integrate environmental modeling over space and time with use of next-gen sequencing, coalescent analyses and phenotype to provide robust estimates of lineage and phylogenetic endemism and to improve understanding of biodiversity dynamics in response to past climate change. The appointees will benefit from interactions across multiple labs in the Division of Evolution, Ecology and Genetics of the Research School of Biology (<http://biology.anu.edu.au/eeg/>) as well as geographically adjacent groups in CSIRO.

All positions are available from July 1, 2012. Details of positions and instructions for applying can be found as follows:

\*Postdoctoral Associates\* (spatial modeling and genomics): <http://jobs.anu.edu.au/PositionDetail.aspx?P=2557> \*Laboratory Manager\* (Research Officer 6): <http://jobs.anu.edu.au/PositionDetail.aspx?P=2566> \*PhD scholarship\*:

\*PhD scholarship in Evolutionary Biogeography\*, (4 years @ AUD27,222, commencing July 1, 2012).

A 4 year PhD scholarship, funded by the Australian Research Council, is available in the Moritz Lab of the Division of Ecology, Evolution and Genetics, Research School of Biology, Australian National University ([http://biology.anu.edu.au/Craig\\_Moritz/](http://biology.anu.edu.au/Craig_Moritz/)). The student will undertake comparative phylogeographic and phenotypic analyses of lizards from the monsoonal tropics of northern Australia to investigate biogeographic and speciation processes underlying the high diversity of this, as yet underexplored region. There is considerable scope for independent development of the project. The appointee should have a strong background in evolutionary biology and/or molecular ecology and enthusiasm for both field and molecular analyses. Prior research and or field experience is an advantage, but is not required. The position is open to both Australian and International applicants. For fur-

ther details or to send applications, please contact Craig Moritz ([craig.moritz@anu.edu.au](mailto:craig.moritz@anu.edu.au)). Review of applications will commence on March 18, 2012.

Applications close on March 18th, 2012. Please direct enquiries to Craig Moritz at [craig.moritz@anu.edu.au](mailto:craig.moritz@anu.edu.au)

Craig Moritz Museum of Vertebrate Zoology 510-642-3567

Craig Moritz <[gekkojessie@gmail.com](mailto:gekkojessie@gmail.com)>

für Spezielle Zoologie Rheinische Friedrich-Wilhelms-Universität Bonn Adenauerallee 160 53113 Bonn, Germany

[w.waegele@zfmk.de](mailto:w.waegele@zfmk.de) (NEW !!!!) Tel.: 0049 (0) 228 9122 200 Fax: 0049 (0) 2289122 202 <http://www.zfmk.de> Werden Sie Mitglied der Alexander Koenig Gesellschaft! (<http://www.zfmk.de/web/Foerderer/Freunde/index.de.html>)

“Wägele J. Wolfgang” <[W.Waegele@zfmk.de](mailto:W.Waegele@zfmk.de)>

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## Bonn BarcodeOfLife

Entomologist position open for 3 years at the Museum Koenig, Bonn GBOL (German Barcode of Life, see <http://www.bolgermany.de/>) is a project funded by the German Federal Ministry of Education and Research (BMBF) and is dedicated to catalog and characterize the fauna and flora in Germany. We seek an entomologist to coordinate the inventory at the Zoologisches Forschungsmuseum A. Koenig in Bonn ([www.zfmk.de](http://www.zfmk.de)).

The tasks include managing taxon lists (for dipterans, beetles, hemipterans, spiders, etc.), maintaining contacts with taxon experts and support of the collectors, coordinating the sample income pipeline (incl. photography and preparation by designated personnel), and validating of species-determinations as well as results from tree reconstructions. We expect very good, broad entomological knowledge, outstanding organizational and negotiating skills and intimate knowledge of the German entomological scene. GERMAN language skills ON A NATIVE LEVEL are a necessary prerequisite. Basic knowledge in DNA barcoding is beneficial. A number of domestic travels will be expected (entomologists' meetings, workshops, etc.)

The position will be paid to grade TV-L E 13 in the German Public Service scheme and will be available for three years during the first funding period. It should be filled as soon as possible.

The ZFMK is an equal opportunity employer. Women are therefore strongly encouraged to apply. Equally qualified handicapped applicants will be given preference. Please send your application until March 25th 2012 to Zoologisches Forschungsmuseum Alexander Koenig, z. Hd. Frau Heike Lenz, Adenauerallee 160, D-53113 Bonn, Germany [h.lenz.zfmk@uni-bonn.de](mailto:h.lenz.zfmk@uni-bonn.de)

Prof. Dr. J. Wolfgang Waegele Direktor Zoologisches Forschungsmuseum Alexander Koenig und Lehrstuhl

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## Cambridge MolEvolution

A position is available in Nick Goldman's group at the EMBL-European Bioinformatics Institute (near Cambridge, UK) for a Research Associate (post-doctoral level).

The position is available from 1 April 2012 or later by mutual agreement, and is expected to be for 3 years in the first instance.

Full details are viewable at [http://ig14.i-grasp.com/-/fe/tpl\\_embl01.asp?newms=jj&id=47907&aid=-15470](http://ig14.i-grasp.com/-/fe/tpl_embl01.asp?newms=jj&id=47907&aid=-15470) and <http://www.nature.com/naturejobs/science/jobs/245341-Research-Associate-in-Molecular-Evolution> and the job description is included below.

Nick Goldman

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

//

A Research Associate (Officer) position exists in Nick Goldman's research group (<http://www.ebi.ac.uk/-goldman>) at the European Bioinformatics Institute (EBI) which is located on the Wellcome Trust Genome Campus near Cambridge in the UK.

The group studies the evolutionary analysis of DNA and protein sequences, computational data analysis methods, probabilistic modelling of molecular evolutionary processes and statistical inference based on these models. We are particularly interested in applications of existing and novel sequence analyses in large-scale comparative genomics and Next (2nd- and 3rd-) Generation Sequencing, and benefit from association with other groups at the EBI (<http://www.ebi.ac.uk/-Groups>) and elsewhere.



The Research Associate will work with Nick Goldman and other members of the group on issues relating to evolutionary sequence or NGS analysis. It is expected that these would include phylogenetic methodology and biological applications. The position permits freedom for the postholder to be involved in research projects already under way in the group (for example, detection of adaptive evolution, analysis of patterns of DNA mutations and amino acid replacements, sequence alignment, comparative analysis of genome-scale sequences, methods to exploit NGS data) and to develop his/her own interests in related areas; the Research Associate will be expected to do both of these things.

In addition to pursuing their research projects, a suitably experienced Research Associate will take responsibility for various tasks maintaining and developing the efficient operation of the group. These may include management and/or leadership of research projects of their own and the group leader's devising; preparation of grant applications, liaison with colleagues and collaborators both within and outside of EMBL; promotion of the group's work at EBI and elsewhere (including abroad); teaching at training events (including abroad); compilation of materials for reports and presentations; scientific supervision of other staff (including post-graduate students and junior visitors).

The EBI is part of the European Molecular Biology Laboratory (EMBL) and is Europe's leading provider of information services to biological researchers in academia and industry.

For further information please visit [www.ebi.ac.uk](http://www.ebi.ac.uk) Qualifications and Experience

The post holder will have a PhD, and further research experience in related fields will be advantageous. Necessary qualifications include: understanding of and enthusiasm for the questions molecular biologists need to ask of sequence data, experience of mathematical modelling and statistical data analysis, and scientific computer programming. A background in biology, mathematics/statistics, computer science or other technical disciplines, combined with subsequent cross-disciplinary experience, is the likely career path. Demonstrated previous success in the additional responsibilities described above, and aptitude for all of them, will be preferred.

The successful candidate will have a good research record with previous publications in a related area of research.

Excellent communication and interpersonal skills are required.

Application Instructions

Please apply online through [www.embl.org/jobs](http://www.embl.org/jobs) Additional Information

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organisation.

Please note that appointments on fixed term contracts can be renewed, depending on circumstances at the time of the review.

Note that special visa requirements apply to employees from non EU countries working at EMBL-EBI in the UK. The period of work does not qualify them for the Highly Skilled Migrants Programme.

[goldman@ebi.ac.uk](mailto:goldman@ebi.ac.uk)

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## CityUNewYork QuantBiology

\*Assistant, Associate, or Full Professor V Quantitative Biologist Job Opening\*

\*ID Number: FY-5367 Closing Date: Until Filled; Applications will be reviewed starting March 1, 2012\*

The Biology Department at City College of the City University of New York invites applications for a tenure-track or tenured position in Quantitative Biology at the level of Assistant, Associate, or Full Professor to begin Fall 2012. We seek an outstanding candidate performing cutting-edge research in landscape ecology, microbial ecology, evolutionary ecology, macroecology, or urban ecology. Candidates should have demonstrated research excellence and collaborative skills to interact with a vibrant, expanding Ecology, Evolution, and Behavior group. The candidates research program should strengthen the current departmental research in tropical ecology, biogeography, evolutionary ecology, and conservation biology. The successful candidate will be expected to teach in both undergraduate and doctoral program and work collaboratively within the City University of New York. For areas of departmental strengths, see [www.sci.cuny.edu/biology](http://www.sci.cuny.edu/biology) .

\*QUALIFICATIONS\*

Junior candidates should have a Ph.D., postdoctoral experience, and a strong record of publications; senior candidates should have a strong history of federal funding, research productivity, and teaching at the undergraduate and graduate level.

\*COMPENSATION\*

Commensurate with qualifications and experience. Competitive start-up package available.

**\*HOW TO APPLY\***

If you are viewing this job posting in CUNYFirst, please click on "Apply Now" on the bottom of this page and follow the instructions.

If you are viewing this job posting externally, please apply as follows: - Go to [www.cuny.edu](http://www.cuny.edu) and click on "Employment" - Click "Search job listings" - Click on "More options to search for CUNY jobs"- Search by Job Opening ID number - Click on the "Apply Now" button and follow the instructions.

To be considered for this position, you must include a curriculum vitae (CV), summary of past research accomplishments and future research plans, and a statement of teaching and mentoring experience in one document in any of the following formats: doc, docx, .pdf, .rtf, or text format.

Letters of recommendation from at least three referees should be sent directly to the search committee at: Quantitative Biology Search Committee Department of Biology, J526

The City College of New York 160 Convent Avenue New York, NY 10031 [biosearches@sci.cuny.edu](mailto:biosearches@sci.cuny.edu) fax: 212 650-8585\*EQUAL EMPLOYMENT OPPORTUNITY\*

We are committed to enhancing our diverse academic community by actively encouraging people with disabilities, minorities, veterans, and women to apply. We take pride in our pluralistic community and continue to seek excellence through diversity and inclusion. EO/AA Employer.

Ana Carolina Carnaval, Ph.D. Assistant Professor, Department of Biology City College of New York, City University of New York Marshak Science Building, Room J-526 160 Convent Avenue New York, NY 10031, USA phone (212) 650-5099 fax (212) 650-8585

Ana Carolina Carnaval <[acarnaval@cny.cuny.edu](mailto:acarnaval@cny.cuny.edu)>

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## ColoradoCollege Chair

BIOLOGY, Department Chair.

Term position, approximately four years, beginning August 2012 at Colorado College.

Preference for late career or recently retired individual

with previous chairing experience; other academic leadership experience highly desirable. Teaching and/or research opportunities negotiable. Colorado College is a highly selective liberal arts college with a unique one-course-at-a-time curriculum. Applicant must understand the atmosphere of a small liberal arts college, especially the role of a teacher/scholar. Preference for a cell or molecular biologist with wide appreciation for pedagogy across sub-disciplines, but other science disciplines considered. Applicant must have personal qualities that include skill in collaborative leadership and ability to work effectively with faculty, staff, and students in the department and across the institution. Colorado College is committed to increasing the diversity of its community and curriculum. Candidates are encouraged to identify the ways in which they can contribute to that goal.

Application deadline is March 15, 2012, or until position is filled.

Send letter of application describing interest in position, academic background and leadership experience, along with curriculum vitae, and names of four references to Search Committee, Department of Biology, Colorado College, 14 E. Cache la Poudre St., Colorado Springs, CO 80903. Equal Opportunity Employer: The Colorado College welcomes members of all groups and reaffirms its commitment not to discriminate on the basis of race, color, age, religion, sex, sexual orientation, gender identity, gender expression, national origin, or disability in its educational programs, activities, and employment practices.

[Emilie.Gray@ColoradoCollege.edu](mailto:Emilie.Gray@ColoradoCollege.edu)

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## DR Congo Field Assist BonoboCommunication

"Field assistant on bonobo communication, DR Congo

Description: We are looking for a volunteer field assistant for a project on communicative development of bonobos in the wild. The field site LuiKotalis located in a remote forest area in the southern sector of Salonga National Park, Democratic Republic of Congo. The task will be the collection of focal video data and scan data of bonobo mother-infant-interactions. This involves long-distance walking in difficult terrain under very warm and humid climatic conditions.

Term of appointment: July 2012 – End of December

2012 (6 months)

Qualifications: The position requires above average physical fitness, a high degree of discipline, self-motivation and responsibility, high stress resistance, and language skills in French and English. Candidates with experience in field research in Africa and/or behavioral data collection will be preferred.

Support provided: Accommodation and living expenses at the camp (lodging in tents, food) as well as at the flight from Kinshasa to the camp and back will be covered by the project. The international flight to and from Kinshasa and expenses for staying in Kinshasa will not be covered.

Application deadline: Applications will be considered as they are received. They should include a CV and a short letter of motivation.

\*\*Contact information: Paul Kuchenbuch Max Planck Institute for Ornithology Humboldt-Research Group "Comparative Gestural Signalling" Eberhard-Gwinner-Strasse 82319 Seewiesen Germany

phone: +49 8157 932 - 242 email: pkuchenbuch@orn.mpg.de

Supervisor: Dr Simone Pika Max Planck Institute for Ornithology Humboldt-Research Group "Comparative Gestural Signalling" Eberhard-Gwinner-Strasse 82319 Seewiesen Germany"

Paul Kuchenbuch <pkuchenbuch@orn.mpg.de>

Applicants must be available throughout the field season from early May or early June through mid-August, but exact start and end dates are flexible. However, ability to start May 1st is a plus. Successful applicants are expected to assist in data collection and data entry, plant care, transplanting, seed collection, and driving research vehicles. The work can be physically demanding, and the research team usually collects data 5-6 days per week. Qualifications: 1) some undergraduate education in biology, ecology, or related field, or equivalent experience; 2) experience camping and working outdoors and/or previous field research experience; 3) ability to perform repetitive tasks with a cheerful attitude and with attention to detail; 4) willingness to live and work in close proximity with six other researchers under rustic and sometimes crowded conditions; 5) a current driver's license. First aid training and/or previous experience working with plants is preferable but not required. Transportation, room with internet access, and salary will be provided.

Interested applicants should submit: 1) a short cover letter describing their qualifications as well as future academic and professional goals; 2) a résumé outlining previous work experience, relevant courses (completed or in progress), extracurricular activities; and 3) contact information of two character references. Email to: Tom Mitchell-Olds tmo1@duke.edu Department of Biology, Duke University <http://www.biology.duke.edu/~mitchell-olds/> mrw28@duke.edu

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## DukeU FieldAssist RockiesHerb

Field research opportunity in the northern Rockies

The Mitchell-Olds lab at Duke University seeks a highly motivated, detail-oriented assistant for summer field research in the northern Rocky Mountains. We are studying *Boechera*, a perennial herb that offers genetic tractability and ecological context. Current field experiments focus on questions related to local adaptation, speciation, plant defense, and breeding systems.

Our research sites are located in east-central Idaho and southwest Montana. Base camp is located near the beautiful town of Salmon, but travel distances between sites often necessitate overnight camping. Weather conditions in the Rockies can be severe, and assistants should expect to work in snow and rain as well as 90 degree temperatures. Regular trips are made to Missoula, Montana for groceries, supplies, and taco consumption.

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## France DeepSeaMicrobeEvolution

An international chair position is open in the laboratory of Microbiology of Extreme Environments (LM2E) (<http://www.ifremer.fr/umr6197/>). The LM2E explore the microbial diversity of marine extreme environments such as hydrothermal vents, cold seeps and deep-sea subterranean environments. These environments are important to understand the biological processes and to decipher key evolutionary boundary conditions of life, life origin and diversification. These deep-sea environments are governed by a set of physico-chemical constraints and various environmental properties that make them all different. Nevertheless, microbial communities and animals thriving in these ecosystems share many similarities suggesting that these ecosystems might be connected. The extent and importance of deep-sea environments only begin to be es-

timated, while the deep geographical limits under the sub seafloor are not yet established. Based on previous experience and expertise in these unique and extreme ecosystems the LM2E holds a key position to clarify a number of important issues ranging from molecular adaptation to physiology and ecology of these extreme ecosystems.

The LM2E conducts its investigations from the molecular to ecosystem scale and two research topics, corresponding to two complementary levels of study have been selected: study the diversity and function of deep-sea extreme ecosystems and analysis of specific “adaptive” mechanisms based on some model organisms. The first theme involves projects that focus on the exploration and characterization of microbial diversity of Bacteria, Archaea and mobile genetic elements, as well as functional approaches to contribute to a better understanding of the role of these micro-organisms in their ecosystem and their interaction with their biological and mineral environment. The second theme will analyze some fundamental adaptive processes, particularly those involved in the maintenance and stability of genomes and those involved in adaptation to high hydrostatic pressures of some model organisms belonging in particular to the family Thermococcales.

The Chair will be hosted by the European Institute of Marine studies±, Institut Universitaire Europeen de la Mer, IUEM (UBO, CNRS, IRD). The candidate, chosen jointly by the universities and by CNRS, by joint selection panels, will be recruited by the universities as Associate Professor and will be hosted also by CNRS. This chair position will thus enable an assistant professor to devote five years to a research project which she/he will carry out within an appropriate scientific environment. The LM2E would like to recruit a candidate who has skills in Genomics and Systems Biology and who will interact with scientists of the LM2E working on the biology of extremophiles (ecology, biodiversity, microbial physiology, ecophysiology, biochemistry and molecular biology). The candidate will also strengthen the research activity and the involvement of the LM2E in the Axis 3 (Geobiological interactions in extreme environments) of the LabexMer.

The LM2E looks for a young or tenured researcher with an internationally recognized experience in the field of environmental genomics and / or systems biology to exploit the flood of information from molecular genomic analysis and post-genomic and use tools and experimental methodologies necessary for data mining while integrating the different levels of information to understand as a biological system, the functioning of extremophilic microbes and their interactions with biotic and abiotic components of their environment. The can-

didate will also develop its pedagogical skills through a teaching schedule limited to a third of its time in genomics and bioinformatics disciplines. This permanent position is not only open to young candidates for their first associate professor position, but also to tenured professors asking to be transferred and to researchers wishing to convert to teaching positions.

Application procedures are the same as for associate professor positions, and therefore require that a candidate be qualified± by the Higher Education board. Applicants must hold a PhD diploma or equivalent experience in Bioinformatics and environmental genomics with a high level of skills. At least 3 years of postdoc experience in genomics and system biology is required. Applicants must provide evidence of their experience in managing a research group and be able to foster international collaborations.

Ability to work in English is essential and the international dimension of the successful candidate will be critical. Experience in fundraising for research projects will be an advantage. Administrative contact: Isabelle Marc (Isabelle.Marc@univ-brest.fr) Scientific contacts: Anne Godfroy (Anne.Godfroy@ifremer.fr) or Mohamed Jebbar (Mohamed.Jebbar@univ-brest.fr) Teaching contact: Marc Leromancer (Marc.Leromancer@univ-brest.fr)

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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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## France FieldAssist TurtleEvolution

Field assistant in evolutionary ecology of European pond turtles

We are looking for a student field assistant to participate in a conservation project on European pond turtles (*Emys orbicularis*) from April to September 2012 at the Research Station Petite Camargue Alsacienne in France ([www.camargue.unibas.ch](http://www.camargue.unibas.ch)).

The work will include caring for the about 80 pond turtles living in the station’s outdoor enclosures, capturing the turtles, observing breeding behaviour, locating nests and collecting eggs for artificial incubation in the lab. Ideally, the applicant should stay for the entire field season from April to September, but it is also

possible to cover only the first or second half of that period. The work is planned as a student internship, thus applicants must be students.

The field site is situated in the nature reserve Petite Camargue Alsacienne in France, about 10 km north of Basel (Switzerland). We cannot cover travel expenses, but accommodation and living expenses at the research station will be covered.

The position will be filled as soon as possible. Applications should be in English, French or German, 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 address:

PD Dr. Valentin Amrhein Zoological Institute University of Basel [pca.recherche@orange.fr](mailto:pca.recherche@orange.fr)

Valentin Amrhein <[pca.recherche@orange.fr](mailto:pca.recherche@orange.fr)>

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### HainanU China FieldAssist AvianEvolution

Field assistants in co-evolution of Asian cuckoos and passerine hosts in China and Hawaii

We are looking for several field assistants to participate our large-scale project about co-evolution of Asian cuckoos and passerine hosts in China and Hawaii, USA, from April to June 2012 coordinated by Prof. Wei Liang from Hainan Normal University, China (<http://www.hainnu.edu.cn> < <http://www.hainnu.edu.cn/> >).

The work will investigate egg recognition and clutch variation in several host species of Asian cuckoos. The subprojects and working places include:

- 1) Plaintive cuckoo (*Cacomantis merulinus*), in Nonggang NR, Guangxi, southwestern China (from early April to late June);
- 2) Large hawk-cuckoo (*Hierococcyx sparveroides*) and Asian Emerald cuckoo (*Chrysococcyx maculatus*), in Kuankuoshui NR, Guizhou, southwestern China;
- 3) common cuckoo (*Cuculus canorus*), in Dongzhai NR, Henan, central China (April to late June);
- 4) common cuckoo (*Cuculus canorus*) in a reed habitat, Hebei (May to late June);
- 5) common cuckoo (*Cuculus canorus*) in Jilin, north China (May to late June);
- 6) Red-billed Leiothrix (*Leiothrix lutea*), a common cuckoo host and an introduced species in Hawaii (late April to May).

We require field assistants to help in searching nests, mist-netting and ringing birds, taking blood samples, model egg and dummy experiments and egg spectrometer measurement. The subprojects in China will work with Prof. Wei Liang and his PhD students from Hainan Normal University, China. The subproject in Hawaii will work with Lijin Zeng, University of California, Riverside, USA and Yang Liu, University of Bern, Switzerland. We cannot cover travel expenses to the working place, but all expenses in China or in Hawaii during field work (i.e. housing, foods, and local travels, etc) will be covered.

The ideal candidate should have a strong interest in birds and animal behavior, physically fit and is willing to work for long and irregular time in the field. Previous experience of bird-handling is preferred, but not necessary. We will offer basic trainings such as model egg and dummy experiments, egg spectrometer measurement. The applicants should speak English fluently and holding a driving license is expected.

The full application should include 1) a letter outlining your motivation for this project, previous research experience and also specify the subproject(s) that you prefer to work; 2) a CV. We appreciate if applicants could provide a recommendation letter but it is not compulsory. Please send your application in a single PDF file by email to the following address:

Field work in China, Wei Liang, <[liangw@hainan.net](mailto:liangw@hainan.net)>

Field work in Hawaii, Yang Liu, <[yang.liu@iee.unibe.ch](mailto:yang.liu@iee.unibe.ch)>

[yang.liu@iee.unibe.ch](mailto:yang.liu@iee.unibe.ch)

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### ImperialCollege London ResTech GWAS

Imperial College London

Research Technician I am looking for a research technician to assist with a project using genome-wide association studies to investigate genotype-genotype interactions between Anopheles vector mosquitoes and human malaria parasites. This project is funded by the Medical Research Council and my lab is based in the Department of Life Sciences at Imperial College (South Kensington campus). The successful candidate's duties will include rearing adult female mosquitoes in large quantities and growing infective human malaria gametocyte cultures. These cultures cannot be grown with



antibiotics and so are prone to contamination, thus this task requires someone who has or will be able to acquire fastidious cell culture techniques. The technician will also assist with infectious feeds, mosquito dissections, and bench-work associated with dsRNA creation and RNAi testing of genes thought to affect mosquito susceptibility to the parasite. Salary will be £27,400 - £31,300 per annum.

To apply for this position, please go to the following link

[https://www4.ad.ic.ac.uk/-OA\\_HTML/OA.jsp?akRegionCode=-IRC\\_VIS\\_VAC\\_DISPLAY\\_PAGE&akRegionApplicationId=800&transactionid=290155213&retainAM=-Y&addBreadCrumb=S&p\\_svid=32863&p\\_spid=-1497099&oapc=7&oas=EzvZKVoSP20cyb356NYkYQ](https://www4.ad.ic.ac.uk/-OA_HTML/OA.jsp?akRegionCode=-IRC_VIS_VAC_DISPLAY_PAGE&akRegionApplicationId=800&transactionid=290155213&retainAM=-Y&addBreadCrumb=S&p_svid=32863&p_spid=-1497099&oapc=7&oas=EzvZKVoSP20cyb356NYkYQ)

For informal enquiries please contact me (Mara Lawniczak) at [m.lawniczak@imperial.ac.uk](mailto:m.lawniczak@imperial.ac.uk)

Mara Lawniczak <[m.lawniczak@imperial.ac.uk](mailto:m.lawniczak@imperial.ac.uk)>

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## INRA France ComputationalBiology

Two permanent research positions as computational biologist are open in the animal genetics division of INRA (Institut National de la Recherche Agronomique), France.

One in Paris : <http://www.inra.fr/drh/cr2012/profil-cr2.php?NumProfil=CR2-2012-11-GA-3&langue=EN> contact : Didier Boichard ([Didier.Boichard@jouy.inra.fr](mailto:Didier.Boichard@jouy.inra.fr))

the other in Toulouse : <http://www.inra.fr/drh/cr2012/profil-cr2.php?NumProfil=CR2-2012-11-GA-4&langue=EN> contact : Thomas Faraut ([Thomas.Faraut@toulouse.inra.fr](mailto:Thomas.Faraut@toulouse.inra.fr))

In total 5 permanent research positions are open this year in the animal genetics division of INRA : [http://www.inra.fr/genetique\\_animale\\_eng/nous\\_rejoindre/-concours\\_cr2\\_2012](http://www.inra.fr/genetique_animale_eng/nous_rejoindre/-concours_cr2_2012) [bertrand.servin@toulouse.inra.fr](mailto:bertrand.servin@toulouse.inra.fr)

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## INRA France PopulationDynamics

Research scientist permanent position at INRA Sophia

Antipolis (France)

Open competition: Population dynamics and adaptation

Discipline(s): Mathematics: applications to other disciplines - Ecology

Research field: Ecology of parasite communities within agroecosystems : the effects of changes in agricultural practices

Key activities and required skills: In a team consisting of biologists and modelers, you will participate in the development of modeling approaches to predict the adaptive responses of pests and pest communities to complex selection pressures, in order to assess the sustainability of new plant protection methods (including biological control). Your skills are in mathematics applied to biology and / or theoretical ecology. Previous experience in modeling for biology, particularly in population ecology / evolutionary biology would be helpful. Team working skills are important.

Person to contact before applying: Ludovic MAILLERET E-mail: [ludovic.mailleret@sophia.inra.fr](mailto:ludovic.mailleret@sophia.inra.fr)

Host unit reference: Research unit: 1355 ISA Institut Sophia-Agrobiotech Centre: PACA Address: 400 ROUTE DES CHAPPES 06410 SOPHIA ANTIPOLIS

Details on the position and the procedure to apply can be found here: <http://www.inra.fr/drh/cr2012/profil-cr2.php?NumProfil=CR2-2012-3-SPE-3&langue=EN>

Deadline for application is February 28th 2012

[ludovic.mailleret@sophia.inra.fr](mailto:ludovic.mailleret@sophia.inra.fr)

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## KeckScienceDept 5 biology

VISITING ASSISTANT PROFESSOR POSITIONS IN BIOLOGY

The W.M. Keck Science Department of Claremont McKenna, Pitzer, and Scripps Colleges, three of the five undergraduate Claremont Colleges, seeks to hire five visiting faculty for the 2012-2013 academic year, beginning August 2012. Anticipated teaching responsibilities include: Position 1: Cell and molecular neuroscience with lab, introductory biology lab, and co-teaching of introductory neuroscience with lab. Position 2: A systems level neuroscience class, a non-majors course with lab, and introductory biology labs. Position 3: Introduction biology lecture and labs and a non-majors

course with lab. Position 4: Vertebrate physiology with lab and introductory biology. Position 5: Biostatistics, animal behavior, and introductory biology with lab. A one-year appointment will be made for Positions 1, 2, and 3. A two-year appointment, contingent upon satisfactory annual review of the first year, will be made for Positions 4 and 5. For all five positions, the rank will be either Visiting Assistant Professor or Visiting Professor depending on experience.

Participation in research, particularly directing undergraduate research projects, may be possible. A Ph.D. in biology or related subject is required and prior teaching experience is preferred.

Please apply online at <https://webapps.cmc.edu/-Kecksci/>. Upload a cover letter, a c.v., a statement of teaching philosophy, and the names and e-mail addresses of three references. Direct inquiries to Professor Jennifer Armstrong at [jarmstrong@kecksci.claremont.edu](mailto:jarmstrong@kecksci.claremont.edu). Additional information about the department can be found at [www.kecksci.claremont.edu](http://www.kecksci.claremont.edu). Review of applications will begin immediately, and the positions will remain open until filled.

Sarah Gilman, Ph.D.

W.M. Keck Science Department The Claremont Colleges  
925 N. Mills Avenue Claremont, CA 91711

<http://faculty.jsd.claremont.edu/sgilman>  
[sgilman@kecksci.claremont.edu](mailto:sgilman@kecksci.claremont.edu) 909-607-0715

[SGilman@jsd.claremont.edu](mailto:SGilman@jsd.claremont.edu)

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## McMasterU ChairBiology

McMaster University, Department of Biology - Professor and Chair

The Department of Biology at McMaster University invites applications for the position of Professor and Department Chair. The Department of Biology is the hub of basic research on living systems and its application in environmental and medical biotechnology. Research in the Department spans a wide spectrum of interests and expertise, including molecular biology, cellular and developmental biology, genetics, ecology, evolution, environmental physiology, plant biology, microbiology, biotechnology, cancer biology, bioinformatics, and neurobiology. The Department currently consists of 33 full-time faculty members and maintains a vibrant program

of basic research, and graduate and undergraduate education.

We seek a leader with an outstanding academic background, including strong internationally recognized research credentials, demonstrated commitment to excellence in research and graduate and undergraduate education, experience in mentoring junior faculty, and proven leadership and management skills in an academic environment. The successful candidate must have the vision and ability to take the Department to a new level of international recognition and achievement and will play a major role in shaping the Department through a period of change and growth. Applicants must hold a Ph.D. degree or equivalent in biology or a related field with academic credentials and experience commensurate with an appointment to the rank of full Professor with tenure at McMaster University.

McMaster University's collaborative research community and its distinctive approach to teaching are the basis of its international reputation for innovation and highly rated student experience, and research excellence. Located in Hamilton, Ontario, the University offers a full range of undergraduate and graduate programs to over 24,000 full-time and over 4,000 part-time students. There are approximately 7,400 faculty and staff. With an operating budget of \$500 million, annual expenditures from all funds exceed \$850 million, including more than \$395 million in research funding. McMaster is consistently ranked as one of Canada's and the world's top research-intensive universities.

Application materials including a statement of interest highlighting specific strengths related to this position, including previous administrative experience and accomplishments, research interests and plans, curriculum vitae and the names of three references should be sent to:

Dr. John P. Capone, Dean and Committee Chair Selection Committee for a Chair of the Department of Biology, Faculty of Science McMaster University 1280 Main Street West, Burke Science Building, Room 102 Hamilton, Ontario, Canada L8S 4K1 905-546-9995 facsimile [deansci@mcmaster.ca](mailto:deansci@mcmaster.ca) | [www.science.mcmaster.ca](http://www.science.mcmaster.ca)  
Please submit application materials by March 15, 2012. The appointment is for July 1, 2012, although the position will remain open until filled.

All qualified candidates are encouraged to apply. However, Canadian citizens and permanent residents will be considered first for these positions. McMaster University is strongly committed to employment equity within its community and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of vis-

ible minorities, Aboriginal peoples, members of sexual minorities and persons with disabilities.

Kathy Greaves Administrative Assistant to Chair McMaster University Department of Biology 1280 Main Street West Hamilton, Ontario L8S 4K1

(905) 525-9140 extension 24400

greaves@mcmaster.ca

Kathy Greaves <greaves@mcmaster.ca>

publication list. 4. A description of past and present research activities (up to 5 pages with 1.5 spacing). 5. The proposed research project (up to 10 pages with 1.5 spacing) including a title and a summary 6. The names of 3 scientists from whom letters of recommendation can be sought, together with the names of scientists with a potential conflict of interest from whom evaluations should not be requested.

Lluís QUINTANA-MURCI <quintana@pasteur.fr>

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## PasteurInst StatisticalGenetics

Faculty Position in STATISTICAL GENETICS Institut Pasteur

The Institut Pasteur announces an international call for candidates with a strong background in statistical genetics wishing to create an independent young researcher group on its Paris campus in France within the framework of The French Government program entitled “Investments for the Future”. The new group will reinforce research at the Institut Pasteur in statistical and computational aspects of basic genetics research, population genetics and association studies with quantitative traits (e.g. immunological profiles). A co-appointment in the Departments of Genomes and Genetics and the Department of Immunology is encouraged.

Candidates must have defended their PhD thesis on or after Feb 1, 2004 (women with children are eligible up to 10 yrs after their PhD). Short-listed candidates will be invited for an interview by September 2012. The successful candidate will be appointed as head of a group of up to 6 people for a period of 5 years. The start-up package includes the salary for the group leader (if necessary), a postdoctoral position, a technician, part-time secretarial assistance, basic laboratory equipment and a contribution to running costs, together with access to on-campus facilities including state-of-the-art technology platforms.

Candidates should send their formal applications before May 31st, 2012 by E-mail to the Director of Scientific Evaluation, Prof. Alain Israël, at the Institut Pasteur (g5mi@pasteur.fr).

1. The application should comprise the following (in order) in a single pdf file: 2. A brief introductory letter (candidates are encouraged to contact first Lluís Quintana-Murci for informal enquiries, (quintana@pasteur.fr) 3. A Curriculum Vitae and a full

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## SmithsonianInst Tech PathogenEvolution

Technician/Pathogen Genetic Analyses Center for Conservation and Evolutionary Genetics Smithsonian Institution

We are recruiting a technician to conduct laboratory diagnoses and genetic analyses of pathogens (bacteria, fungi, parasites), including ancient DNA methods. The position will involve microscopy, DNA extraction, PCR and standard DNA sequencing, next-generation (454) sequencing, and other molecular methods as required. The position is available initially for one year and will begin as soon as possible following the deadline, but no later than May 2012. Minimum qualification is a bachelor’s degree in biology or similar field, or an equivalent combination of education or experience. Demonstrated laboratory experience is required.

To apply, email (1) a brief letter of application detailing your experience in molecular genetics, ancient DNA and diagnosis of pathogens, (2) a current curriculum vitae or resume, and (3) names, addresses and phone numbers of at least three references to Robert Fleischer (fleischerr@si.edu). Deadline for applications is 9 March 2012. Please contact Dr. Fleischer if you have any questions concerning the position.

Center for Conservation and Evolutionary Genetics  
Smithsonian Conservation Biology Institute National  
Zoological Park PO BOX 37012 MRC 5503 Washington,  
DC 20013-7012 USA

“Fleischer, Robert” <FleischerR@si.edu>

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## StockholmU MicrobialMetagenomics

Posted at Stockholms universitet 2012-01-26

Ref. no. SU 619-0311-12 Dok no. 1

RESEARCH FELLOW -

metagenomic analyses of microbes in the Baltic Sea A position as researcher is open at the Department of Botany, Stockholm University. Reference number SU 619-0311-12. Deadline for application: February 20th, 2012.

Stockholm University is committed to academic excellence and is a world renowned university with about 60 000 students. The Department of Botany is within the Faculty of Science, and has about 70 employees. Teaching is oriented towards plant physiology, ecology and systematics. The plant physiology unit offers a stimulating atmosphere in well-equipped laboratories.

Position The Department seeks to employ a Researcher Fellow that will produce new essential information within the framework of an international and multidisciplinary research program: MiMeBS 'Microbial Metagenomics of the Baltic Sea' localized at SU ([www.botan.su.se/physiology](http://www.botan.su.se/physiology)). The MiMeBS program is a collaborative research effort with scientists at J. Craig Venter Institute (La Jolla, USA; [www.jcvi.org](http://www.jcvi.org)) and SciLifeLab (Stockholm; [www.scilifelab.se](http://www.scilifelab.se)).

Focus & Expectations The focus will be on analyses of large data sets from sequenced metagenomes, transcriptomes and single cell genomes of Baltic Sea microbial populations using bioinformatic tools; and to make use of the information gained in an environmental context as means for an optimized management of the unique Baltic Sea. The Research Fellow is also expected to be in charge of the MiMeBS bioinformatic team members and act as supervisor for students and post docs.

Qualifications The position requires a person with a PhD in biology/microbiology/molecular biology/ bioinformatics, combined with a deep experience and expertise in bioinformatic tools and analyses. Eligible candidates must have a strong record of academic research demonstrated by peer-reviewed publications. Collaborative leader and innovative skills and independence are expected, as is excellence in writing and speaking English. Eligible candidates have received a PhD exam

in the past 3-6 years (from the application deadline).

Terms of employment A two year full time position as researcher, starting as soon as possible.

Application The application, in English, should include and be organized as follows: a cover letter outlining your qualifications, relevant experiences and interest in the position (max 1 page) CV & publications (max 2 pages) copies of degree certificates names of two reference persons (give phone numbers and email addresses; state the relation to the reference person)

For further information, contact Professor Birgitta Bergman, telephone +46-(0)8-16 3751, [bergmanb@botan.su.se](mailto:bergmanb@botan.su.se)

Union representatives are Bo Ekengren (SACO), Lisbeth Häggberg (ST), telephone +46-(0)8-16 2000 (switch board), and Gunnar Stenberg (SEKO), telephone +46-(0)70 316 43 41.

Applications, labeled with the Reference number SU 619-0311-12, should be posted to the address below and be postmarked no later than February 20th, 2012:

Stockholm University Registrar/PÅ SE-106 91 STOCKHOLM SWEDEN

or by e-mail to: [registrator@su.se](mailto:registrator@su.se) - give Reference number in the Subject head

Johan Nylander <[Johan.Nylander@abc.se](mailto:Johan.Nylander@abc.se)>

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## TelAvivU PlantEvolutionEco

Tel Aviv University position

Plant Ecology and Evolution

The Department of Molecular Biology & Ecology of Plants at Tel Aviv University (ISRAEL) invites applications for tenure-track positions for the 2013-2014 academic year. We are interested in outstanding applicants who apply modern approaches to investigate fundamental problems in the general area of Plant Ecology. We will consider applications at the tenure-track level. In exceptional cases, an appointment of senior faculty will be considered. We seek investigators who will build innovative research programs and who will teach effectively (in Hebrew) at the undergraduate and graduate levels. Applicants should send their curriculum vitae, list of publications, statement of research plans, and teaching interests to Prof. Hillel Fromm (e-mail: [Hillelf@post.tau.ac.il](mailto:Hillelf@post.tau.ac.il)),

Head of the Department of Molecular Biology & Ecology of Plants. Successful candidates will be asked to arrange three letters of recommendation. Women and minorities are particularly encouraged to apply. [http://www.tau.ac.il/lifesci/departments/-plant\\_s/](http://www.tau.ac.il/lifesci/departments/-plant_s/) Lilach Hadany <lilach.hadany@gmail.com>

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## Trondheim Evolutionary Biology

Associate professor position

Norwegian University of Science and Technology (NTNU)

Faculty of natural science and technology Department of Biology

ASSOCIATE PROFESSOR IN EVOLUTIONARY BIOLOGY

The Department of Biology, Faculty of Natural Sciences and Technology, at the Norwegian University of Science and Technology (NTNU) announces a vacant position as Associate Professor in Evolutionary Biology. The Department has at present 24 professors, 9 associate professors, 3 adjunct professors and approximately 60 research fellows.

The main focus for the strategy of the Department of Biology is to understand biological processes of life to preserve the environment. The Department has an interdisciplinary approach to education and research that is deeply rooted in environmental biology, with evolutionary biology as an important link between the different sub-disciplines. The Department currently consists of seven research groups: behavior, evolution, evolution and life history; conservation biology; plant ecology and physiology; zoophysiology; molecular and systems biology; environmental toxicology, and marine biology and aquaculture. The Department is organized in three academic sections: Physiology, Environmental toxicology and Biotechnology (PEB), Ecology, Ethology and Evolution (EEE) and Marine Sciences (MS). The current position will be organized under the EEE section.

Evolution and ecology are strong research-disciplines in several of the research groups at the department. Understanding adaptations evolved through natural selection is key to understand evolution. Furthermore, the use of evolutionary principles in preserving biodiversity is pivotal for sustainable resource use in a changing world. These evolutionary problems form an important research area in several prominent groups at the

department, including the Centre for Conservation Biology, which is an interdisciplinary centre for research into dynamical changes in biological diversity at different organismic levels. Evolutionary biology is therefore one of the core subjects at the Department of Biology and NTNU. The announced position should strengthen the link between evolutionary and conservation biology.

The Department focuses on developing integrated research groups where researchers within related fields can establish strong research and teaching units within evolution and ecology, but also in interaction with the other sections. It is required that the new faculty member has a strong research profile that will strengthen the current academic staffs from the EEE section, and the Department as a whole. The new faculty member should contribute in strengthening the research in evolutionary biology at the Department. The appointed person is expected to take active part in the further development of evolutionary biology at NTNU.

The applicants should hold a PhD and document a strong theoretical and/or empirical research competence in evolutionary biology. The potential of the candidate to co-operate within the existing research groups is emphasized. Strong emphasis will be placed on the ability of the candidates to initiate research and tutorial agendas related to evolutionary biology and conservation biology.

The new faculty member will have responsibility for part of the teaching in Evolutionary Biology and teaching competence in this field is therefore required. The teaching will be at graduate, post-graduate and PhD levels, including supervision of MSc and PhD fellows.

Emphasis will be placed on teaching and communication skills. Evaluation of the applicant will be based on documented material, including pedagogical training, presentation of academic work, experience from supervision and teaching of master-level candidates and PhD candidates, as well as other related skills. Quality and scope will be evaluated.

Academic staff that is unable to document formal pedagogical qualifications in university-level teaching is required to successfully complete a recognized course that gives a pedagogical qualification in university-level teaching within two years of taking up the appointment. Courses are available at the University.

Applicants short-listed for the position will be invited for interview. A demonstration of teaching ability, usually in the form of a trial lecture, is also required.

The Associate Professor will be jointly responsible for the development of the discipline together with other scientific staff in the department and will also partici-



pate in teaching activities, in accordance with the relevant curriculum, and assist in developing the teaching program, including advanced and postgraduate courses. The Associate Professor will also be required to participate in administrative work.

The Associate Professor is required to comply with regulations concerning developments within the discipline and organisational changes at the University.

Newly employed academic staffs who do not already master a Scandinavian

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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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## UAHuntsville ResTech EvolutionaryGenomics

Ecological and Evolutionary Genomics Research Technician University of Alabama in Huntsville Department of Biological Sciences

An immediate vacancy for a Research Technician is available in the lab of Dr. Luciano Matzkin at the University of Alabama in Huntsville. The lab focuses on the ecological and evolutionary genetics of adaptation in cactophilic insects (mainly *Drosophila*). Please see the lab webpage for more information, <http://www.uah.edu/biology/LAB/matzkin/>. Job Description: The principal purpose of the position will be to manage and maintain the laboratory and its ongoing research projects.

Requirements: Bachelors degree in Biology or a related field. General molecular lab experience, knowledge of PCR, gel electrophoresis and good record keeping and organizational skills. Must possess general computer skills and have the ability to learn more complicated software. Knowledge of Genomics, *Drosophila* and computer programming a plus.

The position is for one year, but may be extended pending the availability of future funding and performance of candidate.

Application Instructions: Applicants interested to apply MUST submit the following documents online (<http://uah.interviewexchange.com/candapply.jsp?JOBID=30434>):

1. UAH Application For Employment 2. Resume/CV

After submitting your Application, the subsequent pages enable you to upload additional documents (i.e. Resume/CV, cover letter etc.). Please include the names of up to three references.

Please direct any inquiries to Dr. Luciano Matzkin ([Imm0015@uah.edu](mailto:Imm0015@uah.edu)).

Dr. Luciano M. Matzkin Assistant Professor Department of Biological Sciences The University of Alabama Huntsville 301 Sparkman Drive Huntsville, AL 35899 Office (256) 824-4326 Lab (256) 824-6968

Luciano Matzkin <[Imm0015@uah.edu](mailto:Imm0015@uah.edu)>

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## UBern FieldAssist AvianEvolution

Job: UBern.FieldAssist.AvianEvolution

Field assistants in evolutionary ecology of Great tits (*Parus major*), Switzerland

I am looking for two enthusiastic field assistants for the upcoming field season (1st of April until end of June 2012) to join my project investigating the relationship between begging behavior and oxidative stress in great tits. The fieldwork will take place in a forest near Bern.

I will require field assistants to help with all aspects of the work, including nest checks, ringing and taking body measures of the birds, recording the nests and some smaller amount of lab work. Experience in fieldwork and bird handling would be an advantage. Since we will work many hours in the forest in all weather conditions, motivation is very important.

Applicants should speak English fluently and have a driving license.

Travel expenses and accommodation will be paid, additionally; the field assistants will receive approximately 900 Swiss Francs per month to cover their expenses.

Applications should include a CV and a short letter of motivation.

Please send your application to: Lea Maronde (Evolutionary Ecology, University of Bern) E-mail: [lea.maronde@iee.unibe.ch](mailto:lea.maronde@iee.unibe.ch)

“Maronde, Lea (IEE)” <[lea.maronde@iee.unibe.ch](mailto:lea.maronde@iee.unibe.ch)>

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## UBristol Macroevolution

Subject: University of Bristol advert - Ref. 16988

Lecturer/Senior Lecturer/Reader in Macroevolution (vacancy ref. 16988)

The schools of Earth and Biological Sciences wish to recruit an exceptional individual with internationally recognised expertise in the broad field of macroevolution. We interpret this liberally to include candidates whose specialisms encompass the development of the statistical phylogenetic methods to solve evolutionary problems, or their application in large-scale phylogenetics, lineage diversification, or phylogenomics, as well as candidates in the field of evolutionary developmental biology. The schools have existing expertise in macroevolutionary research, as well as animal and plant biology. We would be particularly interested in candidates with expertise in plant macroevolution, although we welcome applications from researchers interested in organismal evolution across the breadth of the Tree of Life and extent of Earth History.

You will have an international reputation for research and a track record in research income and publication to support this. You will be expected to be or become a research leader, bringing or building your own research group and developing new research avenues with colleagues in both schools and the university at large.

The position forms part of a wider investment in the biological sciences at Bristol, and benefits from location in the new Life Sciences Building, a £50M development to be completed in late 2013.

Grade : Level b - Level d in Pathway 1 Salary : £33,884 - £52,706

Contact: ( School of Biological Sciences ) Professor IC Cuthill E-mail: [i.cuthill@bristol.ac.uk](mailto:i.cuthill@bristol.ac.uk) Tel: 0117 928 7475 Alternative Contact: ( School of Biological Sciences ) Professor M Kendall E-mail: [gljmk@bristol.ac.uk](mailto:gljmk@bristol.ac.uk)

Tel: 0117 954 5400

Closing Date : 30 March 2012

Interview Date : 30 April 2012

Timescale of Appointment(s) - Contract : Permanent

Further details and an application form can be found at <https://www.bris.ac.uk/boris/jobs/feeds/ads?ID=>

108471 Alternatively you can telephone (0117) 954 6947, minicom (0117) 928 8894 or E-Mail [Recruitment@bristol.ac.uk](mailto:Recruitment@bristol.ac.uk) (stating postal address ONLY), quoting reference number 16988.

The closing date for applications is 9.00am, 30 March 2012

Philip Donoghue Professor of Palaeobiology

Department of Earth Sciences University of Bristol Wills Memorial Building, Queens Road, Bristol BS8 1RJ, UK Mobile +44 (0) 759 8189545; Tel +44 (0) 117 954 5440; Skype [phil\\_donoghue](https://www.skype.com/user/phil_donoghue)

Homepage < <http://palaeo.gly.bris.ac.uk/donoghue/> > < <http://bristol.academia.edu/PhilipDonoghue> > < <http://www.researcherid.com/rid/A-3873-2008> >

EvoDevo - a new BMC Open Access Journal < <http://evodevojournal.com/> >

Philip Donoghue <[phil.donoghue@bristol.ac.uk](mailto:phil.donoghue@bristol.ac.uk)>

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## UCalifornia Riverside InvasiveSpecies

Advertisement

Assistant Professor and Assistant Entomologist in the area of Invasive Species Ecology, University of California, Riverside. Position available July 1, 2012, 9-month appointment, 50% Instruction and Research / 50% Organized Research. Appointment level and salary commensurate with experience. Ph.D. in Entomology, Biology, Ecology or a related discipline is required. The successful candidate must demonstrate evidence of strong training and experience with the biological processes, species attributes and ecological conditions that promote the establishment and potential spread of invasive and/or introduced terrestrial arthropod species. Areas of research emphasis could include the study of invasion processes; the evolution and genetics of invasiveness; the role of habitat quality and diversity on the establishment of invasive and introduced species; the dispersal and spread of these species; and the interactions of such species with established potential hosts, competitors and natural enemies. Hypothesis-driven research that includes theoretical issues relating to propagule size and establishment frequencies; climatic matching; genetic adaptations; and population genetics, dynamics and regulation would also be considered. Applied research consistent with the mission of the Agricul-

tural Experiment Station directed toward managing invasive and introduced (insect or weed) species is expected. Teaching responsibilities include supervision of graduate students, participation in undergraduate instruction in entomology, ecology, and evolution, as well as a graduate course taught in an area of interest. Interactions with the other research groups in interdepartmental programs are encouraged. Participation in the Center for Invasive Species Research and the Center for Conservation Biology and the Institute for Genome Biology is encouraged. Send curriculum vitae, transcripts, statement of research interests, reprints, manuscripts in press, and have four letters of recommendation sent to: Dr. Richard Stouthamer, Invasive Species Ecologist Search Committee Chair, Department of Entomology, University of California, Riverside, CA 92521; e-mail : Richard.Stouthamer@ucr.edu; phone: 951-827-2422; FAX (951)-827-3086; e-mail. Review of applications will begin March 1, 2012, but this position will remain open until filled. Information about the Entomology Department and an expanded description can be found on the website: <http://www.entomology.ucr.edu>.

The University of California is an Affirmative Action / Equal Opportunity Employer committed to excellence through diversity, and strongly encourages applications from all qualified applicants, including women and minorities

Bradley J. White, Ph.D. Assistant Professor Center for Disease Vector Research Department of Entomology University of California Riverside, CA 92521

bradley.white@ucr.edu

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## UCalifornia Riverside PlantEvoDevo

The Department of Botany and Plant Sciences invites applications for a faculty position in plant evolutionary developmental biology (“evo-devo”). This is a 9-month, tenure-track position at the Assistant or Associate level. The successful candidate is expected to work at the interface between modern developmental, phylogenetic, and evolutionary plant biology. He/she will join an active and collegial department with broad interests in plant biology. The individual will be expected to establish and maintain an independent, vigorous, innovative research program, teach at the undergraduate and graduate level in the areas of evolutionary developmental biology, plant systematics, or developmental

anatomy/morphology to complement the Department’s existing strength in cell and developmental biology, and participate in departmental and interdepartmental undergraduate and graduate programs.

The position includes an appointment in the Agricultural Experiment Station and will be available July 1, 2012. Applicants must hold a Ph.D. and postdoctoral experience is essential for candidates at the assistant level.

Evaluation of applications will begin April 9, 2012 and continue until the position is filled. Interested individuals should submit 1) a curriculum vitae, 2) a statement of research and teaching interests, and 3) have three letters of recommendation sent to:

Chair, Plant Evo-Devo Search Committee c/o Department of Botany and Plant Sciences 2118 Batchelor Hall University of California, Riverside, CA 92521-0124 Email: [bpsrecruit@ucr.edu](mailto:bpsrecruit@ucr.edu) FAX: (951) 827-4437

For additional information on the Department and the campus visit <http://cnas.ucr.edu/> and <http://www.plantbiology.ucr.edu/>. The University of California, Riverside has an active career partner program, and is an Affirmative Action equal opportunity employer committed to excellence through diversity.

Jason E Stajich, PhD Assistant Professor Plant Pathology & Microbiology University of California, Riverside 951.827.2363 <http://lab.stajich.org> <http://fungalgenomes.org> <http://fungidb.org> twitter @stajichlab @hyphaltip @fungalgenomes @fungidb <http://plantpathology.ucr.edu> <http://genomics.ucr.edu> [jason.stajich@ucr.edu](mailto:jason.stajich@ucr.edu)

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## UGlasgow Bioinformaticians

There are several openings for Bioinformaticians and Software Developers at the University of Glasgow (UK). The successful candidates will join a new facility - jointly funded by the Wellcome Trust and the University of Glasgow - that will develop and extend data analysis tools for integrated genomics, transcriptomics, proteomics and metabolomics studies. This is a great opportunity to interact closely with biologists, clinicians and ecologists, and to establish varied collaborations within and outside the University.

Closing date is 2 March 2012.

For more information see the Naturejobs ads: <http://bit.ly/xeaq3H> (Bioinformaticians, 4 jobs), <http://bit.ly/zh09py> (Software developer, 1 job) and <http://bit.ly/xEyO27> (Software development manager, 1 job).

And the ad on the University website: <http://bit.ly/ykeLSc> To learn more about research in the College of Medical, Veterinary and Life Sciences at the University of Glasgow, visit: <http://www.gla.ac.uk/colleges/mvls/> The University of Glasgow, charity number SC004401

Paul.Johnson@glasgow.ac.uk

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## UIdaho ChairPosition

Department Chair Position: The University of Idaho is seeking an outstanding leader for the Department of Biological Sciences. The Department of Biological Sciences consists of 25 faculty with dynamic extramurally funded research programs, with particular strengths in evolutionary biology, reproductive biology, cellular and molecular biology and biochemistry. This position represents an opportunity to lead new initiatives and guide the future growth of the department. This is a 12 month, tenured position at the rank of professor. Qualified candidates must possess: a) a doctorate in biology or a related field; b) a professional record sufficient to achieve tenure at a senior rank; c) an internationally recognized, externally funded research program and; d) experience in teaching at the undergraduate and graduate levels. Outstanding candidates will also possess the ability to: a) lead large scale research initiatives; b) bridge academic disciplines and; c) work and communicate effectively with diverse groups including students, faculty, alumni, and university and state administrators. Review of applications begins 3/15/2012. For a full description and application materials, visit [www.hr.uidaho.edu](http://www.hr.uidaho.edu). For questions relating to the application process, contact Gina Reid at [biofac@uidaho.edu](mailto:biofac@uidaho.edu).

Jack Sullivan President, Society of Systematic Biologists Department of Biological Sciences University of Idaho Moscow, ID 83844-3051 <http://www.webpages.uidaho.edu/~jacks/> [jacks@uidaho.edu](mailto:jacks@uidaho.edu)

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## UIllinois InsectEvolution

Assistant or Associate Professor of Integrative Insect Biology

School of Integrative Biology

University of Illinois at Urbana-Champaign

The School of Integrative Biology and the Department of Entomology at the University of Illinois, Urbana-Champaign invite applications for a full-time, nine-month, tenure-track faculty position in integrative insect biology at the rank of Assistant or Associate Professor. The position starts as early as August 2012. We seek a broadly trained biologist working on insects who will develop an internationally recognized, externally funded research program that integrates evolutionary approaches into any aspect of insect biology, including but not limited to chemical ecology, developmental genetics, plant-insect interactions, physiology, neuroscience, and behavior. Applicants should be familiar with a diversity of modern techniques, including molecular and genomic methods. The successful candidate will have the opportunity to be part of dynamic and well-established communities of integrative biologists with interests spanning a wide range of taxa in the School of Integrative Biology, as well as in a number of interdisciplinary programs across the campus. Participation in both undergraduate and graduate education is required. A Ph.D. in Biology or related discipline is required by start date, and postdoctoral experience is desirable. Salary is commensurate with qualifications and experience.

To ensure full consideration, please create your candidate profile through <http://go.illinois.edu/-InsectBiology> and upload your application letter, curriculum vitae, summary of research and plans, teaching philosophy and experience, and contact information for three professional references by March 15, 2012. Referees will be contacted electronically upon the submission of the application. Applicants may be interviewed before the closing date; however, no hiring decision will be made until after that date. For further information contact Insect Biology Search Chair, [sib@life.illinois.edu](mailto:sib@life.illinois.edu).

Illinois is an Affirmative Action /Equal Opportunity Employer and welcomes individuals with diverse backgrounds, experiences, and ideas

who embrace and value diversity and inclusivity. ([www.inclusiveillinois.illinois.edu](http://www.inclusiveillinois.illinois.edu)).

fuller@life.illinois.edu

Kirby Drive Duluth, MN 55182 218-726-7738

kupdegra@d.umn.edu

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## UMinnesota Duluth SummerREU

Project Baseline, a nationwide initiative to create a research-quality seedbank for the study of plant evolutionary processes, is recruiting an undergraduate to participate in supervised research as part of the NSF Research Experience for Undergraduates program for summer 2012.

**POSITION AND DUTIES:** The successful candidate will work as part of a field team, collecting seeds, plant material and associated ecological data throughout Minnesota and the Midwest. In addition, they will apply geostatistical methods to sampling data in order to determine efficient plant population sampling schemas. The REU scholar will be expected to produce a final report on the results of their analyses by 31 October 2012.

**SKILLS/EDUCATION/EXPERIENCE:** The ideal candidate will be a returning junior or senior in the environmental sciences with academic background in plant biology, ecology, statistics and geographic information systems.

**PHYSICAL REQUIREMENTS:** Applicants should be in good physical condition, and prepared for extensive travel and long days spent outdoors.

**CONDITIONS OF EMPLOYMENT:** The position is offered during the summer season, with a weekly stipend for a period of 10 weeks between June and August 2012. It will be based in Duluth, Minnesota.

**APPLICATION DEADLINE:** Applicant review will begin March 15 and continue until a suitable candidate is identified.

**TO APPLY:** By US Mail or email, send a cover letter, resume, copy of transcripts, names, addresses and phone/email contact information for 3 references to: Karen Updegraff University of Minnesota, Duluth Department of Biology 1035 Kirby Drive Duluth, MN 55182 email: kupdegra@d.umn.edu

The University of Minnesota is an Equal Opportunity Educator and Employer.

– Karen Updegraff PostDoctoral Associate University of Minnesota, Duluth Department of Biology 1035

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## UOxford Fellowships PlantEvolution

Independent Research Fellowships

Evolutionary biologists, population geneticists are encouraged to apply.

\*We particularly welcome enquiries by Friday 16 March, 2012\* The Department of Plant Sciences at the University of Oxford is keen to hear from early career researchers who feel they have what it takes to secure a fellowship from one of the UK or international research sponsors and become an Independent Research Fellow in the Department. Fellowship opportunities include:

\* BBSRC David Phillips Fellowship \* Royal Society University Research Fellowship \* NERC Fellowship \* ERC Starting Grants.

These schemes enable the best early career researchers to establish themselves as independent research fellows with their own research groups. The fellowships are prestigious and competitive. Sponsors' eligibility criteria apply.

We can support the best candidates to apply for fellowships. We are also keen to hear from fellows who may wish to transfer a current fellowship to the Department. See [www.plants.ox.ac.uk](http://www.plants.ox.ac.uk) Debbie Reeves Research Coordinator Dept of Plant Sciences University of Oxford South Parks Road Oxford OX1 3RB UK

Telephone +44 1865 275053

Debbie Reeves <[debbie.reeves@plants.ox.ac.uk](mailto:debbie.reeves@plants.ox.ac.uk)>

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## URennes EvolutionaryEcol

Dear all

Please can you distribute this job add.

Please find below an announcement for a professorship at Rennes 1 university. Note that, normally, candidates must have passed a formal national "qualification" to be eligible, and this unfortunately has to be acquired in



September, i.e. prior to the yearly publication of posts.  
Please send inquiries to the below mentioned addresses.

Best regards Andreas Prinzing

(French version below)

Job title Permanent Professor position in Integrative Ecology, University of Rennes 1, France  
Job Summary Context : The University of Rennes 1 (Brittany, France) offers a full-time permanent professor position in Integrative Ecology. The position will be opened in the laboratory UMR CNRS 6553 “Ecosystems, Biodiversity and Evolution” (ECOBIO). The laboratory is a joint research unit of the CNRS Department of Ecology and Environment (INEE) and the University of Rennes 1. ECOBIO is a multidisciplinary unit working in the field of continental Ecology, that brings together fundamental concepts and skills in evolutionary biology, community ecology and functional ecology. Its core research is the understanding of ecosystem functioning through the analysis of biodiversity dynamics, from genes to landscapes, and thus offers wide opportunities for developing integrative ecology. ECOBIO is also a member part of the OSUR « Observatoire des Sciences de l’Univers » within the University, that allow future applicants excellent opportunities for cross-disciplinary research collaboration in Earth and Environmental Sciences.

Job Description Research : Within the University of Rennes 1, and connecting with the OSUR , we seek senior ecologists whose research interests focus on continental ecosystems and whose research is integrative across areas of ecology to bridge evolutionary and functional aspects of ecosystem ecology. Applications will be particularly welcome from candidates who work on aspects of global change and biodiversity, and aim at explaining how phenotypic plasticity and adaptations, including behavioural and ecophysiological ones, determine the ability of species to respond to global changes. Research interests to investigate the paradox between the speed at which global changes occurs and the slowness of the implementation of the evolutionary process (microevolution, macroevolution) will be highly considered to complement current strengths in ECOBIO. The research expertise of the applicants could thus include invasive species, complex community interactions, niche concept, life history traits, environmental changes (landuse/landcover or climatic changes), and modeling or other experimental and computational approaches of integrative ecology.

Education: The position also involves teaching at the undergraduate (BSc) and graduate (master) educational programs in the field of ecology and evolutionary

biology. The successful candidate will primary teach in the BSc program of “Biology of Organisms” and in the Master research program “Functional, Behavioural and Evolutionary Ecology”, on specific topics such as: population dynamics, evolutionary biology, community ecology, behavioural ecology, ecophysiology, as well as the analytical tools of modern ecology. He/She is expected to take a leadership in these programs or others related environmental masters within the OSUR, and interacting with the “Life and Environmental Sciences” teaching programs, to enhance a quantitative and theoretical training of students for basic and applied research in Ecology.

Application details : The position will be opened on September 2012. The application has to be submit before 27 March 2012 at the University of Rennes 1, 2 rue du Thabor, 35042 Rennes cedex, France. Salary to be negotiated following research experience. Experienced researchers (senior level) > 10 years of research are expected. For additional information on the position , please contact : francoise.binet@univ-rennes1.fr from ECOBIO, gilles.pinay@univ-rennes1.fr from OSUR, hubert.leriveray@univ-rennes1.fr from UFR SVE or frederic.thirot@univ-rennes1.fr from the University of Rennes1

Poste de professeur en Ecologie intégrative (section 67), Université de Rennes 1, France

Contexte : L’Université de Rennes 1 (Bretagne, France) recrute un professeur en écologie intégrative. Le poste est ouvert dans le laboratoire «Ecosystèmes, Biodiversité et Evolution» (UMR CNRS 6553 ECOBIO). Le laboratoire est une unité mixte de recherche entre l’Institut d’Ecologie et de l’Environnement du CNRS (INEE) et l’Université de Rennes 1. ECOBIO est une unité multidisciplinaire travaillant dans le domaine de l’écologie continentale, qui réunit les concepts fondamentaux et les compétences en biologie évolutive, écologie des communautés et écologie fonctionnelle. Le cœur des recherches porte sur la compréhension du fonctionnement des

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

Please note that this position is renewable annually for up to three years, and that research support is available.

#### University of Richmond VISITING POSITION IN EVOLUTION AND/OR ECOLOGY

The Department of Biology at the University of Richmond seeks to fill a one to three year visiting, non-tenure-track position beginning August 2012. We are looking for a broadly trained biologist with expertise in the evolutionary and/or ecological sciences. We seek individuals with a strong commitment to high quality undergraduate education and an interest in gaining experience in teaching and research at a primarily undergraduate institution. Teaching expectations include participation in introductory courses in Evolution and/or Ecology, and upper-level electives in the candidate's area of expertise. Candidates who can integrate field experiences into their teaching will receive favorable consideration. Research space and equipment will be made available based on synergy with existing faculty research programs. Candidates must hold a Ph.D. or be ABD with an anticipated completion by August 2012.

Applicants should apply online at <http://www.urjobs.org> using the Faculty (Instructional/Research) link. Applicants should submit an electronic cover letter that addresses their vision for being a teacher-scholar at a primarily undergraduate institution, as well as a curriculum vitae. Additionally, applicants should arrange for two letters of recommendation, including at least one that addresses teaching effectiveness and potential, to be sent electronically to Dr. Carrie Wu in the Department of Biology at [cwu@richmond.edu](mailto:cwu@richmond.edu). The deadline for applications is Thursday, March 1, 2012, but qualified applicants will be considered until the position is filled.

The University of Richmond is committed to developing a diverse workforce and student body and to being an inclusive community. We strongly encourage applications from candidates who will contribute to these goals. For more information on the department, see (<http://biology.richmond.edu/>).

Department of Biology: The Gottwald Center for the Sciences houses the Departments of Biology, Chemistry, and Physics and had an extensive renovation/expansion of laboratory and teaching facilities completed in 2005. Approximately 50 biology majors graduate each year, many of whom go on to attend top graduate and medical schools. A full-time Director of Biological Imaging manages our microscopy suite (SEM, TEM, and confocal microscopes). The university also maintains an animal facility, greenhouse and herbarium, flow cytometer,

standard molecular biology equipment, and computer imaging technology, all of which are available for student and faculty use.

Carrie Wu, Ph.D. Assistant Professor Department of Biology University of Richmond Richmond, VA 23173  
phone: 804-289-8712  
[cwu@richmond.edu](mailto:cwu@richmond.edu)

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### USheffield Evolutionary Biol

Patrick and Irwin-Packington Zoology Fellowships (2 positions).

Job Reference Number: UOS004052

The Department of Animal and Plant Sciences at the University of Sheffield seeks to further enhance its strong community of independent research fellows. We seek outstanding candidates in any area of Zoology who are interested in applying for externally-funded fellowships with the support of the Department. Up to two funded positions of up to 18 months each are available to assist the best candidates to develop successful proposals. Biology in Sheffield was the highest-ranked, broadly-based unit in its subject area in the most recent national Research Assessment Exercise (3rd overall). The Department of Animal and Plant Sciences has particular strengths in evolutionary biology, animal behaviour, ecology and biodiversity, with exceptional expertise and facilities for approaches from molecular ecology and developmental genetics to long-term field experiments and theoretical ecology. You should have a PhD (or equivalent experience) in Biology and the potential to become a leading researcher in the field. A track record in writing and successful submission of high impact papers in scientific journals is essential. In addition to a CV, applicants are requested to supply a one page synopsis of their research track record and a one page plan of their proposed future research.

Further details available at [www.shef.ac.uk/jobs](http://www.shef.ac.uk/jobs) or from Roger Butlin ([r.k.butlin@shef.ac.uk](mailto:r.k.butlin@shef.ac.uk))

Professor Lorraine Maltby Head of Department Department of Animal & Plant Sciences The University of Sheffield Alfred Denny Building Western Bank Sheffield S10 2TN UK Tel: +44 (0)114 222 4111 Fax: +44 (0)114 222 0002 email: [hodaps@sheffield.ac.uk](mailto:hodaps@sheffield.ac.uk) PA: Sue Carter - Tel: +44 (0)114 222 4376, email: [s.a.carter@sheffield.ac.uk](mailto:s.a.carter@sheffield.ac.uk)

Departmental web site: <http://www.sheffield.ac.uk/-aps> r.k.butlin@sheffield.ac.uk

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## UValencia Bioinformatics

Bioinformatics position available at LIFESEQUENCING S.L.

Lifesequencing is the first Spanish private company involved in Next Generation Sequencing (NGS) data generation and analysis; the company is allocated at the University of Valencia Scientific Park (C/Catedrático Agustín Escardino, 9, Edif 2, 46980 Paterna, Valencia, Spain). Lifesequencing is an active company in the field of supporting NGS in research projects, and also developing internal research. The company has sequencing facilities with access to 454 Life Science/Roche, Illumina, Ion Torrent and SoLID, as well as access to Super-computing facilities.

Lifesequencing offers a full time contract during 6-month contract with a possibility of long term-undefined contract after the 6 months.

The successful applicant will play a key role in the evaluation and development of bioinformatic tools and pipelines to support analysis of high-throughput next-generation (Illumina/454/Ion Torrent) sequencing data. Additional Information: Basic Qualifications: 1.- A Master degree or equivalent experience in computer science, computational biology, or related field.

2.- Experience with object oriented bioinformatics programming languages in a unix environment (Perl, Python, Javascript, SQL) and compiled languages (e.g. C++), relational databases and construction of computational pipelines.

3.- Ability to work inside of the bioinformatics core facility of the company.

4.- Prior experience in NGS data analysis is required (specially assembly, RNAseq analysis and genome annotation).

Applicants should submit a cover letter describing interest, skills and prior bioinformatic experience; a CV with the contact information of 3 people who can provide references.

All documents should be sent to Francisco M. Codoñer, PhD (fcodoner@lifesequencing.com) Scientific Director and Head of Bioinformatics.

Thanks

Francisco M Codoñer, PhD Scientific Director & Head of Bioinformatics Lifesequencing S.L. [www.lifesequencing.com](http://www.lifesequencing.com) Parc Científic Universitat de València Edificio 2, Biotecnología C/Catedrático Agustín Escardino, 9 46980 Paterna (VALENCIA)

Telf. +34 963 644 356 Mov. +34 673 535 344 Fax. +34 963 160 367 mail: fcodoner@lifesequencing.com

“Francisco M. Codoñer”  
<fcodoner@lifesequencing.com>

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## VirginiaCommonwealthU Plant EvoDevo

Faculty Position - Assistant Professor PLANT EVOLUTIONARY DEVELOPMENT Virginia Commonwealth University

The Department of Biology invites applications for a biologist with expertise in plant evolutionary developmental at the molecular and organismal levels. This includes applicants with interests in phylogenetic origins and genetic underpinnings of plant developmental phenotypes. Special consideration will be given to applicants who can collaborate with our growing groups of plant, developmental and evolutionary biologists. This is a nine-month, tenure-track position at the rank of Assistant Professor. Anticipated start date is August 16, 2012, contingent on funding. The successful applicant will be expected to develop a productive, externally-funded research program, direct graduate students through the Ph.D. level, and to teach in the Department's undergraduate and graduate programs. Postdoctoral and teaching experience, as well as demonstrated evidence of overall excellence in scholarship, are required. In addition, applicants must have demonstrated experience working in and fostering a diverse faculty, staff, and student environment, or a commitment to do so, as a faculty member at VCU. Competitive start-up funds are available.

Virginia Commonwealth University has an enrollment of 32,000 students, including over 1,900 undergraduate and 75 graduate students in Biology. The Department of Biology ([www.has.vcu.edu/bio](http://www.has.vcu.edu/bio)) has 39 faculty members with diverse research interests in the following three areas of excellence: Cell Regulation, Evolution, and Ecological Processes and Applications. Faculty members have access to core facilities and colleagues in the Center for the Study of Biological Complexity ([www.vcu.edu/csbc](http://www.vcu.edu/csbc)).

Electronic submission of applications to biology@vcu.edu is preferred, but hard copies of vitae, statements of research and teaching interests, and three letters of reference may be sent to: Stephanie Millican, Department of Biology, Virginia Commonwealth University, Richmond, VA 23284-2012. Closing date for receipt of applications is March 15, 2012. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.

aeckert2@vcu.edu

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## WoodsHole BioinformaticsAnalyst

Job Available: Scientific Informatics Analyst, MBL

Please apply online at <https://mbl.simplehire.com/postings/2167>. Note, this is an initial one-year position with the possibility of extension. The job is located at the Marine Biological Laboratory in Woods Hole, MA.

Department Bay Paul Center Position Type: Research Position Title: Scientific Informatics Analyst , Bay Paul Center Position Summary: The Marine Biological Laboratory is seeking applications for a full-time Scientific Informatics Analyst position with the Josephine Bay Paul Center. The successful applicant will play a key role in the evaluation and development of bioinformatic tools to support analysis of high-throughput next-generation (Illumina/454/Ion Torrent) sequencing data. In close collaboration with Bay Paul Center researchers, the applicant will develop, document, and maintain bioinformatics processing tools for a wide

range of projects. Examples include processing of raw Illumina data to maximize quality; clustering, annotation, assembly, and visualization of metagenomic data; building SQL database structures to manage next-gen sequence information; analysis of RNA-seq and small RNA expression data; whole genome assembly and analysis; visualization of DNA sequence information and associated metadata; and analysis and visualization of microbial population structures. Close interaction with experimental and informatic scientists will be an important part of the job.

Additional Information: Basic Qualifications: .A master's degree or equivalent experience level in mathematics, computer science, computational biology, or related field.

.Experience with object-oriented bioinformatics programming languages in a unix environment (Perl, Python, Javascript, SQL) and compiled languages (e.g. C++), relational databases, and construction of computational pipelines.

.Ability to work independently and with teams of technical and nontechnical personnel, manage multiple projects, and respond to a rapidly changing environment.

.Prior experience with next-generation sequencing data, particularly Illumina short-read data, preferred.

Special Instructions to Applicants: Applicants should submit a cover letter describing interests, skills (including any specific experience with the job responsibilities listed above), and prior bioinformatics experience; a resume or CV and the names and contact information of 3 people who can provide letters of reference.

Required Documents Cover Letter References Resume/CV

sherisim@gmail.com

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## Other

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## Advice drosophila incubator

I am in the market to buy an incubator (temperature and humidity-controlled) for use in culturing *Drosophila melanogaster*. However I'm not sure which brand and model is best value for money, so I'm hoping that the EvolDir community can give me some advice. I am based in southern Sweden, so fairly large variation in external humidity levels can be expected. All I know is that a colleague of mine has had a bad experience with Sanyo incubators. Please share your incubator experiences with me, particularly with respect to reliability, price, cost of repair, etc.

Thanks!

Jessica Abbott.

– Dr. Jessica K. Abbott Department of Biology Section for Evolutionary Ecology Lund University Sölvegatan 37 223 62 Lund, Sweden Phone: 046 222 3795 Website: <http://jessicakabbott.com> “It is those who know little, and not those who know much, who so positively assert that this or that problem will never be solved by science.”

–Charles Darwin, Descent of Man

Jessica Abbott <jessica.abbott@biol.lu.se>

## Alberta Volunteer Internship GroundSquirrel

Field Assistants Required-Columbian ground squirrels

Sheep River Provincial Park, Alberta, Canada

We are looking for 4-5 volunteers to assist with fieldwork for the period of April 15 to Aug 31, 2012. 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, radio-telemetry (to locate natal burrows) 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 southwestern 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 and accommodation are provided, but you will be required to make your own way to either Calgary or Edmonton. 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 one of these posts 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 March 08, 2012.

Contact:

Dr. Jeff Lane [u.columbianus@hotmail.com](mailto:u.columbianus@hotmail.com) Department of Biological Sciences University of Alberta Edmonton, AB Canada T6G 2E9

[u.columbianus@hotmail.com](mailto:u.columbianus@hotmail.com)

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## American science writing

From Anthem Press <http://www.anthempress.com/-index.php/an-anthology-of-nineteenth-century-american-science-writing.html> American Science in the 19th century lagged behind Europe but was certainly not without its luminaries and its lasting contributions, especially in the Natural Sciences. These luminaries included systematists and organismal biologists who helped lay the foundation for the development of modern evolutionary biology, names such as Say, Nuttall, Rafinesque, Ord, Gray, Leidy, Dana, Marsh, Wright, Cope, King, Merriam, and Agassiz. Have you wondered about who these people really were and their place in American Science? Have you ever had the opportunity to read their original works? Then perhaps this work should be on your bookshelf.

An Anthology of Nineteenth-Century American Science Writing

Edited by C. R. Resetarits

About This Book

This volume is a brief anthology of the most influen-

tial writing by American scientists between 1800 and 1900. Arranged thematically and chronologically to highlight the progression of American science throughout the nineteenth century V from its beginnings in self-taught classification and exploration to the movement towards university education and specialization V it is the first collection of its kind. Each section begins with a biography, putting human faces to each time period, and introducing such notable figures as Thomas Jefferson and Louis Agassiz.

valuable collection of original source documents on the natural and physical sciences not readily available to scholars and the general public. This anthology expands our understanding of the American contribution to nineteenth-century science, which is often overshadowed by European achievements. XAlan S. Weber, Premedical Program, Weill Cornell Medical College in Qatar, and editor of Nineteenth-Century Science

work reflects a thorough reading of the major sources in the history of science in America. Its preface and introductions present a well-digested summary survey of scientific activity in the United States, and nothing comparable to this collection of primary sources exists. Its focus on the scientists own words brings to life the theories, methods, and questions that animated both their own and their contemporaries research. XDonald deB. Beaver, Professor of History of Science, Williams College

William J. Resetarits, Jr. Professor Department of Biological Sciences Texas Tech University Lubbock, Texas 79409-3131 Phone: (806) 742-2710, ext.300 Fax (806) 742-2963

<http://www.myweb.ttu.edu/wresetar/>

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## Animated Natural Selection

Dear friends,

I need some animated gifs ou small movies showing natural selection to use with first year students but.... looking in the internet I cannot find a good one!

If anyone have a good one could you please send me?

Thanks!

Voltolini

Prof. Dr. J. C. VOLTOLINI Universidade de Taubate - Departamento de Biologia Taubate, SP. 12030-010. E-Mail: [jcvoltol@uol.com.br](mailto:jcvoltol@uol.com.br) \*

Grupo de pesquisa ECOTROP CNPq: <http://dgp.cnpq.br/buscaoperacional/detalhepesq.jsp?pesq=-8137155809735635> \* Currículo Lattes: <http://lattes.cnpq.br/8137155809735635> \* Fotos de Cursos e Projetos no Orkut e Facebook: <http://www.orkut.com.br/Main#Profile?uid=-17608429643840608483> <http://www.facebook.com/VoltoliniJC?v=info> “Siamo tutti angeli con un’ala e possiamo volare soltanto se ciabbracciamo”

jevoltol@uol.com.br

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## Bayesian Clustering Methods

Dear Group,

I would like to find a Bayesian clustering method useful to assign a posterior probability of group membership into k groups for all individuals in my dataset. See data description below. Your suggestions are much appreciated. I am using R for all my statistical analysis.

Many Cheers, Keith

Data description:

I have sampled almost 2000 individual birds (single species representing two subspecies or phenotypes) across Sweden. All individuals are adult males. Although this is one species, in middle of Sweden there is a (migratory) divide where the southern individuals presumably migrate to West Africa and north of the divide they presumably migrate to East Africa. There is a zone of overlap approximately 300 km wide overlapping the migratory divide.

Variables:

Wing (mm) - continuous Tail (mm) - continuous Bill-head (mm) - continuous Tarsus (mm) - continuous Mass (g) - continuous Colour (9 levels) - categorical Stable carbon-isotopes (parts per mil) - continuous Stable nitrogen-isotopes (parts per mil) - continuous SNP WW1 (0, 1, 2) - molecular marker, 0 and 2 are fixed and 1 is heterozygote SNP WW2 (0, 1, 2) - molecular marker, 0 and 2 are fixed and 1 is heterozygote

Keith Larson, PhD Student Evolutionary Ecology, Lund University Sölvegatan 37 223 62 Lund Sweden Phone: +46 (0)46 2229014 Mobile: +46 (0)73 0465016 Fax: +46 (0)46 2224716 Skype: sternacaspia FB: keith.w.larson@gmail.com

keith.w.larson@gmail.com

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## Bird breeding atlas

Hi All,

I am a PhD student looking at the Evolution of birds across the Atlantic Islands. However, I am struggling to find data from the Cape Verde islands in the form of a breeding bird atlas (e.g. number of individuals per quadrat per species). Does anyone know if there is any such project?

Regards,

Danny Norrey PhD Student Division of Biology and Conservation Ecology School of Science and the Environment Manchester Metropolitan University Manchester, M1 5GD

JOHN.D.NORREY@stu.mmu.ac.uk

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## Corbiculate bee samples

Hi Folks,

For a new study starting, I am searching small samples (few specimens) of corbiculate bees: Apini (different of *A.mellifera*), Bombini, Meliponini and Euglossini. Ideally specimens would be send in RNA-later solution or frozen. Samples in Ethanol 75% or above are however welcome too.

Please make contact in order to get the address for expedition.

Thanks for collaboration, Seb

Dr Sébastien Patiny (Entomologist) Chemcom s.a. 1070 Brussels BELGIUM

url : <http://sites.google.com/site/patinys/> Sébastien Patiny <patiny.s@gmail.com>

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## DIY ABC

I am attempting to test divergence scenarios using DIY ABC on three clusters of plant populations, each of which may represent a distinct species (and thus may not share immediate common ancestry). My data set consists of 31 SSRs. No matter how I change scenario parameters or adjust priors, DIY ABC finds that gene genealogies do not support the scenarios. The program has no problem dealing with each of the three population clusters separately. My question is: at what point should one conclude that the failure of the program to accept the overall scenarios is due to the biological reality that the three population clusters represent three independent genealogies and thus violate the expectations of coalescence, rather than some flaw in my scenario priors. I realize this is a rather open-ended question. I should add that with genetic distance clustering, there is no bootstrap support for any "sister" relationship between the three populations clusters. STRUCTURE, using the Evanno et al. delta K methods of determining optimal K, also support the uniqueness of each cluster. Am I just stubbornly refusing to face reality?

Thanks, Alan

Alan W. Meerow, Ph.D., Research Geneticist and Systematist USDA-ARS-SHRS, National Germplasm Repository 13601 Old Cutler Road, Miami, FL 33158 USA voice: 786-573-7075; cell: 786-412-1821; FAX: 786-573-7102 email: alan.meerow@ars.usda.gov

"Meerow, Alan" <Alan.Meerow@ARS.USDA.GOV>

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## EDEN undergrad internship

### Undergraduate Training Opportunities in Emerging Model Organisms

Are you an undergraduate student interested in gaining research experience? Would you like to find out what it is like to work in a lab-based or field-based research environment? Are you interested in what happens when you combine evolution with development, ecology with genetics, or lab work and field work? Are you unsure how to find opportunities like this? If you answered "yes" to any of these questions, then EDEN's Undergraduate Internship Program is for you! You may have heard of fruit fly genetics, forest ecology, or biomedical research using mice as model organisms. But did you know that there are labs studying the evolution and function of butterfly wing patterns, the genetic basis of different flowers shapes and col-

ors, and African fish behavior and how it relates to genome structure? The growing fields of evolutionary ecological and developmental biology, often known as Evo-Devo-Eco, use both classical and cutting-edge techniques to study less traditional organisms, including sponges, finches, columbines, dung beetles, lizards and snails! The EDEN Undergraduate Training Program can give you the opportunity for a summer research internship in a lab studying such a new or emerging model organism.

### Goals of the Program

EDEN aims to train undergraduates in the field of Evo-Devo-Eco, with an emphasis on emerging model systems. Much undergraduate training in biology is based on textbooks that emphasize the contributions of traditional model organisms to our understanding of the natural world. Given the crucial role of such models in the history and progress of science, this focus is both inevitable and important. However, it is equally important that the next generation of scientists be made aware of the increasing contributions of models that emerge at the frontiers of the dynamic fields encompassed by Evo-Devo-Eco. EDEN offers you the opportunity to do research in laboratories working on such models, giving you the option to broaden the scope of your future research choices. EDEN's ultimate goal with this program is to enable effective and interdisciplinary training of budding scientists in performing research on emerging model systems.

### Eligibility Criteria

Eligible students should be undergraduates at any U. S. institution, including liberal arts colleges, community colleges, and universities. Eligible host labs should be conducting research using new and emerging model organisms. If the proposed host lab is working on a well-established model organism, your application must explain how the techniques or skills that you learn in the host lab will be applied to work on new or emerging model organisms at your home institution.

Students may apply to work in a lab that is at their home institution, as long as the proposed research involves new and emerging model organisms. However, in cases where all other aspects of applications are considered to be equally competitive, preference will be given to applicants who propose to travel to a lab that is not at their home institution.

We strongly encourage you to contact EDEN ( admin@edenrcn.com) to confirm that your proposal and proposed host lab meet these criteria.

Host labs can be at any US institution, including liberal arts colleges, universities, and research institutes,

as long as the host lab has the necessary infrastructure to support the proposed project. Host labs can be chosen from the list of participating labs < <http://edenrcn.com/participating/> >, or students can make their own arrangements with prospective labs. For assistance in finding a suitable lab, click here < <http://edenrcn.com/lab/> >. EDEN is committed to supporting all undergraduate students for this training program, including students from groups that are traditionally underrepresented in the sciences, and students from low-income backgrounds.

It is NOT a requirement that applicants for EDEN funding, or hosts of EDEN-funded students, be listed as EDEN Participating Labs < <http://edenrcn.com/participating/> >. If you are applying for an EDEN undergraduate internship, you can propose to work with any lab in the US. However, please encourage your host lab PI to add their details to the EDEN Participating Labs < <http://edenrcn.com/participating/> > database by completing this brief survey < <http://edenrcn.com/join/> >.

#### Terms and Conditions

Each year, EDEN will award eight ten-week undergraduate research internships. Each award consists of a \$4000 stipend per student, and need-based travel assistance of up to \$1000 per student. Exact amounts of travel allowances will be determined on a case by case basis. Students

— / —

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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## EntangledBank database

The Entangled Bank Database (EBDB), developed at Imperial College London, provides integrated access to a number of Mammal Datasets (a taxonomy, supertree phylogeny, Pantheria trait database and range maps) and the Global Population Dynamics Database of long-term abundance records. These data may be queried by biological name, tree topology, data set attributes, geography and time to answer complex questions that span multiple data sets such as;

Which nocturnal South American mammals are descended from the last common ancestor of these

species?

What are the ranges of Rodentia species that have a body mass less than 250g and for which there are population abundance records between 1980-90?

Data subsets may be downloaded in a variety of formats.

<http://www.entangled-bank.org.uk/> The system is a prototype, so please tell us any problems experienced or ideas for additional functionality: email [d.kidd@kingston.ac.uk](mailto:d.kidd@kingston.ac.uk).

Enjoy, David Kidd Lecturer in Geographical Information Systems and Science, Kingston University, London

“Kidd, David” <[David.Kidd@kingston.ac.uk](mailto:David.Kidd@kingston.ac.uk)>

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## EOL Phylogenetic Tree Challenge

We are pleased to announce the EOL Phylogenetic Tree Challenge [http://www.eol.org/info/tree\\_challenge](http://www.eol.org/info/tree_challenge). Encyclopedia of Life (<http://www.eol.org>) wishes to give its users phylogenetically-informed ways to browse and retrieve information from its pages. A prize (sponsored travel to the iEvoBio 2012 meeting <http://www.ievobio.org>) is offered to the individual or team that can provide a very large, phylogenetically-organized set(s) of scientific names suitable for ingestion into the Encyclopedia of Life as an alternate browsing hierarchy.

This challenge has two core purposes:

- It provides a testbed for the Evolutionary Informatics community to develop robust methods for producing, serving, and evaluating large, biologically meaningful trees that will be useful both to the research community and to broader audiences.

- It enables the Encyclopedia of Life to organize the information it aggregates according to phylogenetic relationships; in other words, it provides a direct pipeline from research results to practical use.

A second iEvoBio attendance prize is offered by the Global Names project (<http://www.globalnames.org>).

The submission period is expected to begin 20 February. Final submissions are due by 15 April 2012. Submission instructions and detailed information about the challenge and eligibility are available at [http://www.eol.org/info/tree\\_challenge](http://www.eol.org/info/tree_challenge). To ask questions or discuss this challenge, please join the Phylogenetic Tree

Challenge community (<http://eol.org/communities/-98/>) on Encyclopedia of Life and post your comment to the newfeed.

Cyndy

Cynthia Sims Parr, [parrc@si.edu](mailto:parrc@si.edu) Director, Species Pages Group Encyclopedia of Life <http://www.eol.org> Office: 202.633.9513, Fax: 202.633.8742

Mailing address: National Museum of Natural History Smithsonian Institution P.O. Box 37012, MRC 106 Washington, DC 20013-7012

[csparr@gmail.com](mailto:csparr@gmail.com)

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## ESEB CallForTravelStipends

**\*\* SECOND CALL FOR APPLICATIONS FOR TRAVEL STIPENDS 2012 - DEADLINE FEBRUARY 19, 2012 \*\***

The ESEB is pleased to announce the call for applications for travel stipends 2012.

These stipends are for students and young scientists to attend the joint ESEB/SSE Congress on Evolutionary Biology in Ottawa in July 2012 (<http://www.confersense.ca/Evolution2012/index.htm>). The stipend will contribute to covering travel, living expenses and congress registration fees. The stipend will be paid out as a reimbursement after the congress, based on specification of the expenses. Eligibility: - Applicants must be ESEB members (for becoming a member of ESEB, see <http://www.eseb.org/>). - Applications can be submitted by scientists at various stages of their professional career (e.g., Masters and PhD students, postdocs, and lecturers). - Scientists working in a country with high GDP are not eligible (for the list of excluded countries see below). - People who received an ESEB travel award in the last five years are not eligible. - Applicants must submit to present either an oral communication or a poster to be eligible for the award. This will be verified before the reimbursement, but no proof that a poster or talk is accepted is necessary at the application stage.

PLEASE NOTE THAT THESE STIPENDS ARE GIVEN IN CONJUNCTION WITH ANALOGOUS STIPENDS OFFERED BY THE SSE (separate call), SO THERE IS NO NEED TO APPLY TO BOTH

How to apply: send your application by email to the ESEB Travel Bursary Committee, c/o Dr. Martijn

Egas <[C.J.M.Egas@uva.nl](mailto:C.J.M.Egas@uva.nl)>. The application should be no more than 2 pages long and include: - Name of the applicant; - Budget, including sources of additional support; - An explanation of how attendance to the meeting will further the attendant's professional goals; - and a CV Please submit the application as a single PDF-file.

A support letter from the applicant advisor/mentor/senior colleague is also required. Support letters should be sent to the same email address ([C.J.M.Egas@uva.nl](mailto:C.J.M.Egas@uva.nl)) by the applicant's mentor.

Deadline has been extended until: 19 February 2012 24:00 GMT.

Members professionally based in the following countries are not eligible for the travel stipend: Australia, Austria, Belgium, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Singapore, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States of America.

- Ute Friedrich ESEB office Email:[office@eseb.org](mailto:office@eseb.org)

European Society for Evolutionary Biology  
[www.eseb.org](http://www.eseb.org) [office@eseb.org](mailto:office@eseb.org)

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## Evol appl

Dear Evoldir members : Some news about Evolutionary Applications.

As we enter our fifth year of publication, we're really excited to let you know that the journal is converting from a subscription journal to become a fully Open Access journal. From now on, everyone can read all of our great papers in the diverse areas we cover - medicine, climate change, invasion biology, conservation, fisheries and aquaculture, agriculture, forestry, and toxicology. Authors will now retain their own copyright as all articles will be published under a Creative Commons license so do send me your papers! Full details on our website - [www.evolutionaryapplications.org](http://www.evolutionaryapplications.org) Submit your best papers to us !

Louis Bernatchez Chief Editor, Evolutionary Applications

Michelle Tseng Managin Editor, Evolutionary Applications  
Managin Editor, Evolutionary Applications



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## Evolution2012 MSI travel award

### Evolution 2012 MSI Faculty Travel Award

Are you a biologist at a minority-serving institution? Apply now for a travel award to attend Evolution 2012 < <http://www.confersense.ca/-Evolution2012/index.htm> > in Ottawa, Canada.

The National Evolutionary Synthesis Center (NESCent < <http://www.nescent.org/> >), with support from the Society for the Study of Evolution (SSE < <http://www.evolutionarybiology.org/> >), is pleased to announce a travel award for faculty from Minority Serving Institutions (MSIs) to attend Evolution 2012. This year, the meeting will be the “1st Joint Congress on Evolutionary Biology”, bringing together five of the worlds largest academic societies devoted to the study of ecology and evolutionary biology: the American Society of Naturalists (ASN), the Canadian Society for Ecology and Evolution (CSEE) the European Society for Evolutionary Biology (ESEB), the Society for the Study of Evolution (SSE), and the Society of Systematic Biologists (SSB).

If you are a faculty member at an MSI, HBCU or other institution with significant enrollment of underrepresented minority students, you are encouraged to apply. Funds are available to cover conference registration, travel, food and lodging.

This award is intended to provide MSI faculty with an opportunity to present original research in evolution, systematic biology, evolutionary genomics/informatics, evolution education/outreach or other disciplines typically represented at the Evolution meetings. As such, your application must include a talk/poster title and abstract. In addition, you will be asked to provide a brief (1 page) statement describing how this award will contribute to your professional/scientific development, as well as provide benefit to your students and institution.

To apply, please visit [www.nescent.org/-Evo2012facultyapp](http://www.nescent.org/-Evo2012facultyapp) Application Deadline: March 31st, 2012 (Awards will be announced by April 9th, 2012)

For more information, please contact Dr. Jory Weintraub ([jory@nescent.org](mailto:jory@nescent.org))

Jory P. Weintraub, PhD Assistant Director, Education & Outreach National Evolutionary Synthesis Center

(NESCent) 2024 West Main St., Suite A200, Durham, NC 27705 Phone: 919.668.4578 Fax: 919.668.9198 Email: [jory@nescent.org](mailto:jory@nescent.org) Skype: jory.weintraub

“Weintraub, Jory P” <[lviscrst@live.unc.edu](mailto:lviscrst@live.unc.edu)>

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## Evolution2012 Undergraduate Diversity

### Undergraduate Diversity at Evolution 2012

We are pleased to announce an undergraduate travel award to bring talented and diverse undergraduates to the Evolution meetings this July 6-10 in Ottawa, Canada. For the 10th year in a row we will fly a cohort of undergraduates from throughout the US and Puerto Rico to present a poster at the meetings, receive mentoring from graduate students, postdocs and faculty, and participate in a career-oriented ‘Undergraduate Futures in Evolutionary Biology’ panel and discussion. The program covers the costs of travel, registration, food and accommodation at the meetings.

The application deadline is Friday, March 30th, and decisions will be announced by Friday, April 6th. Applications are welcomed from all undergraduates, and the admissions goal is to create a diverse pool of students.

An overview of the program and student eligibility can be found at:

<http://www.oeb.harvard.edu/faculty/edwards/-community/application.html> Apply online at:

[www.nescent.org/Evo2012undergradapp](http://www.nescent.org/Evo2012undergradapp) Applications consist of a short statement of interest, a letter of recommendation and the title and abstract of the poster to be presented.

In addition, we will be soliciting names of graduate students, postdocs and faculty members who would like to serve as mentors during the meetings. Mentors meet with pairs of students and attend talks with them, introduce them to colleagues, network and generally make the meetings a welcoming place for them. Although costs are not covered for mentors it is an unusually rewarding experience. Contact Richard Kliman <[rmkliman@cedarcrest.edu](mailto:rmkliman@cedarcrest.edu)> if you are interested in serving as a mentor.

For inquires contact one of the organizers:

Scott Edwards - [sedwards@oeb.harvard.edu](mailto:sedwards@oeb.harvard.edu) Richard Kliman - [rmkliman@cedarcrest.edu](mailto:rmkliman@cedarcrest.edu) Jory Weintraub -

jory@nescent.org

Jory P. Weintraub, PhD Assistant Director, Education & Outreach National Evolutionary Synthesis Center (NESCent) 2024 West Main St., Suite A200, Durham, NC 27705 Phone: 919.668.4578 Fax: 919.668.9198 Email: jory@nescent.org Skype: jory.weintraub

“Weintraub, Jory P” <lviscrst@live.unc.edu>

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## Field Museum Chicago Summer Undergrad REU

Field Museum summer 2012 undergraduate research internship opportunities

The Field Museum in Chicago, Illinois is please to announce its 2012 summer REU internship program. Please visit the web site: <http://fieldmuseum.org/-about/research-experiences-undergraduates-reu> for program details and REU project descriptions.

All REU applications must be made online at: <http://fieldmuseum.org/about/research-experiences-undergraduates-reu> Application deadline: March 15th, 2012.

Deadline for letters of reference: March 20th, 2012.

Announcement of Awards: April 15, 2012.

Start of 2012 REU program: Monday, June 4 or Monday, June 11, 2012 (depending on the applicant's school schedule). The 4th Undergraduate Research Symposium will be held Saturday, August 11 at the Field Museum.

Please note: Undergraduate student participants in REU Sites must be citizens or permanent residents of the United States or its possessions and must be a freshman, sophomore or junior at the time of application. Seniors cannot apply for an REU internship.

The Field Museum houses one of the world's foremost scientific collections of biological diversity (>25 million specimens), and supports active biodiversity research around the globe. Despite the urgency of the current biodiversity crisis, few educational opportunities exist for students in the biological sciences to interact with scientists and institutions dedicated to the study of organic diversity. The Field Museum REU program will train a cohort of at least eight students in biodiversity-related research in a 10-week summer program. Each participant will undertake an indepen-

dent research project supervised by a museum scientist in a discipline such as taxonomy and systematics, phylo/biogeography, paleontology, molecular phylogenetics, or conservation. Students will experience biological diversity through the use of the museum's collections in their research, and will be trained in project-relevant techniques and equipment such as the scanning electron microscope, various light microscopy set-ups, and equipment in the Pritzker DNA lab. A six-week course in phylogenetic systematics is run concurrently with intern projects and will provide a common theoretical framework for their research. REU students will receive an introduction to the Encyclopedia of Life (EOL) in Field Museum's Biodiversity Synthesis Center. At the conclusion of the summer students will present their research results to their peers and museum scientists at the Undergraduate Research Symposium. Providing equal opportunity in biodiversity-related research is an important goal of the program.

REU student participants receive a salary of \$4,500 for the 10-week program, and additionally \$2,500 subsistence and \$500 travel allowance.

This REU program is funded through a REU-Site grant from the National Science Foundation to Drs. Petra Sierwald and Ken Angielczyk (Field Museum of Natural History).

Corrie Saux Moreau, Ph.D. Assistant Curator, Division of Insects Department of Zoology Field Museum of Natural History 1400 South Lake Shore Drive Chicago, IL 60605 USA Office: (312) 665-7743 Fax: (312) 665-7754 Email: [cmoreau@fieldmuseum.org](mailto:cmoreau@fieldmuseum.org) <http://fieldmuseum.org/users/corrie-moreau> \*\*\* Visit our LAB WEBSITE: [www.moreaulab.org](http://www.moreaulab.org) \*\*\*

[cmoreau@fieldmuseum.org](mailto:cmoreau@fieldmuseum.org)

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## Genomics Training

Profile Genomics Training and Services

Hi all,

This is Bob Macey, Brian Rowning and Hank Fabian from Profile Genomics with the Peralta Foundation in Alameda, California. As part of a community college effort we are intending to change lives. Profile Genomics is a new non-profit Genomics training and service facility. We were the first to receive the Covaris LE220R for DNA shearing in high throughput, and we are currently receiving contracts from others to shear DNA on

this instrument.

The caliber of our students is very high, with current students having degrees from universities across the U.S. and Australia.

The lab is looking to add services that will add value to the Evolutionary Genomics community.

In the expansion of the lab, we anticipate accommodating postdoctoral researchers who would contact us to apply to obtain U.S. federal funding which would include both research avenues and novel instructional platforms.

We look forward to talking with anyone who is interested in Genomics training and services.

Best,

Bob, Brian and Hank

contact info:

J. Robert Macey

jrobertamacey@gmail.com

We have newly launched a biotech building at:

Profile Genomics 860 Atlantic Avenue Alameda, California 94501-2200

From barowning@gmail.com From barowning@gmail.com

geography. In return, their attendance at the meeting will be underwritten by the IBS.

Nominations consist of a supporting cover letter of no more than 800 words, co-signed by two members of the IBS, plus a short cv of the nominee, plus pdfs of four key papers published by the nominee, at least two of which should have been published within the last three years. Current members of the IBS Board are not eligible for nomination.

Inaugural competition: The first award will be presented at the IBS biennial meeting in Miami, Florida, 10-12 January 2013. Nominations should be sent to the Chair of the MacArthur & Wilson Award Sub-Committee (pdf's are preferred; Robert.whittaker@ouce.ox.ac.uk) no later than Friday 23rd March, 2012. An individual can be nominated for a single paper or a 'group of papers' and it is anticipated that such a corpus of work will involve - in the spirit of MacArthur & Wilson's famous monograph - scholarly collaborations with other co-workers.

The official announcement can be found in the current issue of *Frontiers of Biogeography*, the scientific journal of the International Biogeography Society (<http://www.biogeography.org/html/fb/-FBv03i04.html> p. 159)

dawson.mn@gmail.com

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## IBS MacArthurWilsonAward CallNominations

The International Biogeography Society announces The MacArthur & Wilson Award

Named after R. H. MacArthur and E. O. Wilson, this award honors their seminal contributions to biogeography. The award recognizes an individual for a notable, innovative contribution to biogeography. It is targeted at comparatively early career investigators and has a guideline that recipients should have completed their PhD no more than 12 years before the deadline for nominations. The committee has some flexibility in regard to this criterion, to take account of differing life and career paths. A pair of collaborators might be considered providing both are eligible by this criterion.

The recipient should be prepared to offer a paper at the biennial meeting of the IBS and will be invited to publish a short article on their work in *Frontiers of Bio-*

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## IonTorrentReviews answers

Recently I posted a message asking for feedback from users of the Ion Torrent and how it compares to the Illumina MiSeq. I received many responses from others interested in the answer to this question, but unfortunately I did not receive any replies from anyone actually using this equipment. I did however receive some links to other sites with pertinent information and a very informative comparison of these two platforms. These are listed below. I would still appreciate any additional information on this topic.

Thank you,

Carla Hurt, Ph.D. [hurtc@bio.miami.edu](mailto:hurtc@bio.miami.edu)

Dept. of Biology Cox science center, rm 36 1301 Memorial Dr., University of Miami Coral Gables, FL 33146

1.) Here are some blog posts that you might find helpful:

<http://www.massgenomics.org/2011/02/small->

ball-sequencing-on-the-benchtop.html <http://www.massgenomics.org/2011/04/iontorrent-benchtop-sequencing-streamlined.html>  
<http://www.massgenomics.org/2011/06/first-look-data-from-iontorrents-316-chip.html>

And then here is a recent announcement from Life Technologies about a

new small sequencer:

<http://goo.gl/9X8lc> 2.) Here is a very helpful blog with information about many NGS platforms:

<http://omicsonics.blogspot.com/> I also contacted Dr. Keith Robison - the author of this blog - and asked him specifically to compare the Ion Torrent and the Illumina MiSeq. His response is pasted below.

Just as a reminder – I haven't had hands on either machine (I have yet to see a MiSeq up close) but I have had data generated for me on both systems & have tried to seriously envision what each system would be like to have in a lab at my employer in terms of cost & labor.

Some key points to consider:

Both machines have a sequence output well suited for amplicon sequencing and for small genome sequencing (probably up through a few tens of megabases). Neither is well suited for really large genomes, metagenomes, for transcriptomes or for counting applications (e.g. ChIP-Seq) – the numbers of reads and amount of data are really too small and the cost per basepair is much higher than a system like HiSeq.

From a user's perspective, the main two reasons to go with these systems rather than HiSeq/GAIIx is the low cost per experiment and rapid turnaround time.

MiSeq has a greater range of software on the academic/freeware side; Ion doesn't really seem to have caught the bioinformatic developer community's imagination. Some software developed for 454 should work with Ion Torrent data, due to each having similar error profiles (homopolymer runs); this error profile also frustrates some software designed for Illumina. On the other hand, a lot of tool are platform-agnostic. On the commercial side, there does seem to be healthy support for all platforms.

Contrasting the two systems further are the read profiles. MiSeq offers a number of read lengths up to 150x2 paired end (which is longer than HiSeq and perhaps one reason why MiSeq may have an edge over HiSeq for genome assembly). Ion now has ~250bp reads (you get a distribution) and a paired end protocol, though not a lot of groups are using it & I haven't seen 250x2 paired end data yet (which would be very cool to have!).

Both are probably going to have further read length improvements. I'm guessing the next Ion mark will be in the 300-350 range and probably be released sometime this spring. Several groups have demonstrated greater than 150 bp runs on the MiSeq, and Illumina will be releasing longer kits this summer (I think 250x2 is the first one).

Overall, I think the true end-to-end run times are getting very similar, but Ion may still be a bit better – if you are willing to put in the extra labor. Also, in planning throughput the timings can be troublesome. For example, right now the 150x2 mode takes 27 hours, which means if you were running just that & didn't have shifts 24x7, it is hard to keep the machine cranking all week (Illumina is finding clever ways to shorten cycle time; I think their reps told me the 250x2 will take /less/ time than that, though I could be remembering that wrong.).

it does appear that the 318 chip is the end of the PGM line, though LIFE has not made that explicit – Proton will be the instrument for doing big sequencing. MiSeq will get an upgrade this summer to allow reading both surfaces of the flowcell; this will roughly double the amount of data. Both will probably top out at a size suitable for targeted sequencing in model systems or with very focused exome arrays (but not whole exome).

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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>

## Low MrBayes PP values

I have a data set for which MrBayes yields a poorly resolved tree with (mostly) low PP values, in contrast with the MP tree in which bootstrap values are quite high. For all data sets I've ever analyzed, the Bayesian trees have always surpassed parsimony trees in resolution, which seems to be the case for most researchers. Thoughts, suggestions for this odd result are welcome. Regards, Bill Chapco.

Dr. William Chapco Professor Emeritus Department of Biology University of Regina Regina, SK, S4S 0A2 Canada 306-585-4478 306-337-2410 (FAX) chapco@uregina.ca

William Chapco <William.Chapco@uregina.ca>

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## microMORPH PlantEvol TrainingGrants

microMORPH is pleased to announce a funding opportunity for undergraduates (\$5,000), graduate students, postdoctorals, and assistant professors (\$3,500) in plant development or plant evolution. These grants are available to support cross-disciplinary visits between labs or institutions for a period of a few weeks to an entire semester. We are particularly interested in proposals that will add a developmental perspective to a study of evolution of populations or closely related species. We are also interested in developmental studies that will incorporate the evolution of populations or closely related species. The deadline for proposals is March 9th, 2012. More information about the training grants and the application process may be found on the microMORPH website:

<http://www.colorado.edu/eeb/microMORPH/-grantsandfunding.html> A list of recent awardees and synopses of perviously funded proposals may be found at:

<http://www.colorado.edu/eeb/microMORPH/grants/-awardees2011.html> To be eligible for microMORPH training grants, applicants must fill one or more of the following criteria: 1) be a U.S. citizen, or 2) be affiliated with (enrolled in a degree granting program or employed by) a U.S. college, university, or institution, or 3) propose to train in and be hosted by a lab at a U.S. college, university, or institution.

These internships are supported by a five-year grant from the National Science Foundation entitled microMORPH: Molecular and Organismic Research in Plant History. This grant is funded through the Research Coordination Network Program at NSF. The overarching goal of the microMORPH RCN is to study speciation and the diversification of plants by linking genes through development to morphology, and ultimately to adaptation and fitness, within the dynamic context of natural populations and closely related species.

“Robert L. Baker” <[robert.baker@Colorado.EDU](mailto:robert.baker@Colorado.EDU)>

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## NESCent EvolutionVideoContest

Call for entries: NESCent announces the Second Annual Evolution Video Contest

Application deadline: Friday, June 29th, 2012

Submit your best evolution-themed video for screening at this years Evolution meeting!

The National Evolutionary Synthesis Center (NESCent) < <http://www.nescent.org/> > invites scientists of all stripes X graduate students, postdoctoral fellows and faculty X to enter the second annual evolution video competition < <http://filmfestival.nescent.org/> >.

To enter, submit a video that explains a fun fact, key concept, compelling question, or exciting area of research in evolution in less than three minutes. Entries may be related or unrelated to your own research, and should be suitable for use in a classroom at any level (K-12, undergraduate, graduate...your choice). Videos should be both informative and entertaining. (In other words, no taped lectures or narrated Powerpoint presentations!) Animations, music videos, and mini-documentaries are all fair game.

Selecting the winners

A panel of reviewers from both NESCent and the science video community will select the semi-finalists, who will be notified by e-mail. The semi-finalists will then be screened at a film festival at the Evolution 2012 < <http://www.confersense.ca/-Evolution2012/index.htm> > conference in Ottawa, Ontario, Canada. After screening the videos, the audience will vote for their favorites. Prizes will be awarded for the top entries.

Eligibility

You dont need to attend the conference to submit an entry. All videos submitted by Friday June 29th (5:00 p.m. ET) are eligible to win.

For more information and full contest rules, and to see last years entrants/winners, please see [filmfestival.nescent.org](http://filmfestival.nescent.org). For additional information, please contact Dr. Jory Weintraub at [jory@nescent.org](mailto:jory@nescent.org), or Dr. Robin Smith at [rsmith@nescent.org](mailto:rsmith@nescent.org)

Jory P. Weintraub, PhD Assistant Director, Education & Outreach National Evolutionary Synthesis Center (NESCent) 2024 West Main St., Suite A200, Durham,



NC 27705 Phone: 919.668.4578 Fax: 919.668.9198  
 Email: jory@nescent.org Skype: jory.weintraub  
 "Weintraub, Jory P" <lviscrst@live.unc.edu>

## NESCent Phylotastic hackathon Jun4-8

Dear colleagues

Every year, the number and size of available species phylogenies grows, with the largest trees now exceeding  $10^5$  tips. The information contained in these megatrees is tremendous, but there is no easy way to access and use it.

To address this issue, a NESCent working group, named HIP (Hackathons, Interoperability, Phylogenies), has planned a hackathon (<http://en.wikipedia.org/wiki/Hackathon>) in which scientist-programmers will design and implement Phylotastic!, an open software system to extract a phylogeny for a named set of species from available megatrees, and optionally create mash-ups with data from online services. Phylotastic is envisioned as a set of web services that collectively provides the operations? pruning, grafting, name-reconciliation, branch estimation, translation? that will democratize using the Tree of Life, making it accessible and computable for researchers throughout the life sciences, from community ecology to comparative genomics

Applications are now being accepted to participate in the Phylotastic hackathon, which will take place June 4 to 8 at NESCent headquarters in Durham, NC (see below, How to Apply). Support for travel and meal expenses will be available to each successful applicant, according to his or her stated needs.

We urge you to apply if you are enthusiastic about the goals of the project, and you have one or more of the following skills:

development, adaptation and use of software for megatree informatics, grafting & pruning trees, branch length estimation, NeXML support, provenance annotation, mashups (semantic integration), taxonomic name resolution, phylogenetic visualization, construction of and programming with web service interfaces, and assembling web-services into executable workflows .

We also welcome your application if you can envision a role for yourself based on other attributes not listed,

including non-programming skills (e.g., generating documentation) and expert knowledge of use-cases (i.e., real-world problems).

To understand how you might be able to contribute, please review a brief slide presentation (ppt format, <http://bit.ly/xGvwRr>, or PDF format, <http://bit.ly/wcQzMI>). If further information is needed, consult the Phylotastic project wiki (<http://www.evoio.org/wiki/Phylotastic>), or contact a member of the HIP leadership team (listed below).

Sincerely,

Arlin Stoltzfus (arlin@umd.edu)

on behalf of the HIP (Hackathons, Interoperability and Phylogenies) Leadership Team

1. HOW TO APPLY You may apply by filling in the online form here <http://tinyurl.com/PhyloTasticForm>. Please note the following: The application deadline is March 4 at midnight, EST Be sure that you understand the project before applying. If needed, review a brief slide presentation (ppt format, <http://bit.ly/xGvwRr>, or PDF format, <http://bit.ly/wcQzMI>). The application form asks you to describe your qualifications. If possible, cite tangible accomplishments to provide evidence of your skills. All code produced at the event is to be made available immediately under an OSI-approved open-source license, and documentation under a Creative Commons BY license (<http://creativecommons.org/licenses/by/3.0/>). Using the online application, indicate whether this would pose any difficulty for your participation.

Support for travel and meal expenses will be available to each successful applicant, according to his or her stated needs. Please understand that your application is not a guarantee of participation in the event. Funds and space are limited: we may not be able to sponsor every individual who is qualified to participate.

2. SCOPING STATEMENTS To further clarify the project, consider the following points. In scope: Populating data store of existing trees Evolution of PhyloWS to support the needs of PhyloTastic Taxonomic name resolution (embedding existing TNRS capacities) Pruning trees and grafting species on them Branch length (existing methods for incorporating branch lengths) Integration of data and trees (e.g., mashups) - species-wise integration Display of resulting trees (using existing technologies) Wrap all these existing tools as web services NeXML syntax extensions if needed If needed, determine methods for compressing NeXML representations user interfaces that are simple (web form) or that adapt existing tools

Not In Scope: Constructing new input trees  
 New Data Generation  
 Arguing or evaluating the correctness of trees  
 Design of new TNRS systems  
 Debates about which naming system is best  
 Developing new techniques to derive branch lengths

Uncertain: Phylo-referencing

— / —

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>

## NESCent Phylotastic hackathon Jun4-8 LastCall

Dear Colleague,

This is the final call for applications to the Phylotastic! hackathon planned at NESCent in June. The application (see below) should take about 15 minutes, and is due March 4 at midnight EST.

Every year, the number and size of available species phylogenies grows, with the largest trees now exceeding 10<sup>5</sup> tips. The information contained in these megatrees is tremendous, but there is no easy way to access and use it.

To address this issue, a NESCent working group, named HIP (Hackathons, Interoperability, Phylogenies), has planned a hackathon (<http://en.wikipedia.org/wiki/Hackathon>) in which scientist-programmers will design and implement Phylotastic!, an open software system to extract a phylogeny for a named set of species from available megatrees, and optionally create mashups with data from online services. Phylotastic is envisioned as a set of web services that collectively provides the operationsX pruning, grafting, name-reconciliation, branch estimation, translation X that will democratize using the Tree of Life, making it accessible and computable for researchers throughout the life sciences, from community ecology to comparative genomics

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We urge you to apply if you are enthusiastic about the

goals of the project, and you have one or more of the following skills: development, adaptation and use of software for megatree informatics, grafting & pruning trees, branch length estimation, NeXML support, provenance annotation, mashups (semantic integration), taxonomic name resolution, phylogenetic visualization, construction of and programming with web service interfaces, and assembling web-services into executable workflows

We also welcome your application if you can envision a role for yourself based on other attributes not listed, including non-programming skills (e.g., generating documentation) and expert knowledge of use-cases (i.e., real-world problems).

To understand how you might be able to contribute, please review a brief slide presentation (ppt format, <http://bit.ly/xGvwRr>, or PDF format, <http://bit.ly/wcQzMI>). If further information is needed, consult the Phylotastic project wiki (<http://www.evoio.org/wiki/Phylotastic>), or contact a member of the HIP leadership team (listed below).

Sincerely,

Arlin Stoltzfus \* [arlin@umd.edu](mailto:arlin@umd.edu)

\* on behalf of the HIP (Hackathons, Interoperability and Phylogenies) Leadership Team

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Support for travel and meal expenses will be available to each successful applicant, according to his or her stated needs. Please understand that your application is not a guarantee of participation in the event. Funds and space are limited: we may not be able to sponsor every individual who is qualified to participate.

2. SCOPING STATEMENTS To further clarify the project, consider the following points. In scope: Populating data store of existing trees Evolution of PhyloWS

to support the needs of PhyloTastic Taxonomic name resolution (embedding existing TNRS capacities) Pruning trees and grafting species on them Branch length (existing methods for incorporating branch lengths) Integration of data and trees (e.g., mashups) - species-wise integration Display of resulting trees (using existing technologies) Wrap all these existing tools as web services NeXML syntax extensions if needed If needed, determine methods for compressing NeXML representations user interfaces that are simple (web form) or that adapt existing tools

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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>

## Paleontology undergraduate textbooks

Dear friends, I need to suggest new Paleontology textbooks for my library in the University and I would like to receive suggestions. I would like to hear about teaching experiences with these two books:

Benton 2009: [http://www.amazon.com/-/Introduction-Paleobiology-Fossil-Record-Michael/dp/-1405186461/ref=sr\\_1\\_15?s=books&ie=UTF8&qid=1328657460&sr=1-15](http://www.amazon.com/-/Introduction-Paleobiology-Fossil-Record-Michael/dp/-1405186461/ref=sr_1_15?s=books&ie=UTF8&qid=1328657460&sr=1-15) Prothero 2004: [http://www.amazon.com/Bringing-Fossils-Life-Introduction-Paleobiology/dp/0073661708/ref=sr\\_1\\_18?s=books&ie=UTF8&qid=1328657536&sr=1-18](http://www.amazon.com/Bringing-Fossils-Life-Introduction-Paleobiology/dp/0073661708/ref=sr_1_18?s=books&ie=UTF8&qid=1328657536&sr=1-18) Thanks for any help! Voltolini

Prof. Dr. J. C. VOLTOLINI Universidade de Taubate - Departamento de Biologia Taubate, SP. 12030-010. E-Mail: [jc-voltol@uol.com.br](mailto:jc-voltol@uol.com.br) \* Grupo de pesquisa ECOTROP CNPq: <http://dgp.cnpq.br/buscaoperacional/-detalhepesq.jsp?pesq=8137155809735635> \* Currículo Lattes: <http://lattes.cnpq.br/8137155809735635> Fotos de Cursos e Projetos no Orkut e Facebook: <http://www.orkut.com.br/Main#Profile?uid=-17608429643840608483> <http://www.facebook.com/-VoltoliniJC?v=info> "Siamo tutti angeli con un'ala e possiamo volare soltanto se ci abbracciamo"

[jcvoltol@uol.com.br](mailto:jcvoltol@uol.com.br)

## Panama VolFieldAssist SocialWasps

Volunteer Field Assistant Required Social Behaviour in Tropical Paper Wasps Mid April - Late June 2012

A volunteer field assistant is required to help with a field-based project on social behaviour in social wasps. The position is a fantastic opportunity to gain tropical field experience working in a vibrant research group, from the Institute of Zoology, Zoological Society of London ([www.zsl.org/seiriansummer](http://www.zsl.org/seiriansummer)). The project is concerned with the evolution of castes (queens and workers) in *Polistes* paper wasps. These are a well-studied genus of social insects representing the early stages of social evolution where castes lack morphological differences, but have clear behavioural roles. Our study species is the tropical *Polistes canadensis*, found in Central and South America. It builds small nests (c20-60 females) that lack an envelope, so individually marked wasps can be easily observed and castes can be manipulated. The 2012 field site is based near the Smithsonian Tropical Research Station at Galatea, Colon, Republic of Panama and the field season will run from mid April until end of June.

The work involves marking wasps, conducting censuses and behavioural observations and simple manipulation experiments. Assistants are generally expected to be graduates with a good degree in the biological sciences, background in and keen interest in behavioural ecology and/or social evolution. Experience gained on the project will be especially useful for those soon to commence a field-based MSc or PhD project. Applicants should be fit, enthusiastic, hard working, and happy with living shared accommodation and working in uncomfortable conditions. Previous experience of working on social insects and/or in the tropics would be an advantage. A clean driving license and some basic knowledge of Spanish is also desirable. The applicant should be comfortable and must be able to commit to the full field season. NB these wasps do sting if provoked!

All work-related costs in Panama will be paid, including accommodation. In addition the assistant will receive a minimum of £500 towards travel costs (e.g. air ticket). More details are available from Dr Seirian Sumner ([Seirian.Sumner@ioz.ac.uk](mailto:Seirian.Sumner@ioz.ac.uk)) and/or Dr Solenn Patalano ([solenn.patalano@babraham.ac.uk](mailto:solenn.patalano@babraham.ac.uk)). Applications should include CV (with email addresses for two referees) and a covering letter explaining why you would

like to work on the Project. Applications should be submitted by e-mail to both Drs Sumner & Patalano by Thursday 24th February 2012. Shortlisted applicants will be notified by email by March 1st, and will be invited for interview either in person or over skype/phone soon afterwards.

Dr Seirian Sumner Research Fellow Institute of Zoology Zoological Society of London Regent's Park London, NW1 4RY

Tel: +44 (0) 207 449 6617 Fax: +44 (0) 207 586 2870 Home: +44 (0) 1491 652 882

Web: [www.zsl.org/seiriansumner](http://www.zsl.org/seiriansumner) ZOOLOGICAL SOCIETY OF LONDON LIVING CONSERVATION Registered Charity no. 208728

Seirian Sumner <[seirian.sumner@gmail.com](mailto:seirian.sumner@gmail.com)>

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## Phyloinformatics course lectures

The lecture slides, notes, and accompanying software for a short (internal) course I recently ran on phyloinformatics are online at:

<http://iphylo.org/~rpage/phyloinformatics/course/> Source code (somewhat lacking in documentation) is available from: <https://github.com/rpage/phyloinformatics> Feel free to make use of any of these materials if they are useful to you.

Regards

Rod

Roderic Page Professor of Taxonomy Institute of Biodiversity, Animal Health and Comparative Medicine College of Medical, Veterinary and Life Sciences Graham Kerr Building University of Glasgow Glasgow G12 8QQ, UK

Email: [r.page@bio.gla.ac.uk](mailto:r.page@bio.gla.ac.uk) Tel: +44 141 330 4778 Fax: +44 141 330 2792 AIM: [rodpage1962@aim.com](mailto:rodpage1962@aim.com) Facebook: <http://www.facebook.com/profile.php?id=3D1112517192> Twitter: <http://twitter.com/rpage> Blog: <http://iphylo.blogspot.com> Home page: <http://taxonomy.zoology.gla.ac.uk/rod/rod.html> [r.page@bio.gla.ac.uk](mailto:r.page@bio.gla.ac.uk)

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## Phyloseminar RevBayes

Next up at <http://phyloseminar.org/>: “RevBayes: An R like Environment for Bayesian phylogenetic inference” John P. Huelsenbeck and Sebastian Höhna (UC Berkeley and Stockholm University)

RevBayes is a computer program that uses directed acyclic graphs (DAG's) to specify any type of model, to hold the model and data in memory, and to compute the likelihood of the parameters of the model. DAG's provide a framework for the construction of modular models. Models can easily be extended and/or parts of the model exchanged (e.g., the substitution process and clock model) and several models can be combined. The design of RevBayes should allow the implementation of any extension to existing models. RevBayes is mainly developed for Bayesian phylogenetic analyses, but it can be extended to any inference on probabilistic models.

In this talk, I will give a brief introduction to the concept of DAG's and how they are used to construct a model. Once the model is specified, I will show how to simulate new observations under the model and how to estimate its parameters. I will demonstrate this in the RevLanguage, which is an R-like language for building DAG's for phylogenetic problems. The RevLanguage is used interactively to specify the model, as done with R. I will show how a full phylogenetic model is specified, step-by-step. I will mainly focus on various standard substitution models, relaxed clock models, and divergence times priors. Specifically, I will show a new birth-death model with speciation and extinction rates varying over time and use this in a integrative analysis. In the integrative analysis I condition only on the alignment (only the alignment is considered to be known) and estimate the tree and divergence times simultaneously as well as the speciation and extinction rates.

West Coast USA: 11:00 (11:00 AM) on Wednesday, February 29 East Coast USA: 14:00 (02:00 PM) on Wednesday, February 29 England: 19:00 (07:00 PM) on Wednesday, February 29 France: 20:00 (08:00 PM) on Wednesday, February 29 Japan: 04:00 (04:00 AM) on Thursday, March 01 New Zealand: 08:00 (08:00 AM) on Thursday, March 01

Frederick “Erick” Matsen, Assistant Member Fred Hutchinson Cancer Research Center <http://-matsen.fhcrc.org/> [ematsen@gmail.com](mailto:ematsen@gmail.com)

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## Phytoplankton samples

Dear colleagues,

We are looking for phytoplankton samples to do molecular works. We are particularly interested in *Pseudo-nitzschia* and *Dinoflagellates* species (genera *Dinophysis*, *Phalacroma*, *Azadinium*, *Alexandrium*, *Gonyaulax*, *Protoceratium*, *Lingulodinium*, *Karenia*, *Heterocapsa* and *Prorocentrum*). To better compile molecular data and test primer specificity, we would be grateful to get some phytoplankton samples (either DNA, or cells preserved in lugol or ethanol).

Please let us know if you can help us. Thanks in advance.

Charlotte Noyer Service Interfaces & Capteurs IFREMER BP 70 29280 Plouzané, FRANCE Tel : (+33) 02.98.22.41.01 Charlotte.Noyer@ifremer.fr

NOYER Charlotte <charlottenoyer@yahoo.fr>

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## Plant Evolutionary changes project

Project Baseline is a nationwide, long-term, NSF-funded initiative designed to build a research-quality seed bank that will enable contemporary and future scientists to directly study evolutionary changes as plants respond to environmental change. We will do this by collecting and storing seeds from well-defined populations of relatively common, widely-distributed, and short-lived plant taxa. The seeds will be archived at the National Center for Genetic Resources Preservation, in Fort Collins, CO. Seeds will be released to researchers at defined (e.g., 5-10 year) intervals over a period of 50 years, to be grown in common gardens with their descendants, or subjected to other, more novel, types of phenotypic and genetic analysis. Because this project is designed to benefit the scientific community as a whole, we are soliciting suggestions for candidate species. If you would like to suggest a species or population, please fill out and submit the Species Suggestion Form at <http://www.baselineseedbank.org/suggestionForm.html>. The main criteria for sites are that they be ensured of long-

term protection from major disturbance and that they be physically and legally accessible by collection teams. More information about this project may be obtained from our website: <http://www.baselineseedbank.org>, or by contacting Karen Updegraff, Project Manager ([kupdegra@d.umn.edu](mailto:kupdegra@d.umn.edu)).

Karen Updegraff PostDoctoral Associate University of Minnesota, Duluth Department of Biology 1035 Kirby Drive Duluth, MN 55182 218-726-7738

[kupdegra@d.umn.edu](mailto:kupdegra@d.umn.edu)

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## Plant Evolution Summer Internship

Summer field research internships

Are you interested in gaining field research experience and learning about the ecology and evolution of plants and plant-animal interactions in fragmented prairie? We are looking for 3-5 summer field researchers for an NSF-funded project on habitat fragmentation of the tallgrass prairie. We are investigating how small plant population size influences inbreeding, demography, pollination, and herbivory in the purple coneflower, *Echinacea angustifolia*. This is a great summer internship, REU, or co-op for those interested in field biology or conservation research.

No experience is necessary, but you must be enthusiastic and hard-working. You will survey natural plant populations, measure plant traits in experimental plots, hand-pollinate plants, observe & collect insects, and assist in all aspects of research. Housing is provided and there is a stipend. Undergraduate students have the opportunity to do an independent project as an REU participant.

If you want more information or wish to apply, please visit this website <http://echinaceaProject.org/opportunities/> or contact Stuart Wagenius. Applications will be reviewed starting 29 February 2012.

Stuart Wagenius, Ph.D. Conservation Scientist Division of Plant Science and Conservation Chicago Botanic Garden 1000 Lake Cook Road Glencoe, IL 60022 phone: 847 835 6978 fax: 847 835 6975

email: [echinaceaProject@gmail.com](mailto:echinaceaProject@gmail.com) web: <http://echinaceaProject.org/> Stuart Wagenius <[SWagenius@chicagobotanic.org](mailto:SWagenius@chicagobotanic.org)>



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## **RADTAG sequencing facility**

We are conducting a molecular biology project on two roe deer species in order to find species-specific nuclear DNA markers and to assess the introgression level between these two closely related species. We plan to obtain our goals using RAD TAG sequencing. We know, there is a very good lab in Edinburgh, Scotland and in Oregon, USA (eg Genepool). However, Edinburgh lab seems to be very busy, and Oregon is relatively expensive. Our project is now going and we have funding for it. Because our project ends in the end of this year we search for any labs/companies to perform RAD TAG sequencing during next six months. We would greatly appreciate any advice concerning possibility of RAD TAG sequencing or maybe to use other markers to assess a level of genome introgression? with kind regards Miroslaw Ratkiewicz, PhD Institute of Biology University of Bialystok, Poland. [ermi@uwb.edu.pl](mailto:ermi@uwb.edu.pl)

[ermi@uwb.edu.pl](mailto:ermi@uwb.edu.pl)

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## **SMBE Walter Fitch Competitors**

SMBE Walter Fitch Competitors information requested

The Society for Molecular Biology and Evolution is trying to update and complete its records of the Walter Fitch Prize competition. We would appreciate it if former competitors in the Walter Fitch Prize for Best Student Presentation at the annual SMBE meetings would send an email giving the year in which you participated, your affiliation at the time, and your current position to [barryghall@gmail.com](mailto:barryghall@gmail.com) with a c.c. to [mlong@uchicago.edu](mailto:mlong@uchicago.edu).

The 2011 SMBE annual meeting in Kyoto, Japan.

The 2010 SMBE conference in Lyon, France.

The 2009 SMBE conference at the University of Iowa.

The 2008 SMBE conference in Barcelona, Spain.

The 2007 SMBE conference at Dalhousie University in Halifax, Nova Scotia, Canada.

The 2006 SMBE conference at Arizona State Univer-

sity, Tempe, Arizona

The 2005 SMBE conference in Auckland, New Zealand.

The 2004 SMBE conference at Pennsylvania State University, University Park, Pennsylvania.

The 2003 SMBE conference in Newport Beach, California.

The 2002 SMBE conference in Sorrento, Italy.

The 2001 SMBE conference at the University of Georgia, Athens, Georgia.

The 2000 SMBE conference at Yale University, New Haven, Connecticut.

The 1999 SMBE conference in Brisbane, Queensland, Australia.

The 1998 SMBE conference in Vancouver, British Columbia, Canada.

The 1997 SMBE conference in Garmisch Partenkirchen, Germany.

The 1996 SMBE conference at the University of Arizona, Tucson, Arizona.

The 1995 SMBE conference in Hayama, Japan.

The 1994 SMBE conference at the University of Georgia, Athens, Georgia.

The 1993 SMBE conference at the University of California, Irvine, California.

“Barry G. Hall” <[barryghall@gmail.com](mailto:barryghall@gmail.com)>

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## **South Africa volunteers Small Mammal Evolution**

3 volunteers needed from July / August to November / December 2012

as field assistants for the project:

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

Opportunity: This is a great opportunity for anybody who wants to get more experience in field work relating to evolution, ecology and behavior before starting an MSc or PhD project.

Project: We study the evolutionary and ecological reasons as well as physiological mechanisms of group living, paternal care, communal nesting and social flexibility in the striped mouse. One focus this year is on person-

ality traits of striped mice. As this species is diurnal and the habitat is open, direct behavioral observations in the field are possible.

What kind of people are needed? Biology/zoology/veterinary students are preferred as candidates. Applicants must have an interest in working in the field and with animals. Hard working conditions will await applicants, as the study species gets up with sunrise (between 5 and 6 o' clock), and stops its activity with dusk (19 o' clock). Work during nights might also be necessary. Work in the field will be done for 5 days a week. Applicants must be able to manage extreme temperatures (below 0 at night in winter, sometimes over 40C during summer days). Applicants must both be prepared to live for long periods in the loneliness of the field and to be part of a small social group.

Work of field assistants: Trapping, marking and radio-tracking of striped mice; direct behavioral observations in the field. Volunteers will participate in a project on personality traits of striped mice, doing behavioral tests at the research station and in the field. Volunteers are also expected to help with maintenance of the research station (water pump, solar power, etc.).

Confirmation letter: Students get a letter of confirmation about their work and can prepare a report of their own small project to get credit points from their university for their bachelor or masters studies.

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 1250 (around 180 US\$, 120 Euro) must be paid for accommodation at the research station. Students must buy their own food etc in Springbok (costs of about R 2500, approx. 360 US\$ or 250 Euro/month). Including extras (going out for dinner; shopping), you should expect costs of about 600 US\$, 450 Euros per month. Students get an invitation letter which they can use to apply for funding in their home country (eg. DAAD in Germany, SSJARP in Switzerland).

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

When and how long: At the moment we are looking for 2-3 volunteers starting in July / August 2012. Volunteers are expected to stay at least three months, but longer periods of up to 6months are preferred.

How to apply? Send a short motivation letter stating why and for which period you are interested and your

CV via email to [carsten.schradin@ieu.uzh.ch](mailto:carsten.schradin@ieu.uzh.ch).

More information under

[http://stripedmouse.com/site1\\_3\\_5.htm](http://stripedmouse.com/site1_3_5.htm)

<http://www.ieu.uzh.ch/research/behaviour/-endocrinology.html>

Contact via e-mail: [carsten.schradin@ieu.uzh.ch](mailto:carsten.schradin@ieu.uzh.ch)

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

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

Working as a field assistant in Goegap Nature Reserve

A report by Romy Höppli, student at the University of Zurich, who staid in Goegap June to August 2008

Blue skies without a single cloud for six weeks - rocky mountains with little vegetation - yellow, orange and pink fields of flowers in whatever direction you look - small mammals, lizards and birds in our front yard and Mountain Zebras, Springbok and Ostrich right next door...

This was my time at the Succulent Karoo Research Station in Goegap Nature Reserve in South Africa! During six weeks from the beginning of July until the middle of August I've been living here, studying mice, experiencing nature like never before and being part of a small community where there was always something to laugh and joke about!

After arriving in Goegap, right the next morning my scientific adventure in South Africa began: Setting and checking traps, nest observations and radio-tracking were our daily routine. While I got bitten by the mice quite often in the beginning and my right middle finger was scarred all over, I

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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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**SSB ErnstMayr Award**

Society of Systematic Biologists Ernst Mayr Award

(Graduate Student Award)

The Ernst Mayr Award is given to the presenter of the outstanding student talk in the field of systematics at the annual meetings of the Society of Systematic Biologists (SSB). This is SSB's premier award, and is judged by the quality and creativity of the research completed over the course of the student's PhD program. The award consists of \$1000, a certificate of distinction, and a two-year subscription to the journal *Systematic Biology*.

**Eligibility:** Members of the Society who are advanced PhD students or have completed their Ph.D. within the last 15 months are eligible. Applicants may be from any country, but must be members of SSB, and are advised to join the Society as soon as possible to be considered (to join go to: <http://systbio.org/?q=node/6>). Previous Mayr award winners are not eligible.

**Application Procedure:** 1. To be considered for this award, you will need to submit a 400-word abstract of your talk to the Evolution Ottawa meeting website ( <http://www.confersense.ca/Evolution2012/-index.htm>) at the time of registration. Instructions for registering as a potential Mayr award contender will be given on the meeting website. 2. Abstracts should clearly indicate methods used, conclusions, and the relevance to systematics. Presentations focusing on other areas of biology (ecology, behavior, genetics, populations or molecular biology, etc.) that lack a strong systematics emphasis are not eligible. 3. Applications for this award will be accepted only until the end of early registration (April 30, 2012). 4. At the closing of early registration, a subset of applicants will be selected by the SSB Awards Committee to present their talks in the Mayr Symposium during the meeting. All applicants will be notified about selection decisions by May 15.

**Judging:** Based on submitted abstracts, the Mayr Awards Committee (appointed by the Awards Chair, Sydney Cameron) will select a maximum of 16 applicants for inclusion in the Mayr Award symposium.

The Mayr symposium will be held at a single venue as a continuous session. Talks will be judged on creativity, depth and excellence of research, and on quality of presentation. Competitive students are expected to be in the final stages of their doctoral program, presenting results of a major body of work.

**Co-Authors:** The talk may be co-authored. It is understood that the ideas, data and conclusions presented are primarily and substantially the work of the student presenter, and the intention is that the student presenter will be senior author on the published version of the

paper.

**Notification of Winner:** The winner of the award will be announced at the SSB business meeting in Ottawa and again during the banquet awards ceremony (complimentary ticket provided) at the conclusion of the Evolution Meetings, whereupon the winner will be given an award certificate. An announcement of the winner will be published in *Systematic Biology* and placed on the SSB website (see last year's winner at <http://systbiol.org/>).

Please see the SSB website (<http://systbio.org/?q=node/10>) for additional information or updates on this award. Questions via email may be addressed to Rhiannon Peery ([ssb-apps@life.illinois.edu](mailto:ssb-apps@life.illinois.edu))

**REMINDER: ABSTRACT SUBMISSION DEADLINE IS APRIL, 30 2012**

Rhiannon Peery PhD Candidate in the lab of Stephen Downie University of Illinois at Urbana-Champaign Department of Plant Biology 265 Morrill Hall 505 S Goodwin Ave Urbana, IL 61801-3707

Rhiannon Peery <[peery1@illinois.edu](mailto:peery1@illinois.edu)>

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## SSB Graduate Std Res Award

Society of Systematic Biology Graduate Student Research Award

The Society of Systematic Biologists (SSB) announces the 2012 annual Graduate Student Research Award competition. The purpose of these awards is to assist students in the initiation (FIRST TWO YEARS) of their systematics projects and in the collection of preliminary data to pursue additional sources of support (e.g., Doctoral Dissertation Improvement Grants from the National Science Foundation) or to enhance dissertation research (e.g., by visiting additional field collection sites or museums). Applicants may be from any country, but must be members of SSB, and are advised to join the Society as soon as possible to facilitate their applications (to join go to: <http://systbio.org/?q=node/6>). Previous awardees may not re-apply, but previous applicants who were not selected for funding are encouraged to re-apply. Awards range between \$1,200 - \$2000 and approximately 10 - 15 awards will be made.

**How to Apply:** applicants must submit 1. a curriculum vitae (one page) 2. brief research proposal including

objectives, methods, significance, and schedule (max. three single-spaced pages including literature cited and any figures and tables) 3. budget and budget justification (1 page) 4. and arrange for two reference letters; one letter must be from the student's current graduate advisor.

All application materials must be in electronic format. Applicants and those writing reference letters are required to use pdf format to minimize difficulties in file transfer. Applicants should send all materials (except reference letters) in a SINGLE pdf file. Letters of reference should be sent separately by the referees in pdf format or in the text of an e-mail; please include the FULL NAME OF APPLICANT in reference letters.

Please email all application materials and queries to SSB Awards Committee (Chair, Sydney Cameron) at [ssb-apps@life.illinois.edu](mailto:ssb-apps@life.illinois.edu). IN THE SUBJECT LINE OF THE E-MAIL, PLEASE INDICATE "Student Research" FOLLOWED BY FIRST INITIAL AND LAST NAME.

To be considered for this year's award, application materials, INCLUDING letters of recommendation, must be received electronically no later than March 31, 2012.

Please see the SSB website (<http://systbio.org/?q=node/22>) for additional details of this award. Questions via email may be addressed to Rhiannon Peery ([ssb-apps@life.illinois.edu](mailto:ssb-apps@life.illinois.edu)).

REMINDER: PROPOSAL SUBMISSION DEADLINE IS MARCH 31, 2012

Rhiannon Peery PhD Candidate in the lab of Stephen Downie University of Illinois at Urbana-Champaign Department of Plant Biology 265 Morrill Hall 505 S Goodwin Ave Urbana, IL 61801-3707

Rhiannon Peery <[peery1@illinois.edu](mailto:peery1@illinois.edu)>

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## SSB Mini-Arts grant

SSB: Mini-ARTS Grant

The Society of Systematic Biologists is pleased to announce the availability of awards for revisionary taxonomy and systematics, modeled after the NSF Dear Colleague Letter: Advancing Revisionary Taxonomy and Systematics (ARTS) recently developed within the Systematics and Biodiversity Science Cluster. We are calling these 'mini-ARTS' grants. These awards are designed to allow SSB members (students, post-docs,

and faculty) to spend a summer or semester apprenticed to an expert in a particular taxonomic group or to enhance revisionary taxonomic and systematics research in novel ways. Goals of this award program are to address constraints on our knowledge of undescribed biodiversity, assist in passing on taxonomic expertise before it is lost, increase the number of students with broad training in organismal biology and systematics, and support projects in biodiversity and taxonomy informatics as well as monographic and revisionary taxonomy. Activities can include a trip to the taxonomist's laboratory, pay for the taxonomist to visit the applicant's laboratory for a period of time, or pay for costs of computer time or development of interactive keys for electronic dissemination of systematics results. Requests for support may be in any amount up to \$3,000. We will fund two or three of these awards this year.

Please visit NSF's website <http://www.nsf.gov/pubs/2011/nsf11037/nsf11037.jsp> for more information about their ARTS program.

How to apply (deadline March 31, 2012) A complete application includes 1) a brief description of the project, including a separate section justifying the importance of the taxon and the revisionary work, 2) an itemized budget, 3) the applicant's CV, and 4) a letter of support from the taxonomic expert or collaborator. If the applicant is a student or post-doc, please also include a reference letter from the advisor. Applicants may be from any country, but must be members of SSB, and are advised to join the Society as soon as possible to facilitate their applications (to join go to: <http://systbio.org/?q=node/6>). The narrative part of the application should be no more than two pages, including the budget, but not including the curriculum vitae and letter(s).

Grant applications should be sent to the SSB Awards Committee ( [ssb-apps@life.illinois.edu](mailto:ssb-apps@life.illinois.edu)), Committee Chair Sydney Cameron. E-mail submissions are required, and applicants should use pdf format for all documents. In the subject line of the email, please indicate the SSB award category as 'mini-ARTS'.

Please see the SSB website (<http://systbio.org/?q=node/26>) for any updates or additional information about this award. Questions via email may be addressed to Rhiannon Peery ([ssb-apps@life.illinois.edu](mailto:ssb-apps@life.illinois.edu)).

APPLICATION DEADLINE IS MARCH 31, 2012

Rhiannon Peery PhD Candidate in the lab of Stephen Downie University of Illinois at Urbana-Champaign Department of Plant Biology 265 Morrill Hall 505 S Goodwin Ave Urbana, IL 61801-3707

Rhiannon Peery <[peery1@illinois.edu](mailto:peery1@illinois.edu)>

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## Support Grants i5k workshop

SUPPORT GRANTS FOR STUDENTS AND POST DOCS TO ATTEND the i5k COMMUNITY WORKSHOP May 30 and May 31, 2012, in Kansas City (Held in conjunction with the 6th Annual Arthropod Genomics Symposium, May 31 to June 2, 2012)

Thanks to a generous grant from the American Genetic Association, we are able to offer scholarships to students and postdoctoral researchers to defray costs related to attending the i5k Community Workshop. These awards will cover the registration fee for the i5k Workshop and two nights in the host hotel (three nights in case of hardship and for those staying to attend the Arthropod Genomics Symposium). Participants will be responsible for their own expenses to travel to the meeting venue in Kansas City.

To apply, please send the information listed below in a single PDF, attached to an e-mail, to Doris Merrill, dmerrill@k-state.edu , before midnight on Thursday, March 8.

Information to include in your application: 1.Your name 2.Your position (undergraduate student, graduate student, or post doc) 3.A poster presentation title 4.Name of your host institution 5.Name of your mentor/advisor 6.Explain in one paragraph how your participation will increase the meetings diversity and add to discussions. 7.Justify your financial need for this scholarship/grant funding. 8.Attach your biosketch or CV (max. 2 pages).

All applications will be reviewed by members of the conference committee, and awards will be announced by Tuesday, March 27.

INSTRUCTIONS can be downloaded as a PDF at: <http://www.k-state.edu/agc/symp2012/images/-SupportGrants-INSTRUCTIONS.pdf> Additional information about the i5k Workshop can be accessed at: ( <http://arthropodgenomes.org/wiki/File:i5kFlyer010312.pdf> or <http://arthropodgenomes.org/wiki/i5K> ).

REGISTRATION and additional information about the i5k Workshop and Arthropod Genomics Symposium can be found at: <http://www.k-state.edu/agc/-symp2012> .

A Symposium brochure/flyer is available at: <http://www.k-state.edu/agc/symp2012/images/Brochure-2012.pdf> .

[/www.k-state.edu/agc/symp2012/images/Brochure-2012.pdf](http://www.k-state.edu/agc/symp2012/images/Brochure-2012.pdf) .

THANK YOU for sharing this information with colleagues, post doctoral researchers and students.

\*\*\*Please note: Refunds will be issued to awardees who previously paid registration fees to attend the i5k Workshop.

Doris Merrill, dmerrill@k-state.edu Program Coordinator Arthropod Genomics Center Kansas State University

dmerrill@k-state.edu

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## UMassachusetts Boston REU EvolBiol

Dear colleagues.

I am pleased to advertise the summer 2012 REU program in “Integrative & Evolutionary Biology” at the University of Massachusetts Boston. Fourteen of our faculty, including several evolutionary biologists, are participating as mentors in this program and we invite applications from undergraduate students at all institutions. Minorities and members of underrepresented groups in science are particularly encouraged to apply. More details along with application instructions are available on our website: <http://www.reu.umb.edu>. The deadline for application is March 1, 2012.

Undergraduate students interested specifically in my laboratory (in which we conduct research on phylogenetic comparative biology and the evolutionary ecology of tropical reptiles, see links below) are also welcome to contact me directly about potential research projects in my lab.

Sincerely, Liam Revell

– Liam J. Revell University of Massachusetts Boston web: <http://faculty.umb.edu/liam.revell/> email: [liam.revell@umb.edu](mailto:liam.revell@umb.edu) blog: <http://phytools.blogspot.com> [Liam.Revell@umb.edu](mailto:Liam.Revell@umb.edu)

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## UMichigan REU AntEvolution



REU: Ant morphometrics and evolution (University of Michigan)

We are looking for a student to work on the analysis of ant morphology evolution in a phylogenetic context. The broader project is investigating the joint evolution of ant biodiversity in morphological, ecological, and geographic space. The summer student project will focus on 3-D imaging and quantification of ant morphology, and analyzing these data with project collaborators to test theories for how morphology evolves in space and time. In addition, there are opportunities to work with computer scientists in the engineering school on artificial intelligence and computer vision applications to biodiversity analysis.

To apply, send a CV, a cover letter explaining your interest in the position, and have two references submit letters of recommendation directly by email. All materials and enquiries can be sent to pheidole.reu@gmail.com. The position is at the University of Michigan in Ann Arbor.

–

Evan P. Economo Michigan Society of Fellows Department of Ecology & Evolutionary Biology University of Michigan

evaneconomo@gmail.com

Dear list members,

We (Miriam Quick: researcher for graphics, Stefanie Posavec: graphic designer and I: evolutionary ecologist) have received an ESEB Outreach grant to do the research for a graphic that illustrates how evolutionary theories are themselves subject to change. Our aim is to communicate the facts of evolution but also to excite and inspire, using a compelling design that will attract people not normally interested in science.

As we all know, evolution is a thriving research area and we are aiming to do justice to the diversity of exciting work going on today.

We want to hear from you!

- What do you identify as the major evolutionary research areas right now? - What do you anticipate to be the major research areas of the near future? - Where do the next (potential) conflicts arise?

We really look forward to hearing your answers to our questions (please email me: tania.jenkins@iee.unibe.ch), and hope to incorporate some of them into our completed graphic!

Best wishes, Tania

tania.jenkins@iee.unibe.ch

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## Visualising evolution

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## PostDocs

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## Barcelona DiseaseEvolution

REF.: 1202IGB

Our group at the Unit of Infections and Cancer (UNIC) within the Cancer Epidemiology Research Program (CERP) at the Catalan Institute of Oncology (ICO) in Barcelona (Catalonia, Spain).is looking for CANDIDATES to apply for a POSTDOC FELLOWSHIP from the Catalan Government, Spain.

The long-term main goal of UNIC is the study of the etiological role of infectious agents in human cancers.

>>> Description and requirements: We seek for candidates to apply to the Beatriu de Pinós Programme (BP- DGR 2011) - Modality B: Grants for the recruitment of research personnel to the Catalan science and technology system. The selected candidates may also be invited to apply to other postdoctoral programmes. Scientific and administrative assistance will be offered in the preparation of the proposals. High level research projects will be associated with the proposals.

>>> Research programs We are looking for highly motivated candidates interested in our main areas of research, but for the evoldir community the most interesting may be the “Studies on the evolution of the

link between infection and cancer” -Studies on diversity, phylogeny and evolution of viruses associated to cancer -Studies on the link between papillomavirus phylogeny and tropism -Studies on the link between the generation of viral diversity interpacient and the progress of the infection -Studies on the interaction between viral diversity and genetic diversity of the host and the progress of the infection -Studies on the presence of viral DNA in precancerous lesions in humans and animals

>>> Requirements As per the grant guidelines, candidates must fulfill the following requirements:

To have obtained the PhD title between January 1, 2006 and December 31, 2010 (the date the PhD was obtained is understood to be that on which the thesis was defended and approved). Check the exceptions in the text of the opening for maternity leave.

To have completed or be on a postdoctoral stay in a country other than the one in which the PhD is obtained and outside Spain for a minimum period of two years. This postdoctoral stay should have been completed when the beneficiary joins the organisation.

Not having worked for more than 12 consecutive months in the host centre on joining the application organisation.

>>> Terms of appointment For the first year each one of the contracts will be 37,904.84 euros and 39,231.51 euros for the second. This amount includes the min-

imum remuneration to be paid to research personnel, 28,912.92 gross euros per annum, and the employer's Social Security contributions. The research group may increase the salary of the research personnel recruited using their own funds and may also pay the employer's Social Security contributions. The programme is co-funded by the European Union. The reference working week is of 40 hours and the working day is of 8 hours. Employees are entitled to an annual leave of 22 working days per year of service plus 23 additional working days.

>>>Applications To apply, please send a cover letter containing a statement of research interest and experience (pdf), a brief CV (pdf) and names and contact information for three researchers that are familiar with you and with your work to adminCerp@iconcologia.net .

>>>Full details of the grant

Beatriu de Pinós Programme: [HYPERLINK http://www10.gencat.cat/agaur\\_web/generados/angles/-/home/recurs/doc/bases\\_dogc\\_angles.pdf](http://www10.gencat.cat/agaur_web/generados/angles/-/home/recurs/doc/bases_dogc_angles.pdf) [HYPERLINK http://www10.gencat.cat/agaur\\_web/AppJava/-english/a\\_beca.jsp?categoria=3Dpostdoctorals&id\\_beca362](http://www10.gencat.cat/agaur_web/AppJava/-english/a_beca.jsp?categoria=3Dpostdoctorals&id_beca362)

>>> Hosting Institution and Program The Catalan Institute of Oncology (ICO) was envisioned to be a center for comprehensive oncological care, to develop and evaluate cancer control strategies, and to combine clinical and epidemiological disciplines as a means to increase the efficacy and efficiency in the fight against cancer. ICO is an advanced and highly specialized centre in oncology that offers in a coordinated form diagnosis, treatment, prevention, research and training.

The Cancer Epidemiology Research Program (CERP) at ICO is devoted to research on the causes, epidemiology, early diagnosis and prevention of cancer. It participates in European and International research networks and conducts clinical, epidemiological and prevention studies. The CERP is composed by a multidisciplinary group of professionals that includes epidemiologists, pathologists, biologists, statisticians, nutritionists, computer specialists, oncologists, project managers and support personnel.

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## Barcelone ViralDiversity

Postdoctoral position in molecular epidemiology of infections and cancer

A two-year post-doctoral position on Molecular Epidemiology is available at the Unit of Infections and Cancer (UNIC) within the Cancer Epidemiology Research Program (CERP) at the Catalan Institute of Oncology (ICO) in Barcelona (Catalonia, Spain).

The long-term main goal of UNIC is the study of the etiological role of infectious agents in human cancers.

>>> Position offered The research subject for this post-doctoral stage is the etiological role of certain human papillomaviruses on oropharyngeal cancer in humans. The study will analyse viral diversity, expression of viral genes and the associated changes in the expression of cellular genes, to identify the connection between viral genotype and phenotypic manifestations of the infection.

>>> Qualifications The applicants should hold a PhD and have a background on cellular/ molecular biology, biochemistry and/or genetics either on cancer or on virology, and should be first author of at least one article generated from the PhD thesis. Knowledge in statistics and strong writing skills in English are mandatory. Experience in population genetics, phylogenetics and programming will be a valuable plus. Expertise with the Luminex platform and/or with immunohistochemistry will be highly appreciated.

>>> Terms of appointment The funding is associated to a four-year project granted by the (late) Spanish Ministry for Science and Innovation. The contract will be initially for two years, and could be renewable for up to two more years depending on satisfactory progress. Expected starting date is April-May 2012. Review of applications will start immediately and will continue until a suitable candidate is found. Gross Salary: 21.830 Euro per year. The reference working week is of 40 hours and the working day is 8 hours. Staff members are entitled to annual leave of 22 working days per year of service plus 23 additional working days.

>>> Applications To apply, please send a cover letter containing a statement of research interest and experience (pdf), a brief CV (pdf) and names and contact information for three researchers that are familiar with you and with your work to adminCerp@iconcologia.net .

>>> Hosting Institution and Program The Catalan In-

stitute of Oncology (ICO) was envisioned to be a center for comprehensive oncological care, to develop and evaluate cancer control strategies, and to combine clinical and epidemiological disciplines as a means to increase the efficacy and efficiency in the fight against cancer. ICO is an advanced and highly specialized centre in oncology that offers in a coordinated form diagnosis, treatment, prevention, research and training. The Cancer Epidemiology Research Program (CERP) at ICO is devoted to research on the causes, epidemiology, early diagnosis and prevention of cancer. It participates in European and International research networks and conducts clinical, epidemiological and prevention studies. The CERP is composed by a multidisciplinary group of professionals that includes epidemiologists, pathologists, biologists, statisticians, nutritionists, computer specialists, oncologists, project managers and support personnel. The Unit of Infections and Cancer (UNIC) main studies focus on virus-related cancers and its team has conducted Hepatitis B Virus (HBV) and liver cancer studies, notably on HBV vaccination trials in Africa, and notorious Human Papillomavirus (HPV) and cervical cancer studies.

UNIC's HPV & cancer major scientific contributions include: - Demonstrating causality in the relationship between HPV and invasive cervical cancer; - Establishing the role of environmental co-factors for carcinogenesis among HPV-positive women; and - Setting the scene for the identification of the international variation of HPV types in cervical cancer and some of its major variants.

UNIC's group is currently participating in trials on HPV vaccines and interacts regularly with other groups and advisory boards. On the other hand, since its creation the Unit has been committed in transferring methodology and specialized training on cancer epidemiology, cancer prevention and cancer registration not only at the local level but also to various health professionals in Europe, Africa, and the Americas and to various Tumor Registries. The Unit offers also advice in the designing, development and analysis of clinical and epidemiological research, providing biostatistical and methodological support to other cancer research groups. Currently, the group is involved in several randomized clinical trials of HPV vaccines and epidemiological studies on the HPV role in several cancer sites. The group is also responsible of monitoring and evaluation of the impact of HPV vaccine and cervical screening

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[mcmaster.ca/~brian/evoldir.html](http://mcmaster.ca/~brian/evoldir.html)

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## Cambridge MolEvolution

One or more post-doctoral fellowships are available to permit researchers with established molecular phylogenetics projects to work with Nick Goldman's group at the EMBL-European Bioinformatics Institute for periods of approx. 3-9 months.

For further details of the work already undertaken in the group, see <http://www.ebi.ac.uk/goldman>. We are happy to consider applicants working on phylogenetic theory, or on applications with a strong theoretical component. We are particularly interested in ideas exploiting next generation sequencing data.

Anyone interested in this possibility is encouraged to contact Nick Goldman directly, at [goldman@ebi.ac.uk](mailto:goldman@ebi.ac.uk) or at the address below.

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

[goldman@ebi.ac.uk](mailto:goldman@ebi.ac.uk)

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## George Washington U Fungal Evolution

Postdoctoral fellow and technician positions in saprotrophic fungal community structure/function:

Postdoctoral and technician positions are available in the Zanne lab at George Washington University in Washington, DC, beginning August 2012, with the potential to begin fieldwork near St. Louis, MO in June 2012. Support is available for multiple years for the postdoc and a single year for the technician to participate in an NSF-funded project, which examines the influences of plant traits and fungal community composition on wood decomposition rates in the Ozark Highlands Ecoregion as climate changes. Potential additional field sites include Appalachians, USA and NSW, Australia. The postdoc will be responsible for fungal identification, using both traditional techniques (field

collection and culturing) and molecular methods (targeted sequencing, environmental DNA extraction and next-generation based metagenomics) with encouragement to further develop the project according to his/her own interests. Opportunities will be available to spend time in collaborating labs that specialize on fungal identification, enzyme analysis and genomics. The technician will work closely with the postdoc and help to establish the lab. In both cities, there are strong links among institutions, including ties to the Missouri Botanical Garden and the Smithsonian. George Washington University is located in the heart of DC, with easy access to numerous science-, conservation-, and policy-based institutions. Motivated applicants with skills in mycology, molecular biology, phylogenetics, and bioinformatics are especially encouraged to apply. Postdoc applicants should have a PhD in a relevant field and strong writing and quantitative skills. Technician applicants with an MSc in a relevant field are preferred but Bachelors applicants will be considered. Applications will be reviewed as received and the positions remain open until filled. Applications should include a research statement, including relevant skills for the project and future goals, for the postdoc (1-2 pages) and research interests and relevant skills for the project (1 page) for the technician, curriculum vitae, and contact information for three references (including emails and phone numbers). Materials should be sent to Amy Zanne: aezanne@gmail.com.

aezanne@gmail.com

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## Imperial College London Speciation Genomics

Imperial College London

Division of Ecology and Evolution

Faculty of Natural Sciences

Research Associate in Speciation Genomics

Salary: £31,300 - £39,920 per annum

This is an exciting opportunity for a Research Associate with an interest in Speciation Biology. The successful candidate will carry out cutting edge research investigating the mechanisms of speciation using genomics techniques.

The post is funded for up to 21 months by the European Research Council and will be based at the Silwood Park

Campus. The successful candidate will work closely with Professor Vincent Savolainen (holder of the ERC Advanced Grant) and his research group.

The main research objective is to disentangle processes and mechanisms, e.g. among neutral evolution, selective constraint, and adaptive evolution, that can lead to the evolution of new species. The *Howea* palms are one of our model systems (e.g. see *Nature* 441:210; *PNAS* 108:13188), but other plants and animals on islands will be included. You will employ advanced modelling and statistical tools in molecular population genetics and/or genomics, to explore the speciation mechanisms in island taxa. This work will complement genomic, laboratory and experimental work undertaken by other research associates in Dr Vincent Savolainen's group.

You must have PhD (or equivalent) in evolution, ecology, genetics or a closely related discipline. Strong expertise in genomics, proficiency in statistics, advanced modelling techniques and knowledge of Geographic Information Systems (GIS) are essential. You must also have knowledge of speciation biology, experience of working in a multi-disciplinary environment, in depth experience of working in speciation biology and experience of management and analysis of complex genetic data.

You must have experience of working in a team, the ability to develop and apply new concepts and have a creative approach to problem-solving. You must also have excellent verbal and written communication skills and be able to write clearly and succinctly for publication.

Further details of the research group can be obtained from the research group website: <http://www3.imperial.ac.uk/people/v.savolainen> Our preferred method of application is online via our website <http://www3.imperial.ac.uk/employment> (please select "Job Search" then enter the job title or vacancy reference number including spaces - NS 2012 035 JT into "Keywords"). Please complete and upload an application form as directed.

Alternatively, if you are unable to apply online, please contact Mrs Diana Anderson on 020 7594 2207 or email [d.anderson@imperial.ac.uk](mailto:d.anderson@imperial.ac.uk) to request an application form.

Closing date: 7 March 2012

Committed to equality and valuing diversity. We are also an Athena Bronze SWAN Award winner, a Stonewall Diversity Champion and a Two Ticks Employer.

Jenny Thomas Senior HR Administrator Faculty of



Natural Sciences

Imperial College London, Level 2, SAF Building, Exhibition Road, London, SW7 2AZ T: 0207 594 1733 F: 0207 594 3797

“Thomas, Jenny” <j.thomas@imperial.ac.uk>

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## IndianaU Evolutionary Genomics Transcriptomics

### POSTDOC IN EVOLUTIONARY GENOMICS AND TRANSCRIPTOMICS

We have an open NSF-funded postdoctoral position in the labs of Matthew Hahn and Leonie Moyle. The work will examine the evolution of reproductive proteins among wild tomato species using genomic and transcriptomic approaches. As part of a larger multi-institution collaboration on prezygotic isolation barriers in wild tomatoes, this genomic work will be complemented by genetic, molecular, cellular, and developmental work on any candidate genes identified.

Our labs combine experience in the genetics of reproductive isolation with work on the statistical and computational tools needed to analyze genomic and transcriptomic data. This project will involve the collection and analysis of large next-generation sequencing datasets, and we are looking for a motivated individual to help us answer interesting biological questions. The postdoctoral candidate will also be encouraged to develop new projects in this system.

There is a wide variety of research going on in our labs in addition to the current project. For a summary of our work, please see:

<http://www.bio.indiana.edu/facultyresearch/faculty/Hahn.html> <http://www.bio.indiana.edu/facultyresearch/faculty/Moyle.html> The candidate must have a Ph.D., preferably in population genetics, statistical genetics, bioinformatics, or phylogenetics. Programming skills and experience with NGS data are preferred. Salary commensurate with experience, full benefits included.

Indiana University has a large and active group in evolutionary genetics, and considerable resources are offered by IU's Center for Genomics and Bioinformatics. Bloomington is situated in scenic, hilly southern Indiana, near several parks and wilderness areas. The cultural environment provided by the University is

exceptionally rich in art, music, and theater.

Applicants should submit a brief cover letter, curriculum vitae and the names and contact information for two references to Dee Verostko at [dverostk@indiana.edu](mailto:dverostk@indiana.edu) with “Hahn postdoc” in the subject line; or send to 1001 E. Third Street, Bloomington, IN 47405. Applications submitted by February 24, 2012 will be given full consideration. The anticipated start date for this position is June 1, 2012.

Indiana University is an Equal Opportunity / Affirmative Action Employer.

Matthew Hahn Associate Professor Department of Biology & School of Informatics and Computing 1001 E. 3rd St. Indiana University Bloomington, IN 47405 Phone: (812)856-7001 <http://www.bio.indiana.edu/facultyresearch/faculty/Hahn.html> <http://sites.bio.indiana.edu/~hahnlab> [mwh@indiana.edu](mailto:mwh@indiana.edu)

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## INRA Montpellier Historical Biogeography

Postdoctoral position in biogeographical history and patterns of diversification of a conifer-feeding aphid at CBGP -“ INRA, Montpellier, France.

An 18 month post-doctoral position is available at CBGP Montpellier, France to work with E. Jousset and A. Coeur d'acier on the Biogeographical history and patterns of diversification of a conifer-feeding aphid genus. This post-doctoral project is part of an the ANR project -PhyloSpace-, which is devoted to decipher the role of migration, and coevolution in some host-tree / phytophagous insect associations using phylogenies, paleoclimatic maps and new tools in cospeciation studies and biogeographical reconstructions. This ANR project is a multidisciplinary project involving research teams working on climate modeling, algorithms and methods in phylogenetics, and several biologists with a thorough knowledge of the insect/tree models chosen for the project.

The successful candidate will be in charge of reconstructing the comparative biogeographical history of one of the insect/tree associations studied in the project (the aphid genus *Cinara* which gathers 220 species associated with conifers and exhibiting an Holarctic distribution) using already gathered data (phylogenies, geographical distribution, paleoclimatic and paleoenvironmental data).

ronnemental maps), current methods in historical biogeography (e.g. DIVA, DEC) and cospeciation studies (e.g. Jane) and methods developed with the partners of the ANR project (LIRMM, Montpellier). The post-doctoral candidate will be expected to handle manuscript preparation.

Applicants should have a PhD in relevant areas (evolutionary biology, phylogenetics, historical biogeography). We are seeking for someone with a vivid interest in evolution and a strong background in phylogenetics and biogeographical reconstructions. Experience with cospeciation methods and analyses of patterns of diversification would be appreciated. Skills in bioinformatics and/or programming are welcome. Interest in Holarctic history and climate change would certainly be advantageous. Skills in French are not required.

The CBGP (<http://www1.montpellier.inra.fr/cbgrp/>) carries out research in the fields of systematics, genetics and ecology relevant to the management of populations and communities of organisms for the purposes of agriculture, public health and biodiversity. This research seeks to elaborate the conceptual and theoretic approaches, and the tools (molecular and bioinformatic) necessary to manage such organisms either through biological control or conservation strategies. Montpellier, South of France, hosts one of the most vibrant communities of biodiversity research in Europe with several research centers of excellence in the field.

Starting date: from May 2012 and no later than 1st of July 2012 .

Applications should be sent to: [jousseli@supagro.inra.fr](mailto:jousseli@supagro.inra.fr) by April 15, 2012 and should include a 1-2-page research statement with date of availability, a detailed CV, and the names and contact details of 2-3 referees. Feel free to email me with any informal inquiry before submitting an application.

Emmanuelle Jousselin Chargé de recherche (CR1) / Researcher - INRA, dept. EFPA Centre de Biologie pour la Gestion des Populations (CBGP - UMR1062) Campus international de Baillarguet - CS 30016 34988 Montferrier-sur-Lez - FRANCE

[ejousselin@yahoo.com](mailto:ejousselin@yahoo.com)

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## IowaStateU FigWaspDynamics

Postdoctoral position in the Nason Lab at Iowa State University

I am seeking a highly-motivated and productive post-doctoral researcher to collaborate in research integrating ecological, evolutionary, and genetic approaches to investigate the basis of geographic variation in a highly coevolved fig - fig wasp mutualism and its associated community of highly specialized insect and nematode parasites. This National Science Foundation (NSF) funded project is described in greater detail below.

The successful applicant will lead field research in the Sonoran Desert of Baja California and lab research at Iowa State University. The field work will be conducted over the course of three years and includes multiple, approximately 8 week trips to Baja. These trips will involve hiking over rough terrain and occasional camping in remote settings. Familiarity with the Spanish language is desired. The lab work includes the analysis of field collected data, microsatellite analysis of fig mating patterns and effective population size, and, potentially, simulation modeling. The Nason Lab is located in the Department of Ecology, Evolution, and Organismal Biology ([www.eeob.iastate.edu](http://www.eeob.iastate.edu)) at Iowa State University, a large and interactive group of faculty and students focusing on ecological and evolutionary research.

Terms of Appointment: Starting salary is \$42,000 plus benefits. Funds are available for one year and are renewable for up to three years, pending satisfactory progress. The optimal start date is August 15, 2012. For consideration, applicants must apply by May 1, 2012. Informal inquiries are encouraged prior to formal application. For formal application, please send 1) a cover letter, 2) a curriculum vitae, 3) names of 3 referees willing to provide a letter of recommendation upon request and 4) a brief statement of research experiences/interests via e-mail to John Nason ([jnason@iastate.edu](mailto:jnason@iastate.edu)). Funding and position is pending final, formal approval.

### Project Description:

Understanding the costs and benefits of mutualism and its persistence over time requires both an ecological and geographical context. The goal of this NSF-supported project is to understand how plant population size and reproductive traits are influenced by environmental gradients and how their variation influences local- and geographical-scale dynamics in a pollination mutualism subject to parasitism. Our research focuses on a fig-fig wasp mutualism composed of *Ficus petiolaris* and its species-specific fig wasp pollinator. Characteristic of fig-fig wasp interactions, this fig species is completely dependent on its fig wasp for pollination while female wasps oviposit in a subset of fig flowers and their offspring feed on developing fig seeds. Associated with this mutualism is a well-defined community of parasites

comprised of seed-eating fig wasps that do not function as pollinators, and a nematode parasite of the pollinator. The geographical setting for this system, the Sonoran Desert of Baja California, Mexico, represents the latitudinal and environmental limits of the fig-fig wasp mutualism in North America. Here, *F. petiolaris* populations are often small and spatially isolated and simulation studies have shown that where fig population size is small, reliance on species-specific, short-lived pollinators combined with the unusual, among-tree flowering asynchrony (but within-tree flowering synchrony) typical of figs, leads to a high risk of local pollinator extinction and mutualism failure. Commonly cited, though rarely tested, is the hypothesis that where host populations are small mutualism may be stabilized by reproductive adjustments in the fig; namely increased intra-crown asynchrony in flower and fruit production and longer receptivity of individual flowers to pollinators. We suspect, however, that these reproductive adjustments by the plant may prove costly by potentially benefiting to parasites that negatively impact fig seed and pollinator production. The patchy distribution of *F. petiolaris*, its high within-crown flowering asynchrony (atypical of figs) and high parasite loads, as well as potential interactions among these factors, make this an interestingly complex yet well-defined system for evaluating these predictions and the impact of environmental and biotic stressors on the fitness and persistence of mutualism.

We will determine the relationship between fig population size and bio-climatic variables related to precipitation and temperature, to test hypotheses concerning the benefits (to pollinators) and costs (of parasites) of fig reproductive trait variation as a function of population size, and to quantify how these variables interact to influence plant-pollinator-parasite interactions and mutualism fitness. This research includes a graphical modeling component to infer conditional interactions among species, and a simulation modeling

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## JohnInnesCentre ResFellowships

Independent Research Fellowships

The John Innes Centre (JIC), Norwich, UK is a world leading centre of excellence in plant and microbial sciences based on the Norwich Research Park. We are inviting applications from outstanding researchers who either hold, or wish to apply for Independent Research Fellowships, to attend a Conference at the JIC on 30 April/1 May 2012. At the meeting you will be able to present a talk about your proposed area of research and to discuss your proposals, the development of your group and your future career plans in depth with senior JIC Scientists. As well as attracting scientists focused on JICs core strengths we are also interested in applications from individuals who could work as part of the Earth and Life Systems Alliance (ELSA - [www.elsa.ac.uk](http://www.elsa.ac.uk)), a strategic alliance between the University of East Anglia and John Innes Centre. This alliance aims to link mechanistic analysis in plants and microbes with evolutionary and ecological significance of variation in that mechanism.

After the Conference we will select and mentor outstanding candidates in writing Fellowship applications and/or offer the opportunity to move existing Fellowships to the JIC.

Further details and particulars can be found at <http://www.jic.ac.uk/corporate/opportunities/vacancies/fellows.htm> Please e-mail a 2-page summary of your research plan, a copy of your CV and arrange for three letters of recommendation to be emailed to dawn.barrett@jic.ac.uk by Friday 16th March 2012

The John Innes Centre is a registered charity (No223852) grant-aided by the Biotechnology and Biological Sciences Research Council and is an Equal Opportunities Employer.

Dawn Barrett FInstAM(Dip), Communications Officer  
The Operations Centre Norwich Bioscience Institutes

Tel: +44 (0) 1603 255 328 Fax: +44 (0) 1603 255 168 e-mail: dawn.barrett@nbi.ac.uk [www.ifr.ac.uk](http://www.ifr.ac.uk)  
[www.jic.ac.uk](http://www.jic.ac.uk) [www.tsl.ac.uk](http://www.tsl.ac.uk) [www.tgac.bbsrc.ac.uk](http://www.tgac.bbsrc.ac.uk)

PBI 100 Symposium June 2012 - [www.jic.ac.uk/events/pbi](http://www.jic.ac.uk/events/pbi) email disclaimer: [www.ifr.ac.uk/edisclaimer](http://www.ifr.ac.uk/edisclaimer) “caroline dean (JIC)”  
<caroline.dean@jic.ac.uk>

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## LundU Adaptation

Dear All,

We have an open two-year postdoctoral position open entitled “Adaptation and genetic variation at expanding range margins in relation to ongoing climate change” which we hope that talented and qualified young scientists will apply for.

The project will combine theoretical population genetic approaches with experimental work on a well-studied insect species: the Common Blue damselfly (*Ischnura elegans*). The position will be suitable for those with a strong interest in answering fundamental and basic questions in ecology and evolution in a highly international and stimulating research environment at the Department of Biology in Lund.

We are looking for a candidate with a strong background in population genetics, molecular ecology, bioinformatics, mathematical modelling, entomology and/or evolutionary ecology or related fields. Excellent communication skills and a collaborative spirit are necessary, and we offer an intellectually stimulating research environment in return. Please do not hesitate to contact us if you wish to discuss the project more in detail before applying, or if you have any specific questions or ideas. Start date is May 1 2012, or as soon as possible.

More information about the funding and theme of this postdoc position and formal application procedures can be found here:

<http://www.lunduniversity.lu.se/o.o.i.s?id=-24914&Dnr=444307&Type=E> Please contact Tina Nilsson ([tina.nilsson@biol.lu.se](mailto:tina.nilsson@biol.lu.se)) if you experience any technical problems with the links or application forms, or need any further instructions.

The postdoc will be co-advised between Prof. Erik Svensson ([erik.svensson@biol.lu.se](mailto:erik.svensson@biol.lu.se)) and Ass. Prof. Bengt Hansson ([bengt.hansson@biol.lu.se](mailto:bengt.hansson@biol.lu.se)), both at the Department of Biology, Lund University (Sweden). You can find more information about our research groups and recent publications below:

Erik Svensson: <http://www.lu.se/o.o.i.s/26007> Bengt Hansson: <http://www.lu.se/bengt-hansson> Please spread this advertisement to potential and promising candidates for this position,

Sincerely,

Erik Svensson & Bengt Hansson

Erik Svensson Professor ( Evolutionary Ecology) Department of Biology, Lund University SE-223 62 Lund SWEDEN

Phone: +46 46 222 38 19 Fax: +46 46 222 47 17 E-mail: [erik.svensson@zooekol.lu.se](mailto:erik.svensson@zooekol.lu.se)

Webpage: <http://www.lu.se/o.o.i.s/26007> Lab blog:

<http://svenssonresearchlaboratory.blogspot.com/> Researcher ID: <http://www.researcherid.com/rid/E-8324-2010> Erik Svensson <[Erik.Svensson@biol.lu.se](mailto:Erik.Svensson@biol.lu.se)>

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## LundU AdaptationRangeLimits

Dear All,

We have an open two-year postdoctoral position open entitled “Adaptation and genetic variation at expanding range margins in relation to ongoing climate change” which we hope that talented and qualified young scientists will apply for.

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We are looking for a candidate with a strong background in population genetics, molecular ecology, bioinformatics, mathematical modelling, entomology and/or evolutionary ecology or related fields. Excellent communication skills and a collaborative spirit are necessary, and we offer an intellectually stimulating research environment in return. Please do not hesitate to contact us if you wish to discuss the project more in detail before applying, or if you have any specific questions or ideas. Start date is May 1 2012, or as soon as possible.

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spread this advertisement to potential and promising candidates for this position,

Sincerely,

Erik Svensson & Bengt Hansson

Erik Svensson Professor ( Evolutionary Ecology) Department of Biology, Lund University SE-223 62 Lund SWEDEN

Phone: +46 46 222 38 19 Fax: +46 46 222 47 17 E-mail: erik.svensson@zoekol.lu.se

Webpage: <http://www.lu.se/o.o.i.s/26007> Lab blog: <http://svenssonresearchlaboratory.blogspot.com/> Researcher ID: <http://www.researcherid.com/rid/E-8324-2010> Erik Svensson <Erik.Svensson@biol.lu.se>

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## LundU AdaptationRangeLimits 2

Dear All,

This is a reminder of a postdoctoral position available at Lund University (information given below; application deadline 29 February).

Sincerely,

Bengt Hansson

Bengt Hansson (PhD, Associate Professor) Department of Biology, Lund University [bengt.hansson@biol.lu.se](mailto:bengt.hansson@biol.lu.se); +46-709-916896

From: [evoldir@evol.biology.mcmaster.ca](mailto:evoldir@evol.biology.mcmaster.ca) Sent: den 6 februari 2012 08:11 Topic: Postdoc: LundU.AdaptationRangeLimits

Dear All,

We have an open two-year postdoctoral position open entitled "Adaptation and genetic variation at expanding range margins in relation to ongoing climate change" which we hope that talented and qualified young scientists will apply for.

The project will combine theoretical population genetic approaches with experimental work on a well-studied insect species: the Common Blue damselfly (*Ischnura elegans*). The position will be suitable for those with a strong interest in answering fundamental and basic questions in ecology and evolution in a highly international and stimulating research environment at the Department of Biology in Lund.

We are looking for a candidate with a strong back-

ground in population genetics, molecular ecology, bioinformatics, mathematical modelling, entomology and/or evolutionary ecology or related fields. Excellent communication skills and a collaborative spirit are necessary, and we offer an intellectually stimulating research environment in return. Please do not hesitate to contact us if you wish to discuss the project more in detail before applying, or if you have any specific questions or ideas. Start date is May 1 2012, or as soon as possible.

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<http://www.lunduniversity.lu.se/o.o.i.s?id=-3D24914&Dnr=3D444307&Type=3DE> Please contact Tina Nilsson ([tina.nilsson@biol.lu.se](mailto:tina.nilsson@biol.lu.se)) if you experience any technical problems with the links or application forms, or need any further instructions.

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Erik Svensson: <http://www.lu.se/o.o.i.s/26007> Bengt Hansson: <http://www.lu.se/bengt-hansson> Please spread this advertisement to potential and promising candidates for this position,

Sincerely,

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Phone: +46 46 222 38 19 Fax: +46 46 222 47 17 E-mail: erik.svensson@zoekol.lu.se

Webpage: <http://www.lu.se/o.o.i.s/26007> Lab blog: <http://svenssonresearchlaboratory.blogspot.com/> Researcher ID: <http://www.researcherid.com/rid/E-8324-2010> Erik Svensson <Erik.Svensson@biol.lu.se>

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## Malaysia MycorrhizalDiversity

Subject: Postdoctoral position in tropical mycorrhizal diversity

The Peay Lab (<http://www.tc.umn.edu/~peay0001>) has a potential opening for a postdoctoral research sci-



entist to work on an NSF funded project investigating the diversity and ecology of ectomycorrhizal fungi in Dipterocarp rainforests in Malaysia. The project will build a molecular database of mycorrhizal fungi in Dipterocarp forests to facilitate fungal ecology research in southeast Asia.

Major duties of the position would include working with collaborators from the US and Malaysia to help coordinate field surveys and local taxonomic workshops, as well as implementation of molecular ecology studies of ectomycorrhizal & fungal diversity on plant roots and soils. There will also be opportunities to develop independent research questions working in this system. The position would involve substantial field time at the Pasoh & Lambir Hills National Parks.

The ideal candidate would (1) be a Malaysian national or have experience working in SE Asia, (2) have a demonstrated ability to work in tropical rainforest field conditions, (3) have experience with molecular techniques for studying microbial diversity, (4) have a background in fungal biology or taxonomy, (5) have experience sampling ectomycorrhizal roots.

Interested candidates should email a SINGLE PDF to kpeay@umn.edu containing (1) a short (<1 page) statement of interest, (2) contact information for 3 potential references, and (3) a CV. The position will begin in the summer of 2012. Review of applications will begin immediately and the position will be filled as soon as a suitable candidate is found. Initial hire is for 1 year with potential for 1 year extension based on satisfactory performance.

Kabir G. Peay, Ph.D Assistant Professor Dept. of Plant Pathology University of Minnesota Email: kpeay0001@umn.edu Web: <http://www.tc.umn.edu/~kpeay0001> Kabir Peay <kpeay0001@umn.edu>

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### MountainLake BiologicalStation EarlyCareerFellowships

REMINDER: Review of proposals has begun. Please send in your application.

Mountain Lake Biological Station announces Early-Career Fellowships.

The University of Virginia's, MLBS is excited to offer a limited number of fellowships to support station and residency costs for researchers to explore new projects or collect preliminary data. This is a rare opportunity

to make an extended stay of up to 2 months at one of North America's premier field stations at no cost to the researcher. Preference will be given to individuals and projects with the potential to develop into long-term research activities at the Station. We especially encourage applications from individuals in the postdoctoral or early faculty phases of their careers, but will not exclude other individuals from consideration.

Interested individuals should submit a single pdf file including CV and a 2-3 pp proposal outlining the proposed research to MLBS@virginia.edu. Review of proposals will begin February 20, 2012. For more information about the fellowship program, research opportunities or Mountain Lake Biological Station (mlbs.org), please contact the Director - Butch Brodie (bbrodie@virginia.edu).

Yours, Melissa Ivy Wender Office Manager Mountain Lake Biological Station University of Virginia 223 Gilmer Hall 1-434-982-5486 [www.mlbs.org](http://www.mlbs.org) "Wender, Melissa (miw2m)" <miw2m@eservices.virginia.edu>

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### PennStateU MolPopulationGenomics

An NIH funded position for a Postdoctoral Scholar in Molecular Population Genomics is available immediately in the lab of Dr. Stephen W. Schaeffer, Professor, Department of Biology, The Pennsylvania State University, University Park, PA, USA. The aim of this project is to determine the molecular population genetic mechanisms for the origin and maintenance of chromosomal inversions in natural populations of *Drosophila pseudoobscura*. This project will involve the analysis of 50 genomes of *Drosophila pseudoobscura* using next generation sequencing. This position will include teaching one academic course (Advanced Genetics) during the fall semester under the guidance of Dr. Schaeffer, where students in the course will aid in the analysis of next generation sequence data. A PhD with expertise in one or more of the following areas is required: molecular population genetics, bioinformatics, or genomics. Applicants should send a cover letter briefly describing their experience and how it relates to the advertised position, their CV, and names and contact information for three references by email to Dr. Schaeffer at (sww4@psu.edu) For further information please call Dr. Schaeffer at 814-865-3269. Review of applications will begin immediately and continue until the position is

filled.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

Stephen W. Schaeffer, Ph.D. Department of Biology The Pennsylvania State University 208 Erwin W. Mueller Laboratories University Park, PA 16802-5301 Office Telephone: (814) 865-3269 Laboratory Telephone: (814) 863-1650 FAX: (814) 865-9131 Email: [swschaeffer@psu.edu](mailto:swschaeffer@psu.edu) WWW: <http://www.bio.psu.edu/directory/sws4>

[swschaeffer@psu.edu](mailto:swschaeffer@psu.edu)

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### ProfileGenomics Instruction HumanEvolRes

Post-doctoral Researcher/Instructor sought for Profile Genomics, Peralta Foundation, Alameda California, USA

**DESCRIPTION OF WORK:** Half-time research on Genomics platforms as described below, and half-time Genomics education. Profile Genomics is a new non-profit Genomics training and service facility. We are looking for original thinking applicants able to apply for post-doctoral funding through NSF and NIH or other international funding sources. This new lab in Alameda, California embraces research as well as training of a diverse Community College student population (of all ages, all races, and all financial backgrounds) in Genomic science and technologies.

**APPLICANT QUALIFICATIONS:** Applicants are expected to have a PhD and preferably experience in some of the following areas: Genomic Biology including DNA sequencing, Evolutionary Developmental Biology, Molecular Cloning technologies, Bioinformatics and related sciences. We are actively developing capabilities in Microarrays, Advanced DNA shearing, and Colony picking for advanced cloning. Targeted areas for future development are: (1) Long-read next generation sequencing; (2) Bioinformatics and software development; (3) Microfluidic PCR; and (4) Optical mapping.

**Research Interests:** Maceys research interests are Asian & Middle Eastern biogeography and mitochondrial genomic evolution. Rownings research interests are vertebrate signaling pathways in body plan formation, neurobiology of behavior and evolutionary genomics.

All of the above topics are directed toward high-

throughput Genomics interpretation. If any of these areas are of interest, please contact us.

J. Robert Macey, Ph.D. and Brian A. Rowning, Ph.D.

Profile Genomics 860 Atlantic Avenue Alameda, California 94501-2200

Contact info:

J. Robert Macey

[jrobertmacey@gmail.com](mailto:jrobertmacey@gmail.com)

Brian Rowning <[barowning@gmail.com](mailto:barowning@gmail.com)>

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### ProfileGenomics Research Instruction EvolVert

Post-doctoral Researcher/Instructor sought for Profile Genomics, Peralta Foundation, Alameda California, USA

**DESCRIPTION OF WORK:** Half-time research on Genomics platforms as described below, and half-time Genomics education. Profile Genomics is a new non-profit Genomics training and service facility. We are looking for original thinking applicants able to apply for post-doctoral funding through NSF and NIH or other international funding sources. This new lab in Alameda, California embraces research as well as training of a diverse Community College student population of all ages, all races, and all financial backgrounds, and commonly students that come to us have already obtained high end degrees (BA/BS, MA/MS, and PhD).

**APPLICANT QUALIFICATIONS:** Applicants are expected to have a PhD and a strong interest in evolutionary biology and genomics as well as in growing their instructional skills. Projects on Amphibians and Reptiles that overlap between the two PIs areas of interest are preferred. Areas of interest are Phylogenetics, DNA sequencing and all of its applications including Bioinformatics, Evolutionary Developmental Biology, Molecular Cloning technologies that include BACs, Fosmids, and pUC18 E. coli. We are actively developing capabilities in Microarrays, rapid DNA shearing, and Colony picking for advanced cloning. Targeted areas for future development are: (1) Long-read next generation sequencing; (2) Bioinformatics and software development; (3) Microfluidic PCR; and (4) Optical mapping.

**RESEARCH INTERESTS:** Maceys research interests are in phylogenetic patterns of life and generally use

Amphibians and Reptiles as systems; he has chosen South Asia and the Middle East as a target because of plate tectonic interactions with biotic change. With over twelve thousand frozen tissue samples (primarily snap-frozen) from over 34 countries, we have one of the largest Amphibian and Reptile frozen tissue collections in the world, and it is by far the most valuable. For example, we have the largest collection of frozen tissues from western China and Tibet, Turkmenistan, Iran, Afghanistan, the Arabian Peninsula (UAE, Oman, and Yemen), and Somalia, as well as other regions. Scientific interests range from the understanding of evolutionary processes of the mitochondrial genome, and large-scale genomics among vertebrates. We also have six complete nuclear genomes of non-mammalian amniotes cloned into BAC libraries. In addition we have mother and daughter human gut microbiota cloned into Fosmid libraries.

Rownings research interests are comparative signaling pathways in body plan formation (Amphibians, other vertebrates and invertebrates), organelle characterization and how it relates to function and disease, the interface between genomics and imaging technologies for assays of functionality, and the neurobiology of behavior and evolutionary genomics.

All of the above topics are directed toward high-throughput Genomic interpretation. If any of these areas are of interest, please contact us. Please send (1) a cover letter, (2) a CV and (3) any other pertinent information. In your cover letter please address the following issues: How you would relate to faculty research interests and how you might use the above lab resources, your vision of teaching a diverse body of students in advanced genomic technologies, your ideas of how to obtain postdoctoral funding, and your long-range career goals.

J. Robert Macey, PhD and Brian A. Rowning, PhD  
Profile Genomics, 860 Atlantic Avenue Alameda, California 94501-2200

CONTACT INFO: J. Robert Macey  
<jrobertmacey@gmail.com> Brian Rowning  
<barowning@peralta.edu>

Brian Rowning <browning@peralta.edu>

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**QueensU AvianLifeHistory**

motivated postdoctoral associate for work on an NSF-funded study on the role of glucocorticoids in mediating life history tradeoffs in tree swallows. The successful candidate will become a member of the Department of Biological Sciences at Virginia Tech in Blacksburg, Virginia, and will work closely with Ignacio Moore and Fran Bonier. The project will require that the postdoc spend approximately 3 months at the Queen's University Biological Station in Ontario, Canada every year, from late April until late July, working with a team comprised of undergraduate field assistants, graduate students, and the PIs (Bonier, Moore, and Mark Haussmann of Bucknell University). The postdoc will coordinate field activities and supervise the field team. The project will involve large-scale field experiments (manipulations of glucocorticoids, parasites, and reproductive effort) and measurement of effects on reproductive investment, parental behavior, immune function, and markers of oxidative stress. The postdoc will have the opportunity to be involved in all aspects of the project, and thus will receive broad training in field and laboratory methods. Start date: September 2012, with some flexibility including potential for participation in the field project beginning in May 2012.

**\*Qualifications:** Must have completed a PhD in Biology or related fields prior to the start date. Previous relevant field and lab research experience and some postdoctoral experience preferred. Strong publication record, written and oral communication skills, organizational skills, teamwork, and leadership ability required.

Interested candidates should send 1) a cover letter summarizing their professional goals and research interests, 2) a cv, and 3) contact information for at least 2 professional references to Fran Bonier (bonierf@queensu.ca) by \*15 March 2012\*. More information about ongoing research in the Bonier lab can be found at: <http://post.queensu.ca/~bonierf/>, information on the Moore lab can be found at: <http://www.faculty.biol.vt.edu/~moore/>, and information about the field station can be found at: <http://www.queensu.ca/qubs/index.html>. Frances Bonier, PhD Banting Postdoctoral Fellow Queen's University Biology Department Biosciences Complex 3523 Kingston, ON K7L 3N6 Canada

Research Scientist Virginia Tech Department of Biological Sciences Blacksburg, Virginia

phone: 613-533-6000 x77024 email:  
bonierf@queensu.ca <http://post.queensu.ca/~bonierf-index.html> fbonier@gmail.com

**\*Description:** We are seeking a talented and highly

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## Smithsonian Biodiversity Genomics

### Smithsonian Biodiversity Genomics and Bioinformatics Postdoctoral Fellowship Program

The Smithsonian Institution (SI) Postdoctoral Fellowships in Biodiversity Genomics and Bioinformatics promote collaborative research in these fields (60%), plus a well-defined outreach component (40%) oriented toward building genomics expertise in the greater SI research community. Research should involve comparative genomic approaches such as phylogenomics, population genomics, metagenomics or transcriptomics, and have a component that involves significant bioinformatics analysis. Your proposal should also detail in at least one page your bioinformatics outreach plan, which can include collaborative work with other SI projects and teams, training workshops or development of software, pipelines or tutorials. We plan to fill three or more Fellowships in the area of Biodiversity Genomics and are especially interested in recruiting a team of Fellows who will work together to advance bioinformatics at the Institution. Coordinated applications dealing with multiple genomic approaches are strongly encouraged. The Smithsonian's molecular research facilities are located at National Museum of Natural History (NMNH), National Zoological Park (NZP), and the Smithsonian Tropical Research Institute (STRI) in the Republic of Panama. Collaboration with other SI facilities (Smithsonian Environmental Research Center, Museum Conservation Institute, etc.) is encouraged. Applicants must propose to conduct research in-residence for a period of 12 to 24 months. Applicants must have completed or be near completion of the Ph.D. Recipients who have not completed the Ph.D. at the time of application must provide proof of completion of the degree before the fellowship begins. Applicants interested in conducting research at these facilities are strongly encouraged to contact potential advisors/hosts at any of the Smithsonian's various Museums and Research Institutes prior to proposal preparation and submission, as well as the Biodiversity Genomics Steering Committee (via Michael Braun, braunm@si.edu). Please consult the research staff listed for the Museum, Research Institutes, and Offices <http://www.si.edu/ofg/-mrirolist.htm>. Proposals are due 1 April 2012 and application materials are available via <https://solaa.si.edu>. "Fleischer, Robert" <FleischerR@si.edu>

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## Southern Illinois U Annelid Phylogenetics

### Postdoctoral Position at Southern Illinois University in Annelid Phylogenetics

An international collaborative research team is seeking a highly motivated and productive postdoctoral researcher to participate in a large-scale project on annelid phylogeny under an NSF Assembling the Tree of Life grant (WormNet II). The WormNet II team is reconstructing annelid phylogeny using a large-scale, multi-tiered approach encompassing both high-throughput genomic techniques and traditional PCR-based methods. The postdoctoral researcher will work at Southern Illinois University in the laboratory of Frank Anderson. The primary responsibilities of the postdoctoral researcher will be 1) generation of cDNA libraries from ~100 annelid species for high-throughput sequencing, 2) RT-PCR/PCR amplification of two conserved nuclear genes from ~300 species, 3) assistance with sequencing and analyses of two mitochondrial gene regions from 1500+ annelids, and 4) contributing to mentoring and coordination of projects of undergraduate and graduate students. The position requires an individual with a PhD and experience in molecular lab techniques (DNA/RNA extraction, PCR, sequencing), phylogenetics and invertebrate zoology. Candidates with previous research experience with annelids and/or bioinformatics will be preferred. The successful candidate will be expected to interact regularly with other WormNet 2 team members at multiple institutions in the U.S. and abroad. There will be opportunities for the researcher to pursue her/his own research interests within the context of the project. Funding will be available for travel to work with other WormNet II team members and for travel to national and international meetings. Terms of Appointment: Starting salary is \$41,000 - \$43,000, plus benefits. Funds are available for one year and are renewable for a second year, pending satisfactory progress. The optimal start date is August 15, 2012. For consideration, applicants must apply by May 1, 2012. Informal inquiries are encouraged prior to formal application. For formal application, please send 1) a cover letter, 2) a curriculum vitae, 3) names of 3 referees willing to provide a letter of recommendation upon request and 4) a brief statement of research experiences/interests via e-mail to Frank Anderson (feander@siu.edu). Funding and position is pending final,

formal approval.

Frank E. Anderson, Associate Professor, Department of Zoology, Southern Illinois University, Carbondale, IL 62901 USA. LAB WEBSITE: <http://www.zoology.siu.edu/anderson/> .

Frank Anderson <feander@siu.edu>

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## SouthKorea PrimateBehaviour

Hiring Organization: Ewha Womans University

Position Description: PRINCE (Primate Research Institute for Cognition and Ecology) at Ewha Womans University, Seoul, Republic of Korea, is looking for a postdoctoral primatologist to be appointed as research professor. One position is available, two profiles will be considered for applications:

1) Researcher specializing in primate cognition, preferably using behavioral tasks in controlled experiments, with additional field research experience with wild non-human primates. He/she would be given opportunities to conduct his/her own cognitive behavioral research on captive apes at the zoos in Korea as well as to supervise existing student projects and manage all zoo-related issues. He/she should advise students of the Primate Team with data analysis and paper writing in addition to writing his/her own papers as much as possible.

Or

2) Researcher specializing in primate field research, preferably behavioral ecology of areas such as mating system, feeding behavior, or communication, with additional interest in cognitive studies. He/she would take responsibility in analyzing and writing scientific papers with students related to an on-going project on gibbons in Indonesia. Duties related to the management of the field site are not included in this position. He/she should advise and guide students of the Primate Team including those conducting cognitive studies with captive apes at the zoo. Some supervision duties related to the project is required.

Producing as many papers as possible is critically important for the evaluation of the project. Other daily duties are subject to discussion and no formal teaching is required.

Anyone interested in this position is encouraged to send a letter of intent, CV, and a few representative publications to Mr. Sanha Kim (sanhakim@hotmail.com)

and/or Ms. Sunyoung Ahn (syahn@ewha.ac.kr).

PRINCE is directed by Jae Choe, a Harvard-trained behavioral ecologist and chair professor of EcoScience at Ewha Womans University. He also runs the Laboratory of Behavior and Ecology in cooperation with Yikweon Jang who is specialized in animal communication. In addition to primate researches, they study the ecology and behavior of magpies, social behavior and genetic systems of ants, and acoustic communication of crickets and frogs.

Qualifications/Experience: Applicants should have a doctoral degree in psychology, cognitive sciences, behavioral ecology, evolutionary biology, or other relevant field.

Salary/funding: The yearly salary is set at 40 million Korean won (approximately \$35,000 according to the current exchange rate).

Term of Appointment: The initial term is set for the six months starting 1 April 2012 but is renewable for another year or two.

Application Deadline: Applications will be considered as they are received.

Contact Information: Mr. Sanha Kim Seodaemun-gu Daehyun-dong 11-1 Seoul 120-750 Korea

E-mail Address: sanhakim@hotmail.com

Laura Martinez <lauramatlan@gmail.com>

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## StockholmU MicrobialMetagenomics

Posted at Stockholms universitet 2012-01-26

Ref. no: SU 619-0098-12 Dok no. 1

POST DOC - metagenomic analyses of microbes related to management of the Baltic Sea

A position as Post Doctor is open at the Department of Botany, Stockholm University (Reference number SU 619-0098-12). Deadline for application: February 20th, 2012.

Stockholm University is committed to academic excellence and is a world renowned university with about 60 000 students. The Department of Botany is within the Faculty of Science, and has about 70 employees. Teaching is oriented towards plant physiology, ecology and systematics. The plant physiology unit offers a



stimulating atmosphere in well-equipped laboratories.

**Position** The Department of Botany seeks to employ a post doctor that will produce new essential information within the framework of two international and multidisciplinary research programs: BEAM 'Baltic Ecosystem Adaptive Management' a Stockholm University Strategic Marine Environment program ([www.smf.su.se/-beam](http://www.smf.su.se/-beam)) and MiMeBS 'Microbial Metagenomics of the Baltic Sea' ([www.botan.su.se/physiology](http://www.botan.su.se/physiology)). MiMeBS is a collaborative program between scientists at Department of Botany and J. Craig Venter Institute (La Jolla, USA; [www.jvci.org](http://www.jvci.org)), and at SciLifeLab, Stockholm ([www.scilifelab.se](http://www.scilifelab.se)).

**Focus** The position will be structured as a collaborative and stimulating effort with MiMeBS and BEAM team members. The focus will be on analyses of sequenced metagenomes and transcriptomes of the Baltic Sea microbial populations and on development of tools to make use of the information gained in an environmental context (via environmental data and models), in turn meant as means for an optimized management of the unique Baltic Sea.

**Qualifications** The post doc position requires a person with a PhD in biology/microbiology/molecular biology/ bioinformatics, preferentially with knowledge in bioinformatic analyses and ecosystem processes, combined with knowledge/interest in management of aquatic ecosystems. Eligible candidates must have a strong record of academic research demonstrated by peer-reviewed publications. Collaborative and innovative skills as well as independence are expected, as is excellence in writing and speaking English. Eligible candidates have received a PhD exam in the past 3-5 years (from the application deadline).

**Terms of employment** A 1.5 year (18 months) full time Post Doctoral position, starting as soon as possible 2012.

**Application** The application, in English, should include and be organized as follows: a cover letter outlining your qualifications, relevant experiences and interest in the position (max 1 page) CV & publications (max 2 pages) copies of degree certificates names of two reference persons (give phone numbers and email addresses; state the relation to the reference person)

For further information, contact Professor Birgitta Bergman, telephone +46-(0)8-16 3751, [bergmanb@botan.su.se](mailto:bergmanb@botan.su.se)

Union representatives are Bo Ekengren (SACO), Lisbeth Häggberg (ST), telephone +46-(0)8-16 2000 (switch board), and Gunnar Stenberg (SEKO), telephone +46-(0)70 316 43 41.

Applications, labelled with the Reference number SU 619-0098-12, should be posted to the address below and be postmarked no later than February 20th, 2012:

Stockholm University Registrar/PÅ SE-106 91 STOCKHOLM SWEDEN

or by e-mail to: [registrator@su.se](mailto:registrator@su.se) - give Reference number in the Subject head

Johan Nylander <[Johan.Nylander@abc.se](mailto:Johan.Nylander@abc.se)>

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## StonyBrookU EvolutionaryGenet

Postdoctoral Position in Evolutionary Genetics at Stony Brook University

A postdoctoral position is available immediately in the laboratory of Walt Eanes in the Department of Ecology & Evolution at Stony Brook University. This opportunity will allow the individual to work across several projects including the physiological genetics of insect flight metabolism, the population and functional genetics of the couch potato gene involved in diapause and life history variation in *D. melanogaster* and the role that the major central metabolic and pathways play in the mechanism of nutrient or energy-state sensing and life history adaptation in *Drosophila*.

There is some flexibility in start date. The position has a possible term of two years with the possibility of renewal.

Successful applicants should possess a Ph.D. and should possess skills in any of several areas including *Drosophila* genetics, molecular evolution, and population, or physiological genetics.

If interested please contact Walt Eanes, Department of Ecology and Evolution, Stony Brook University, Stony Brook, NY 11794 by e-mail [walter@life.bio.sunysb.edu](mailto:walter@life.bio.sunysb.edu).

Walter F. Eanes Professor Dept. of Ecology and Evolution Stony Brook University Stony Brook, New York 11794 <http://life.bio.sunysb.edu/ee/eaneslab/> [weanes@notes.cc.sunysb.edu](mailto:weanes@notes.cc.sunysb.edu)

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## SyracuseU InsectMolPhylo

Postdoctoral Position in Insect Molecular Phylogenetics.

A postdoctoral position on the molecular phylogenetics of tri-trophic interactions is available in the laboratory of Dr. David Althoff at Syracuse University. Specifically, traditional molecular techniques and NextGen sequencing will be used to conduct simultaneous analyses of phylogeographic and phylogenetic patterns in yuccas, yucca moths and their insect natural enemies. The overall goal is to examine the importance of host specialization in diversification at multiple trophic and hierarchical levels.

The position will require field collections, voucher preparation, and the development and application of molecular markers (SNPs, microsatellites, and single copy loci) to analyze genetic structure of plants and insects. The position will be awarded for one year with the possibility of renewal for additional years. The ideal candidate will have strong interests in plant-insect interactions and the use of molecular phylogenetics to test evolutionary hypotheses, be proficient in phylogenetic analyses, and have extensive experience with NextGen Sequencing data collection and analysis.

Applicants should send an e-mail to Dr. David Althoff (dmalthof@syr.edu) explaining their interest in the position, a CV, and the names and contact information for at least two references. The position will begin after July 1, 2012. Review of applicants will begin March 25, 2012 and will continue until the position is filled.

David Althoff Assistant Professor Dept. of Biology Syracuse University 107 College Place Syracuse, NY 13244 Office: 315.443.1096 Lab: 315.443.9368 FAX: 315.443.2012 plantecology.syr.edu/althoff/

David M Althoff <dmalthof@syr.edu>

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### SyracuseU InsectMolPhylogenetics

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dmalthof@syr.edu

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### Trondheim AllometryEvolution

Norwegian University of Science and Technology (NTNU)

NTNU - Innovation and Creativity The Norwegian University of Science and Technology (NTNU) in Trondheim represents academic eminence in technology and the natural sciences as well as in other academic disciplines ranging from the social sciences, the arts, medicine, architecture to fine arts. Cross-disciplinary cooperation results in innovative breakthroughs and creative solutions with far-reaching social and economic impact.

Faculty of Natural Science and Technology Department of Biology

POSTDOCTORAL POSITION IN EVOLUTIONARY BIOLOGY (EVOLVABILITY OF ALLOMETRY) A 2-year postdoctoral fellowship in quantitative genetics is available at the Department of Biology, Norwegian University of Science and Technology (NTNU), Trondheim, Norway. The position is related to the project Evolv-

ability of Allometry, funded by the Research Council of Norway.

The project involves theoretical and experimental research in quantitative genetics related to the evolvability of allometry. We are looking for a motivated candidate with a solid knowledge in evolutionary biology and quantitative genetics. The post-doc will have responsibility for artificial selection work on a plant species but is also expected to develop his/her own research in relation to the evolution of allometry. Because the project has a theoretical component we will favour candidates with a solid knowledge in modelling and statistics. The project is managed by Christophe Pelabon at NTNU (Trondheim), in close collaboration with Thomas F. Hansen (University of Oslo) and although the main working place is Trondheim, the post-doc will be able to interact with the teams at both institutions. Ability to goal-oriented work, ability to deliver, oral and written presentation of research results, and good co-operation abilities will be emphasized.

The post-doc will be formally employed by the Faculty of Natural Sciences at the NTNU, and will become a member of the Department of Biology. The Department of Biology has 36 members of faculty (professors and associate professors), 22 research scientists and about 70 PhD students and post docs. The department has research programs in evolutionary biology, population genetics, aquatic and terrestrial ecology, conservation biology and biodiversity, ethology, molecular biology, cell biology, plant and animal physiology, toxicology, aquaculture, and marine biology. There is considerable collaboration between the disciplines. More information about the Department of Biology can be found at: [www.ntnu.no/biologi/english](http://www.ntnu.no/biologi/english) The positions adhere to the Norwegian Governments policy of balanced ethnicity, age and gender. A NTNU objective is to increase the number of females in scientific positions. Female applicants are therefore encouraged to apply.

The appointment will be made according to the general regulations regarding university employees. Post doctors are remunerated in salary code 1352, normally at wage level 57 (level LR24) on the Norwegian Government pay scale, gross NOK 455 900 per year before tax. There is 2% deduction for superannuation.

Please contact associate professor Christophe Pelabon (tel +47 73 59 03 39, email: [christophe.pelabon@bio.ntnu.no](mailto:christophe.pelabon@bio.ntnu.no)) or Professor Thomas Hansen (tel +47 22 85 45 21, email: [thomas.f.hansen@bio.uio.no](mailto:thomas.f.hansen@bio.uio.no)) for further information about the postdoc, and in case of questions regarding the application procedure.

Applicants should describe why they want the position

and why they are well suited for it. Applications should also include a CV with a complete publication list, 3 selected publications (or manuscripts), documentation of educational background and other relevant experience, and 3 named references (incl. email and phone no.). Please include a brief description of the applicants contribution in cases of multi-authored publications (submitted or listed in the CV) where the applicant is not the first author.

Applications should be submitted electronically through <http://www.jobbnorge.no>. Application deadline: 1 March 2012. Reference number: NT-10/12.

HenvisninGsannonse i ADRESSEAVISEN, Aftenposten og BERGENS TIDENE

POSTDOCTORAL Position at the Department of Biology

1 Postdoctoral Position in Evolutionary Biology, ref. no NT-10/12 A 2-year position is announced in theoretical quantitative genetics to study the evolvability of allometry. Questions regarding the position can be directed to associate professor Christophe Pelabon (tel +47 73 59 03 39, email: [christophe.pelabon@bio.ntnu.no](mailto:christophe.pelabon@bio.ntnu.no)) or Professor Thomas Hansen (tel +47 22 85 45 21, email: [thomas.f.hansen@bio.uio.no](mailto:thomas.f.hansen@bio.uio.no)).

A detailed announcement of the position can be found at [www.jobbnorge.no](http://www.jobbnorge.no). Further information about the Department of Biology can be found at: <http://www.bio.ntnu.no/eng/>

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## UAdelaide AncientDNA

Microbiology (medical/dental) / Ancient DNA / Archaeology

ARC Post-doctoral position available at the Australian Centre for Ancient DNA

School of Earth and Environmental Sciences, University of Adelaide <http://www.adelaide.edu.au/acad/> Salary: (Level A) Aus \$68,751 - \$73,800 / Level B \$75,425 - \$89,569[AC1] per year. (Appointment to either level will be commensurate with qualifications and experience).

We are searching for a post-doctoral researcher to lead a 3-year Australian Research Council funded project 'A powerful new genetic view of the recent evolutionary history of humans and their diseases' which will use DNA from calcified oral microbial plaques to trace the evolution of a variety of human diseases, and the relationship to culture, diet, migration patterns and geography.

The project will use Next Generation Sequencing approaches to explore microbial diversity over the past 10,000 years, in one of the first studies of how human commensals have evolved through time and the potential disease consequences. Primary study areas are Neolithic Europe and the Americas, and international travel is likely.

We are looking for an unusually capable and motivated individual with wide interests who enjoys challenging and unusual research, and has the ability to work closely with archaeologists and museum personnel as well as dental microbiologists and evolutionary biologists. Expertise in microbial evolution, genetics, archaeology, bioinformatics, and natural history are key requirements. Evidence of strong independent research and writing/publishing skills are also essential.

The successful applicant will have been awarded a PhD at the time of taking up the appointment, and will have a strong record of publishing papers throughout their career, preferably in high profile journals.

Enquiries of an academic nature can be directed to Professor Alan Cooper, Australian Centre for Ancient DNA, University of Adelaide, email: alan.cooper@adelaide.edu.au

Fixed-term for three years starting as soon as possible

Applicants can visit <http://www.adelaide.edu.au/jobs/current/> for relevant information on the application process, and the selection criteria. The position will be open from 14 Feb, 2012.

alan.cooper@adelaide.edu.au

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## UAlgarve Bioinformatics

Postdoctoral Research Associate at the Centre of Marine Sciences (CCMAR), University of the Algarve, Portugal.

Applicants with a PhD and a strong background and training in biological computing/ bioinformatics

(scripting, database design) as well as an interest and preferably some background in Ecology, Evolutionary biology, or Biological Oceanography are invited to apply for a postdoctoral fellowship to join our group in the analysis and exploration of eukaryotic planktonic community metatranscriptomic datasets generated using next generation sequencing.

The successful applicant will join a group led by Gareth Pearson and Ester Serrao to work on metatranscriptomic analysis of natural Antarctic and Arctic diatom-dominated community samples, using various bioinformatic analyses to integrate functional gene annotation, taxonomy assignment and relative expression in order to investigate ecological function and variation in these communities.

The successful candidate will apply to the national science funding agency to join the group as a postdoctoral fellow for an initial term of up to 6 years. During this period the post holder will be strongly encouraged to apply as PI for his/her own projects and for fellowships to extend the post and to actively participate in other projects of the research group in this area.

Applicants should submit a letter describing why they are suited for the position, curriculum vitae and the names and contact information for two references to: gpearson@ualg.pt

Deadline: applications will be assessed immediately until a suitable candidate is found, but no later than May 1, 2012.

Anticipated start of position, if successful: September 1st 2012.

If the candidate is available to start earlier, a short term contract is possible for the months before the start of the fellowship.

Fellowship will be paid at the national rate, currently 1495 euros / month, tax-free.

<http://ccmar.ualg.pt/maree/publications.php> CCMAR, CIMAR Universidade do Algarve Gambelas, 8005-139 Faro, Portugal telef: (+351) 289 800 928 fax: (+351) 289 800 069

eserrao@ualg.pt

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## UAlgarve Phylogeography

Postdoctoral Research Associate at the Centre of Ma-

rine Sciences (CCMAR), University of the Algarve, Portugal\*

Applicants with a Ph.D. in Biology, Ecology, or related fields and a strong background in statistical phylogeography and experience in environmental niche modeling are invited to apply for a postdoctoral fellowship to join our group. Good written and oral communication skills in English and the interest in joining a multidisciplinary team are required.

The successful applicant will work with Rita Castilho and the team Biogeography, Ecology and Evolution from the Centro de Ciências do Mar (CCMAR - <http://ccmar.ualg.pt/>), at the University of the Algarve (<http://www.ualg.pt>) using and compiling global biodiversity and environmental datasets, generating past (LGM) and present geographic distribution maps of specific coastal marine species with a particular focus on past marine refugia location incorporating and exploring phylogeography and landscape genetics into species distribution modeling approaches.

The successful candidate will apply to the national science funding (FCT) agency to join the group as a postdoctoral fellow for an initial term of up to 6 years. During this period the post holder will be strongly encouraged to apply as PI for his/her own projects and for fellowships to extend the post and to actively participate in other projects of the research group in this area.

Deadline: applications will be assessed immediately until a suitable candidate is found, but no later than May 1, 2012. Please send a single pdf document to [rcastil@ualg.pt](mailto:rcastil@ualg.pt) (with the subject: POSTDOC-SDM), containing a cover letter summarizing why you think you are an adequate candidate for the post, a short CV, external links to five of your most relevant papers, and the names and email contacts of two academics as reference. Shortlisted candidates may be invited for an interview and the selected candidate will submit a full application to the FCT (Foundation for Science and Technology). FCT calls will be open between 2nd May and 28th June 2012. Regulations will be published at least two weeks prior to the starting date of applications. (<http://alfa.fct.mctes.pt/emfoco/concursos2012/index.phtml.en>).

The Biogeographical Evolution and Ecology group of CCMAR-CIMAR LA (Associated National Laboratory), is currently interested in research that couples population genetics and species distribution modeling of coastal marine organisms. CCMAR-CIMAR LA (Associated National Laboratory) is the Portuguese platform of excellence in marine research and is currently jointly hosted by the Universities of Porto and Algarve. CCMAR is located on the Gambelas campus, 4km from

Faro, the capital city of the Algarve and close to Faro International Airport (FAO) ([map](#)).

(\* all postdoctoral positions must be proposed to and approved by the Portuguese Foundation for Science and Technology FCT) Fellowship will be paid at the national rate, currently 1495 euros /month, tax-free.

Dr. Rita Castilho Assistant Professor BEE - Center for Marine Sciences University of Algarve Campus de Gambelas 8005-139 Faro Portugal Phone: + 351 918397282 Fax: + 351 289800069 E-mail: [rcastil@ualg.pt](mailto:rcastil@ualg.pt)

Rita Castilho <[rita.castil@gmail.com](mailto:rita.castil@gmail.com)>

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## UCalifornia Davis Morphology Evolution

Postdoctoral Position in Evolutionary Functional Morphology

I have a position in my lab group for a postdoctoral researcher interested in the evolution of functional morphology. Areas of expertise that are of particular interest include biomechanics, vertebrate functional morphology, functional morphology of feeding in fishes, landmark morphometrics, and evolution of organismal design. I am especially interested in extending knowledge about how functional systems work into broad comparative analyses of the evolutionary dynamics of those systems. The position is annually renewable for at least two years. Starting date is flexible.

If you are interested in this position, please send me an email with a summary of your interests and background, and include a copy of your cv.

[pcwainwright@ucdavis.edu](mailto:pcwainwright@ucdavis.edu)

Peter Wainwright Professor and Chair Department of Evolution & Ecology University of California Davis, CA 95616 Phone: 530-752-6782 <http://fishlab.ucdavis.edu/>

[pcwainwright@ucdavis.edu](mailto:pcwainwright@ucdavis.edu)

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## UCalifornia SantaCruz PopGenet

POPULATION GENETICS / STATISTICAL GE-



## NETICS / BIOINFORMATICS

position with the

National Marine Fisheries Service, Molecular Ecology and Genetic Analysis Team

through a cooperative agreement with the

University of California, Santa Cruz

We are seeking a highly qualified and energetic individual to join our team to conduct bioinformatic analyses, develop statistical methods, and analyze population genetic data. We are a dynamic team conducting basic and applied research on the ecology, evolution, conservation and management of marine and anadromous fish. The successful candidate will be prepared to manage genomic sequence data generated on next generation platforms, construct and execute bioinformatic pipelines for de novo assembly, alignment, SNP detection, annotation, etc., and will also be capable of assisting in the development and implementation of novel methods of statistical analysis for genetic data in molecular ecology contexts.

The project scientist will work closely with Drs. Eric C. Anderson and John Carlos Garza on a variety of projects including: -SNP discovery in various fish species -Dissecting selective factors operating upon salmonid genomes using RAD-sequenced data -Development of software for massive scale parentage inference -Implementation of intergenerational tagging of hatchery salmon at a statewide scale

The job location is Santa Cruz, California

The official job announcement, with instructions on how to apply may be viewed at:

[http://apo.ucsc.edu/academic\\_employment/jobs/T12-31.pdf](http://apo.ucsc.edu/academic_employment/jobs/T12-31.pdf) For more information, please contact

[eric.anderson@noaa.gov](mailto:eric.anderson@noaa.gov)

The University of California, Santa Cruz is an Affirmative Action/ Equal Employment Opportunity Employer, committed to excellence through diversity. We strive to establish a climate that welcomes, celebrates, and promotes respect for the contributions of all students and employees.

[eric.anderson@noaa.gov](mailto:eric.anderson@noaa.gov)

A postdoctoral position (up to three years) is available in the laboratory of Dr. Ken Petren at the University of Cincinnati to collaborate on studies of landscape genomics. The postdoctoral scientist will work closely with members of the Petren lab and interact with other faculty and members of the Environmental Change and Biological Resilience (ECBR) research group.

The goal of the research is to test hypotheses related to functional genomic and demographic change over space and over time in natural landscapes. The postdoctoral scientist will lead projects in research areas that may include population genomics in fragmented landscapes, natural selection, range expansion, dispersal, and habitat selection. The successful candidate will participate in project design and drafting of a mentoring plan. Projects will include wet lab work, and a significant amount of data analysis, simulation, and bioinformatics.

The ideal candidate will have prior training in evolutionary ecology, molecular population genetics, and skills that include the inference of migration, natural selection and demographic changes based on genetic data. Prior experience with high-throughput analysis of single nucleotide polymorphisms or bioinformatics is desirable. The start date for this position will be Spring 2012 (exact date flexible), and the salary will be competitive. Candidates should have a PhD in evolutionary biology or a related field, and publications in peer-reviewed journals.

To apply, go to Position Number 212UC0195at [www.jobsatuc.com](http://www.jobsatuc.com). As part of the application process, you will be asked to attach 1) a cover letter in which you describe your past and future research interests and career goals, 2) the names and contact information of three references, and 3) descriptions of your manuscripts in progress.

Kenneth Petren, Ph.D. Associate Professor and Head Department of Biological Sciences University of Cincinnati Cincinnati, OH 45221-0006 513-556-9719 [ken.petren@uc.edu](mailto:ken.petren@uc.edu) <http://homepages.uc.edu/~petrenk> <http://www.artsci.uc.edu/collegedepts/biology> PETRENK@UCMAIL.UC.EDU

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## UGroningen EvolutionaryTheory

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## UCincinnati EvolutionaryGenomics

PhD (4 years) or Post-doc (3 years) position in Theoretical Evolutionary Ecology

“Causes and consequences of variation in dispersal behaviour”

#### Organization

This research project is a collaborative effort of the research groups Theoretical Biology and Behavioural Ecology and Self-organization (BESO), which both are part of the Centre for Ecological and Evolutionary Studies at the University of Groningen (The Netherlands). The research is funded by a TopGrant (ALW-TOP/11.017) allocated to Prof. Jan Komdeur from the Netherlands Science Foundation (NWO).

#### Job description

In many organisms individuals differ systematically in their dispersal behaviour. Moreover, individual variation in dispersal is correlated with other traits, including metabolism, activity, aggressiveness, boldness, sociability, behavioural flexibility and learning ability. Although such correlation structures (“dispersal syndromes”) have been described for many species, neither their evolutionary emergence nor their ecological, evolutionary and genetic consequences are well understood. By means of a theoretical approach (using analytical models and individual-based computer simulations) the project will address questions such as: Why are the dispersal syndromes in different species remarkably similar in some respects and remarkably different in others? What are the consequences of variation in dispersal for social evolution (e.g., cooperative breeding) and the mating system? What are the implications of non-equilibrium dynamics for the genetic structure of a population and for the estimation of pedigrees, relatedness and fitness?

The project is designed as a 4-year PhD project; however, we also welcome applications from exceptional post-doctoral researchers for a 3-year position. The close collaboration between theoretical and behavioural researchers, along with access to the long-term Seychelles warbler dataset, provides a unique opportunity to forge a link between conceptual models and real-world data.

#### Qualifications

- MSc in Theoretical Biology, Behavioural Ecology, Evolutionary Biology or related discipline (for a PhD candidate) or a PhD in any of these disciplines (for a postdoc).
- Research experience in areas related to model development and analysis, individual-based simulations or dynamical systems (desired for a PhD candidate; essential for a postdoc).
- Working knowledge of programmes like C++,

Maple/Mathematica/Matlab or R; excellent programming skills (desired for a PhD candidate; essential for a postdoc).

- Excellent academic record (as shown by a list of examination marks); proven ability to plan and prioritize work and to work to and meet deadlines; strong commitment to excellence in research and teaching.
- Ability to develop creative approaches to problem solving; creativity, curiosity, and ambition; proactive attitude; ability to implement new methods and ideas.
- Excellent organisational and interpersonal skills; ability to work in a team consisting of scientists, students and technical assistants with different backgrounds.
- Excellent communication skills: effective paper writing skills (demonstrated by publications) and ample experience with delivering presentations.
- Good command of the English language (oral and written).

#### Conditions of employment

##### For the PhD

The University of Groningen offers a salary of 2042 (scale 50, number 0) gross per month in the first year, up to a maximum of 2612 (scale 50, number 3) gross per month in the final year, based on a full-time position. The position requires residence in Groningen and must result in a PhD thesis within the 4-year contract period. A PhD training program is part of the agreement and the successful candidate will be enrolled in the Graduate School of Science. The successful candidate will first be offered a temporary position of 1.5 years with the perspective of prolongation for another 2.5 years. After the first year, there will be an evaluation on the perspectives of the successful completion of the PhD thesis within the next three years. If these perspectives are poor, the contract may not be renewed.

##### For the Post-Doc

The university offers a gross salary depending on qualifications and experience, ranging between 2744 gross (scale 10, number 3) per month and a maximum of 3755 (scale 10, number 12) gross per month for a full-time post-doctoral job. This position is defined according to the UFO function profile ‘researcher’. After the first year there is an assessment interview; continuation of the project for the next two years is dependent on successful performance during the first year.

#### Starting date

The preferred starting date is June 1, 2012. The position will be filled as soon as suitable candidates have been found.

### Additional information

Information about the University of Groningen can be found at the website [www.rug.nl](http://www.rug.nl). Detailed information about the Theoretical Biology and the

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## UKaiserslautern CiliateGenomeEvolution

Postdoc position in ciliate genome evolution in Kaiserslautern, Germany

A postdoctoral position testing the putative lack of meiotic sex in colpodean ciliates (Dunthorn and Katz, 2010, Trends Microbiol. 18:183-188) is available in the newly established DFG-Emmy-Noether Independent Junior Research Group for Microbial Diversity at the University of Kaiserslautern. The position is for 3 years, with the possibility of extension. The first aim is to evaluate the evolution of sex-linked genes in already published genomes of known sexual ciliates. The second aim is to evaluate the presence or absence of these same genes using Illumina whole genome sequencing in three colpodeans: *Bursaria truncatella*, *Colpoda magna*, and *Sorogena stioanovitchae*. Opportunities are possible to also work with evaluating these genes in other clades of putative asexual microbial eukaryotes.

The candidate for this position must have excellent bioinformatic skills. Additional requirements: a Ph.D. in biology or computer science; good working knowledge of English, both written and verbal; motivation and ability to work independently. Salary follows DFG guidelines (E13).

The Microbial Diversity research group is headed by Dr. Micah Dunthorn. Other work in the group includes a 5-year study of the diversity and biogeography of soil-inhabiting ciliates in Neotropical rainforests using 454 pyrosequencing, and ciliate molecular phylogenetics. This group is located in the Department of Ecology, headed by DFG-Heisenberg Professor Dr. Thorsten Stoeck.

If interested, please send a single pdf containing your C.V., a description of your motivation and research interests, reprints of published papers, and contact details

of two academic references to: [dunthorn@rhrk.uni-kl.de](mailto:dunthorn@rhrk.uni-kl.de)  
Applications will be screened until the position is filled.  
Starting date: March 2012 or soon thereafter.

Micah Dunthorn <http://www.bio.uni-kl.de/microbialdiversity/> [dunthorn@rhrk.uni-kl.de](mailto:dunthorn@rhrk.uni-kl.de)

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## ULausanne Bioinformatics

### BIOINFORMATICS POSTDOC IN FUNCTIONAL EVOLUTIONARY GENOMICS

Center for Integrative Genomics, University of Lausanne, Switzerland

Two postdoctoral positions (2 years with possible extensions up to 5 years) are available immediately in the evolutionary genomics group of Henrik Kaessmann.

We are seeking highly qualified and enthusiastic applicants with strong skills in computational biology/bioinformatics, preferably also with experience in data mining and comparative or evolutionary genome analysis.

We have been interested in a range of topics related to the functional evolution of genomes from primates (e.g., the emergence of new genes and their functions) and other mammals (e.g., the origin and evolution of mammalian sex chromosomes). In the framework of a recently launched series of projects, a large amount of transcriptome and genome (e.g., epigenome) data are being produced by the wet lab unit of the group using next generation sequencing technologies for a unique collection of tissues from representative mammals and outgroup species (e.g., birds). Topics of current projects based on these data include the origins and/or evolution of protein-coding genes, alternative splicing, microRNAs, long noncoding RNAs, and dosage compensation.

The postdoctoral fellow will perform integrated evolutionary/bioinformatics analyses based on data produced in the lab and available genomic data. The specific project will be developed together with the candidate.

The language of the institute is English, and its members form an international group that is rapidly expanding. The institute is located in Lausanne, a beautiful city at Lake Geneva.

For more information on the group and our institute more generally, please refer to our website:

<http://www.unil.ch/cig/page7858.en.html> Please submit a CV, statement of research interest, and names of three references to: Henrik Kaessmann (Henrik.Kaessmann@unil.ch).

– Henrik Kaessmann, Ph.D. Associate Professor Center for Integrative Genomics University of Lausanne, Switzerland

Representative publications:

Brawand, D., Soumillon, M., Necsulea, A., Julien, P., Csárdi, G., Harrigan, P., Weier, M., Liechti, A., Aximu-Petri, A., Kircher, M., Albert, F.W., Zeller, U., Khaitovich, P., Grützner, F., Bergmann, S., Nielsen, R., Pääbo, S., and Kaessmann, H. (2011) The evolution of gene expression levels in mammalian organs. *Nature* 478: 343-348.

Kaessmann, H. (2010) Origins, evolution and phenotypic impact of new genes. *Genome Res.* 20: 1313-1326.

Henrichsen, C., Vinckenbosch, N., Zöllner, S., Chaignat, E., Pradervand, S., Frédéric Schütz, Ruedi, M., \*Kaessmann, H. and \*Reymond, A. (2009) Segmental copy number variation shapes tissue transcriptomes. *Nature Genet.* 41: 429-9.

Kaessmann, H., Vinckenbosch, N., and Long, M.: RNA-based gene duplication: mechanistic and evolutionary insights. (2009) *Nat. Rev. Genet.* 10: 19-31.

Potrzebowski, L., Vinckenbosch, N., Marques, A. C., Chalmel, F., Jegou, B. & Kaessmann, H. (2008) Chromosomal Gene Movements Reflect the Recent Origin and Biology of Therian Sex Chromosomes. *PLoS Biol.* 6: e80.

Brawand, D., Wahli, W. & Kaessmann, H. (2008) Loss of egg yolk genes in mammals and the origin of lactation and placentation. *PLoS Biol.* 6: e63.

Rosso, L., Marques, A. C., Weier, M., Lambert, N., Lambot, M.-A., Vanderhaeghen, P. & Kaessmann, H. (2008) Birth and Rapid Subcellular Adaptation of a Hominoid-Specific CDC14 Protein. *PLoS Biol.* 6: e140.

Vinckenbosch, N., Dupanloup, I. & Kaessmann, H. (2006) Evolutionary fate of retroposed gene copies in the human genome. *Proc. Natl. Acad. Sci. U. S. A.* 103: 3220-3225.

Marques, A., Dupanloup, I., Vinckenbosch, N., Reymond, A. & Kaessmann, H. (2005) Emergence of young human genes after a burst of retroposition in primates. *PLoS Biol.* 3: e357.

Burki, F. & Kaessmann, H. (2004) Birth and adaptive evolution of a hominoid gene supporting high neurotransmitter flux. *Nature Genet.* 10: 1061-1063.

Henrik.Kaessmann@unil.ch

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## ULaval ExpEvol SystemsBiol

Postdoctoral position in experimental evolution and systems biology

Applications are invited for a postdoctoral position in evolutionary systems biology at the Laval University Institute for Integrative and Systems Biology (IBIS)(Quebec, Canada) to study the organization of signalling networks by means of experimental evolution. The successful candidate will study the genetic architecture and evolution of signalling networks using the budding yeast and its close relatives as models. The candidate will have access to state-of-the-art facilities in automated screening, high-throughput sequencing and computational biology.

Applicants must hold a PhD in biology or in a related discipline. The candidate should have strong experience in molecular biology and/or bioinformatics. Prior experience with high throughput screening and genotyping, statistics and yeast genetics would be an asset.

Université Laval is one of the first higher education institutions in the Americas and is one of the leading universities in Canada. Located in Quebec City – a UNESCO world heritage city– Université Laval offers an excellent research and training environment for scholars and an outstanding quality of life.

Time of initial appointment: Between July and September 2012 (flexible).

Review of applications begins immediately and will continue until the position is filled.

Initial term of one year renewable for two years.

Interested candidates should contact Christian Landry (clandry@post.harvard.edu) and include a cover letter describing research interests, a CV and the names of two referees.

Visit our website for more details on our research

<http://www.bio.ulaval.ca/landrylab/> Christian Landry, PhD Assistant Professor CIHR New Investigator Department of Biology Institute for Integrative and Systems Biology Room 3106, Pavillon Charles-Eugene-Marchand 1030, Avenue de la Medecine Laval University Quebec (Quebec) G1V 0A6 Canada

<http://www.bio.ulaval.ca/landrylab> Phone: 418-656-

3954 Fax: 418 656-7176

Christian Landry <[christian.landry@bio.ulaval.ca](mailto:christian.landry@bio.ulaval.ca)>

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## ULiverpool KinRecognition

Postdoctoral Research Associate - Kin recognition and cooperative breeding

The Mammalian Behaviour & Evolution Group at the University of Liverpool seek an individual with expertise in animal behaviour research for a NERC-funded project investigating the importance of kinship in cooperation between breeding females and the mechanisms underlying kin recognition. You should have (or be about to obtain) a PhD, with excellent experimental and communication skills. Experience of working with rodents and a background in the study of kin recognition or co-operative breeding would be advantageous. The post is available for 20 months.

Closing date for applications 2nd March 2012. Informal enquiries: Prof Jane Hurst ([jane.hurst@liv.ac.uk](mailto:jane.hurst@liv.ac.uk)) Further details: [http://www.liv.ac.uk/working/job\\_vacancies/research/R-571829.htm](http://www.liv.ac.uk/working/job_vacancies/research/R-571829.htm) P.Stockley@liverpool.ac.uk

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## ULiverpool SpermCompetition

Postdoctoral Research Associate - Sperm competition

The Mammalian Behaviour & Evolution Group at The University of Liverpool seek an individual with expertise in animal behaviour research for a NERC-funded project investigating the role of seminal fluid proteins in mammalian sperm competition. You should have (or be about to obtain) a PhD, with excellent experimental and communication skills. Experience of working with rodents and a background in the study of sexual selection or sperm competition would be advantageous. The post is available for up to 2½ years.

Closing date for applications 2nd March 2012. Informal enquiries: Dr Paula Stockley ([p.stockley@liv.ac.uk](mailto:p.stockley@liv.ac.uk)) Further details: [http://www.liv.ac.uk/working/job\\_vacancies/research/R-577644.htm](http://www.liv.ac.uk/working/job_vacancies/research/R-577644.htm) Dr Paula Stockley Mammalian Behaviour & Evolution Group

Institute of Integrative Biology University of Liverpool  
Leahurst Campus Chester High Road Neston CH64  
7TE, UK

tel: +44 151 794 6103 mail: [p.stockley@liv.ac.uk](mailto:p.stockley@liv.ac.uk)  
<http://www.liv.ac.uk/mbe> P.Stockley@liverpool.ac.uk

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## UmeU TreeGenomics

Post-doctoral position (2 years) in Tree Genetics / Genomics

Umeå Plant Science Center is looking to fill a post-doctoral position in tree genetics. The project involves the construction of genetic maps, comparative mapping between pine and spruce, identification of QTL and association mapping for various traits, collaborating broadly with numerous researchers in several research groups at UPSC. This project is funded by the Norway spruce genome sequencing project, ongoing here in Umeå (<http://www.congenie.org/>). The position is full time and is available now and for a period of two years.

The chosen candidate will perform world-class research and be exceptionally mentored. UPSC is a centre of Excellence for Plant and Forest Biology and Biotechnology, located in northern Sweden. Our ca. 200 employees (including about 40 faculty members) perform world-leading research and have access to outstanding infrastructure with many shared resources and platforms, including advanced facilities for growing, transforming and manipulating our main model systems. UPSC is consistently ranked as one of the top places in the world for post-doctoral studies. About half of our staff are non-Swedes, and the composition of employed staff and students at UPSC is highly dynamic, representing on average 35 nationalities.

To qualify for the position, you must have a PhD degree in a relevant field. Candidates ideally should possess a background in high-throughput genotyping, bioinformatics, and statistical genetics. We are looking for a team-oriented person with documented capabilities conducting autonomous scientific research, as well as skills in writing scientific publications. The working language of UPSC is English and thus high competencies are required.

A full application consists of cover letter, your CV including a list of publications, a description of your research interests, a statement about why you are interested in the project, and contact information for three



referees. All documents submitted in hard-copy form should be in two copies, and all electronically submitted material should be in MS Word or PDF format. The official advertisement of the position can be found at: [http://www8.umu.se/umu/aktuellt/arkiv/lediga\\_tjanster/315-108-12.html](http://www8.umu.se/umu/aktuellt/arkiv/lediga_tjanster/315-108-12.html). A complete application, marked with reference number 315-108-12, should be sent to [jobb@umu.se](mailto:jobb@umu.se) (state the reference number as subject) or to the Registrar, Umeå University, SE-901 87 Umeå, Sweden to arrive March 9, 2012 at the latest.

For more information about the position, contact Stacey Lee Thompson [stacey.thompson@emg.umu.se](mailto:stacey.thompson@emg.umu.se), Rosario García-Gil [m.rosario.garcia@slu.se](mailto:m.rosario.garcia@slu.se), or Pär Ingvarsson [par.ingvarsson@emg.umu.se](mailto:par.ingvarsson@emg.umu.se).

Pär K. Ingvarsson Professor, Evolutionary Genetics Umeå Plant Science Centre Department of Ecology and Environmental Science Linneaus väg 6 Umeå University, SE-901 87 Umeå, Sweden tel. +46-(0)90-786-7414, fax. +46-(0)90-786-6705

Pelle Ingvarsson <[par.ingvarsson@emg.umu.se](mailto:par.ingvarsson@emg.umu.se)>

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### UMichigan Computational Macroevolution Biogeography

Postdoctoral position at the University of Michigan

A postdoctoral position is available to work on the NSF-funded project, "Evolving hyperdiversity in phenotypic, ecological, and geographic networks: testing the taxon cycle and alternatives in Indo-Pacific Pheidole" (PIs: Evan Economo, Lacey Knowles). Using the ant genus *Pheidole* as a model system, the primary goal of the project is to understand the deterministic and stochastic components of evolutionary transitions through geographic, phenotypic, and ecological networks and consequences for the assembly of island and continental faunas.

For this position we are looking for researchers with expertise developing and using computational techniques to infer evolutionary and biogeographic processes by integrating phylogenetic and other data types. Previous experience with ant biology is not required.

The position is based primarily at the University of Michigan, and the researcher will have an opportunity to spend considerable time at the Okinawa Institute of Science and Technology, Japan ([www.oist.jp](http://www.oist.jp)). The start date is flexible, and duration would be one year with the possibility of extending for an additional year

based on satisfactory progress.

To apply, please send your CV and a cover letter briefly explaining your background and interest in the position to <[pheidole.project@gmail.com](mailto:pheidole.project@gmail.com)>. Informal questions for the PIs are also welcome ([evaneconomo@gmail.com](mailto:evaneconomo@gmail.com), [knowlesl@umich.edu](mailto:knowlesl@umich.edu)).

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Evan P. Economo Michigan Society of Fellows Department of Ecology & Evolutionary Biology University of Michigan

[evaneconomo@gmail.com](mailto:evaneconomo@gmail.com)

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### UMinnesota PopulationFragments

A postdoctoral position is available on a project examining evolutionary consequences of population fragmentation of *Echinacea angustifolia* (purple coneflower) in North American prairie. This study, now in its 17th year and funded by NSF's Evolutionary Genetics Program, joins demography of remnant populations and quantitative genetic experiments in the field with modeling efforts to shed light on the feedbacks between numerical dynamics and genetic dynamics of *Echinacea*, and on its interactions with insects. The postdoc will collaborate with Stuart Wagenius (Chicago Botanic Garden) and Ruth Shaw (University of Minnesota) on quantitative genetic and demographic studies of the fragmented population and associated field experiments and will have the opportunity to participate in developing evolutionary models that incorporate our accumulating understanding of genetic and demographic processes within the study system. There is considerable potential for the postdoc to develop further research projects pertinent to the overall goals of this study.

To learn more about this project, please consult: Shaw, R.G., C.J. Geyer, S. Wagenius, H.H. Hangelbroek, J.R. Etterson. 2008. Unifying life history analyses for inference of fitness and population growth. *American Naturalist* 172: E35-E47.

Lopez, S., F. Rousset, F. H. Shaw, R. G. Shaw, O. Ronce. 2009 Joint effects of inbreeding and local adaptation on the evolution of genetic load after fragmentation. *Conservation Biology* 23: 1618-1627.

Wagenius, S., H. H. Hangelbroek, C. E. Ridley, R. G. Shaw. 2010. Biparental inbreeding and inter-remnant mating in a perennial prairie plant: fitness

consequences for progeny in their first eight years. *Evolution* 64:761-771.

Wagenius, S., A. Dykstra, C. E. Ridley, and R. G. Shaw. 2011. Seedling recruitment in the long-lived perennial, *Echinacea angustifolia*: a ten year experiment. *Restoration Ecology*. DOI: 10.1111/j.1526-100X.2011.00775.x

Ridley, C. E., H. H. Hangelbroek, S. Wagenius, J. Stanton-Geddes and R. G. Shaw. 2011. The effect of plant inbreeding and stoichiometry on interactions with herbivores in nature: *Echinacea angustifolia* and its specialist aphid. *PLoS One* 6(9): e24762. doi: 10.1371/journal.pone.0024762

More information on the project, including links to papers, available at <http://echinaceaproject.org/> The position is offered for an initial year, with the opportunity to renew for a second year. During the summer, the postdoc will be based, along with the rest of the research team, at the field site near Alexandria MN. During the academic year, the postdoc will be based in the Department of Ecology, Evolution and Behavior at the University of Minnesota. Both are stimulating and interactive communities. To learn more about the project, interested individuals may email Ruth Shaw (rshaw@superb.ecology.umn.edu) or Stuart Wagenius (swagenius@chicagobotanic.org).

To apply, submit a letter of interest describing research interests and experience, CV, and names and contact information of three individuals willing to send letters of reference at <https://employment.umn.edu/userfiles/jsp/shared/frameset/Frameset.jsp?time=-1218654908026> Review of applications will begin March 19, 2012 and continue until the position has been filled.

The University of Minnesota provides equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

Ruth Shaw <shawx016@umn.edu>

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## UMontpellierII AntagonisticEvol

Postdoctoral Scientist to study Host-Pathogen Coevolution

A two-year Postdoctoral Scientist position is available starting October 1st, 2012 at the University of Montpellier II, France. The work will be performed in the research group headed by Dr. Michael Hochberg\*, and in association with Dr. Peter Thrall (CSIRO Canberra, Australia) and Prof. Jennifer Dunne (Santa Fe Institute, USA). The project is fully funded by a grant from the McDonnell Foundation (<http://www.jsmf.org/grants/2011013/>).

**Context:** The proposed project will probe how environments influence the structure of antagonistic coevolutionary interactions. In nature individual organisms are confronted with diverse arrays of abiotic and biotic stresses and mortality factors. This generates higher order complexity because of the multi-scale nature of these interactions, and because both exogenous environments and organisms shift and change in ways which may be difficult to predict. Our goal is to explain pattern by manipulating this complexity at different scales and teasing apart the contributions of its components to coevolutionary dynamics and structure.

**Requirements:** PhD and demonstrated experience in either mathematical modelling or microbial experimental evolution. Excellent command of scientific English.

Interested candidates should apply by 1 May 2012 by sending (1) a letter of motivation, (2) a CV with publication list and (3) the names, institutions and email addresses of three references to Dr. Michael Hochberg at mhochber@um2.fr

\*Recent group publications: Poisot T., Lepennetier G., Martinez E., Ramsayer J. & Hochberg M.E. 2010. Resource availability affects the structure of a natural bacteria-vbacteriophage community. *Biology Letters* doi:10.1098/rsbl.2010.0774

Poisot T., Thrall P.H., Bever J.D., Nemri A. & Hochberg M.E. 2011. A conceptual framework for the evolution of ecological specialisation. *Ecology Letters* doi: 10.1111/j.1461-0248.2011.01645.x

Poisot T., Thrall P.H. and Hochberg M.E. 2011. Trophic network structure emerges through antagonistic coevolution in temporally varying environments. *Proceedings of the Royal Society of London B* doi:10.1098/rspb.2011.0826

Ramsayer J., Fellous S., Cohen J.E. and Hochberg M.E. 2011. Taylors Law holds in experimental bacterial populations but competition does not influence the slope. *Biology Letters* doi:10.1098/rsbl.2011.0895

Poisot T., Canard E., Mouquet N. and Hochberg M.E. In press. A comparative study of ecological specialization estimators. *Methods in Ecology and Evolution*

Escobar-Paramo P., Gougat-Barbera C. & Hochberg M.E. In press. Evolutionary dynamics of separate and combined exposure of *Pseudomonas fluorescens* SBW25 to antibiotics and bacteriophage. *Evolutionary Applications*

Michael Hochberg <mkhochb@yahoo.com>

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## UNebraska Lincoln Bioinformatics

Post Doctoral Research Associate in Bioinformatics

The Core for Applied Genomics and Ecology at the University of Nebraska-Lincoln is seeking candidates for a non-tenure leading post-doctoral research associate position within the Department of Food Science and Technology.

The successful candidate will be expected to engage in a vigorous basic research program focused on Quantitative Trait Locus (QTL) analysis of microbiome "traits" in murine and bovine systems and will function as part of a multi-disciplinary bioinformatics team.

Oversight for the position will be provided by Dr. Andrew Benson (Food Science & Technology), Dr. Stephen Kachman (Statistics) and Dr. Etsuko Moriyama (School of Biological Sciences). The initial appointment to this position is for two years and will be funded by federal grant funds. Continuation of the position from year to year will depend on availability of funds, satisfactory performance and continued employability in the United States.

Requires a PhD in Computer Science, Bioinformatics, or a related field and experience programming with Python, Perl, C, and SQL.

For further details and to apply for this position visit <http://employment.unl.edu>, requisition number 120065. Complete the Faculty/Administrative form and attach a Letter of Application, Curriculum Vitae and a list of professional references. Application review will begin on March 5, 2012 and continue until the position is filled.

The University of Nebraska has an active National Science Foundation ADVANCE gender equity program, and is committed to a pluralistic campus community through affirmative action, equal opportunity, work-life balance, and dual careers.

Dr. Andrew Benson [abenson1@unl.edu](mailto:abenson1@unl.edu) 402-472-5637

<http://cage.unl.edu/> [emoriyama2@unlnotes.unl.edu](mailto:emoriyama2@unlnotes.unl.edu)

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## UNebraska PopulationBiology

POPULATION BIOLOGY POSTDOCTORAL RESEARCH FELLOWSHIP

THE UNIVERSITY OF NEBRASKA-LINCOLN is seeking applications for two 2-year postdoctoral fellows in Population Biology.

A Ph.D. in Biology, Ecology, Evolution, Genetics, or Mathematics, and expertise in any aspect of population biology is required. Qualified candidates are \*required\*\* \*to contact a potential faculty advisor to develop a 2-year research project. Advisors may be in the School of Biological Sciences ([biosci.unl.edu](http://biosci.unl.edu)), School of Natural Resources ([snr.unl.edu](http://snr.unl.edu)), or Department of Mathematics ([math.unl.edu](http://math.unl.edu)) and must be qualified to advise projects in population biology. Fellows will pursue research with a faculty advisor and will teach a graduate seminar in each year of their fellowship. Applications must include a CV, a 1-page research proposal, a 1-page description of prior research, and a 1-page description of potential graduate seminars. Application materials should be assembled into a single pdf (Lastname\_Firstname\_PopBio) and emailed as an attachment to [biologysearch@unl.edu](mailto:biologysearch@unl.edu). In addition, the applicant must arrange for three letters of reference (one of which must be from the proposed faculty sponsor) to be emailed to the same address. Questions about the program should be sent to Dr. Diana Pilson ([dpilson1@unl.edu](mailto:dpilson1@unl.edu)).

\*Applications should be received by 15 April 2012\* in order to ensure full consideration, but the position will remain open until filled. The salary range is in line with international standards for postdoctoral positions. We strongly encourage applications from women, and members of minority groups. UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity, and is responsive to the needs of dual career couples. We assure responsible accommodation under the Americans with Disabilities Act. For further information contact Dr. Valery Forbes at 402-472-6676 for assistance.

Diana Pilson School of Biological Sciences 348 Manter Hall University of Nebraska Lincoln NE 68588-0118

402-472-2347 402-472-2083 (fax)

Diana Pilson <[dpilson1@unl.edu](mailto:dpilson1@unl.edu)>

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## UNotreDame MosquitoGenomics

POSTDOC: Functional Genomics of malaria mosquitoes

An NIH-funded postdoctoral position is available immediately in the lab of Nora Besansky, Department of Biological Sciences, University of Notre Dame. The goal of the project is to uncover the genetic basis of a physiological trait— saltwater tolerance— in an African malaria vector mosquito, *Anopheles merus*. This primarily coastal species is sister to *An. gambiae*, an obligate freshwater breeder that is the main vector of malaria across most of tropical Africa. The two morphologically indistinguishable species are very closely related, and can be crossed to produce viable and fertile F1 females. Laboratory colonies of both species and insectary rearing facilities are available at Notre Dame; other tools include completely sequenced genomes (for *An. gambiae*, since 2002; for *An. merus*, later this year). Genetic analysis of saltwater tolerance will involve two experimental approaches: QTL mapping based on next generation sequencing, and comparative transcriptomics based on RNASeq. As such, the project will involve the collection and analysis of large next-generation sequencing datasets. The successful candidate will work with Dr. Besansky in collaboration with Dr. Romero-Severson at Notre Dame, and Dr. Peter Andolfatto at Princeton. The Besansky lab has other ecological and evolutionary genomics projects ongoing in *An. gambiae*; for more information, please see:

<http://nd.edu/~nbesansk/> <http://biology.nd.edu/people/faculty/-besansky/> <http://www.ncbi.nlm.nih.gov/pubmed?term=3Dbesansky%20n>

EDUCATION/EXPERIENCE/SKILLS: REQUIRED: Ph.D. in biology, computer science, or related field. Strong motivation, good laboratory and analytical skills, demonstrated track record of writing and publication. PREFERRED: Experience in population genetics, statistical genetics, bioinformatics. Laboratory experience with molecular methods (DNA/RNA). Programming skills, familiarity with R, and experience with NGS data.

HOW TO APPLY: Applicants should submit a single PDF file containing a brief cover letter, curriculum vitae, and the names and contact information for two references, to [nbesansk@nd.edu](mailto:nbesansk@nd.edu). Screening of applications

will begin immediately and continue until the position is filled.

TERM OF APPOINTMENT: The initial term is set for one year but is renewable for another year, with the possibility of renewal for additional years.

ADDITIONAL INFORMATION: The Department of Biological Sciences is the center for research and teaching in the life sciences at the University of Notre Dame. Housed mainly in the Galvin Life Sciences Building, the department is home to some 50 research and/or teaching faculty, 120 graduate students, 30 postdoctoral fellows, 300 undergraduate majors, and 75 technical and administrative staff. This vibrant research and teaching community continues to expand its faculty, both within the Department and with new associated faculty in the nearby Indiana University School of Medicine - South Bend, and in other departments in the College of Science and the College of Engineering. New centers in our building enhance our intellectual mission, and include the Eck Institute for Global Health, Center for Rare and Neglected Diseases, Environmental Change Initiative and Center for Aquatic Conservation, Center for Zebrafish Research, and the Notre Dame Integrated Imaging Facility. We also house a Genomics Core and the Freimann Animal Facility and support an outstanding field station, the University of Notre Dame Environmental Research Center - a NSF NEON site. Other available resources on campus include the Harper Cancer Research Institute, Keck Center for Transgene Research, Center for the Study of Biocomplexity, as well as Proteomics Cores and high-performance computing resources. Information on department and other college faculty and facilities can be found at <http://biology.nd.edu> and <http://science.nd.edu>. The University of Notre Dame is located on the northern limits of South Bend, Indiana (90 miles east of Chicago). The University of Notre Dame is an Equal Opportunity / Affirmative Action Employer.

Nora J. Besansky, PhD Rev. John Cardinal O'Hara, C.S.C. Professor of Biological Sciences Eck Institute for Global Health Department of Biological Sciences 317 Galvin Life Sciences Bldg University of Notre Dame Notre Dame, IN 46556-0369 Tel: 574-631-9321 Fax: 574-631-3996 [nbesansk@nd.edu](mailto:nbesansk@nd.edu)

[nbesansk@nd.edu](mailto:nbesansk@nd.edu)

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## UOslo EvolutionaryBiology



Natural History Museum, University of Oslo Postdoctoral position 1: Evolutionary Biology (Intraspecific Divergence)

The postdoc fellow will work on the project The early stages of the speciation process - prezygotic reproductive isolation and diversification in passerines, funded by the Research Council of Norway and NHM. Speciation is a fundamental evolutionary process in which lineages diverge to form new species. Understanding speciation processes is essential for understanding the evolution of biodiversity. Sexual selection may play a role in speciation processes, e.g. by promoting evolution of secondary sexual traits and preferences in allopatry, leading to divergence and premating isolation upon secondary contact. However, if sexual ornaments do not diverge in allopatry, populations may evolve deep genetic divergence but still despeciate upon secondary contact. The postdoctoral fellow will investigate cases of deep sympatric intraspecific divergences in two passerine species (common redstart and raven), using multilocus coalescence-based analyses, and explore several hypotheses for how such deep divergences have evolved. The project will require the use of a variety of analytical tools, like modern molecular genetic analyses, population genetics and coalescence analyses, and comparative statistics. The project will include comprehensive field work, both in Europe, Asia and North America.

The project team will consist of two postdocs and one field/lab technician and two senior NHM scientists: professor Jan T. Lifjeld and associate professor Arild Johnsen (project leader). The project will be performed in close collaboration with associate professor Kevin Omland (University of Maryland, Baltimore County, USA), and his research group

In order to be successful, the applicant should satisfy the following:

hold a degree equivalent to a Norwegian PhD/doctoral degree. be an evolutionary biologist with a scientific record in avian molecular systematics and phylogeography have experience with modern DNA sequencing techniques (including next generation sequencing), multilocus coalescence-based methods and comparative statistics methods

The postdoc fellow will be expected to participate in the supervision of PhD and Master students and should have good training in ornithological field methods. The postdoc fellow must be prepared to spend several months in the field during the first half of the employment period. A research stay of up to one year at University of Maryland, Baltimore County, USA, will be included in the project period. In the ranking of

competent applicants, the whole breadth of their qualifications will be assessed. The employment is for three years, starting as soon as possible after 1 April 2012.

Pay Grade: 57 60 (NOK 456 100-480 900 per year depending on qualifications)

Application Deadline: 19 February 2012.

Informal inquiries to associate professor Arild Johnsen (arild.johnsen@nhm.uio.no).

For full announcement and details on how to apply, please see <http://uio.easycruit.com/vacancy/675503/-71922?iso=no> arild.johnsen@nhm.uio.no

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## UOslo EvolutionaryBiology2

Natural History Museum, University of Oslo Postdoctoral position 2: Evolutionary Biology (Reproductive Isolation)

The postdoc fellow will work on the project The early stages of the speciation process - prezygotic reproductive isolation and diversification in passerines, funded by the Research Council of Norway and UiO. Speciation is a fundamental evolutionary process in which lineages diverge to form new species. Understanding speciation processes is essential for understanding the evolution of biodiversity. Spermatozoa are the most diverse cell types in the animal kingdom, indicating that they evolve rapidly. Given the high evolvability and divergence of sperm cells, we hypothesize that sperm cells and their interaction with the female reproductive system play crucial roles in promoting speciation in passerine birds. The postdoctoral fellow will investigate the role of such postmating, prezygotic selection as mechanisms of reproductive isolation, by performing sperm motility experiments in four species/subspecies pairs with variable degree of divergence. The project will require the use of a variety of analytical tools, like in vitro sperm motility analysis, proteomic analyses, and comparative statistics. The project will include comprehensive field work, both in Norway and elsewhere in Europe.

The project team will consist of two postdocs and one field/lab technician and two senior NHM scientists: professor Jan T. Lifjeld and associate professor Arild Johnsen (project leader). The project will be performed in close collaboration with professor Glenn-Peter Sætre (CEES, UiO) and associate professor Anna Qvarnström (EBC, Uppsala University), and their re-



spective research groups.

In order to be successful, the applicant should satisfy the following:

hold a degree equivalent to a Norwegian PhD/doctoral degree. be an evolutionary biologist with a scientific record in avian behavioural ecology and/or molecular systematics with focus on speciation processes have experience with analyses of sperm motility (Computer-Assisted Sperm Analysis), modern DNA and protein analyses, and comparative statistics methods

The postdoc fellow will be expected to participate in the supervision of PhD and Master students and should have good training in ornithological field methods. The postdoc fellow must be prepared to spend several months in the field during the first half of the employment period. A research stay of up to one year at Uppsala University will be included in the project period. In the ranking of competent applicants, the whole breadth of their qualifications will be assessed. The employment is for three years, starting as soon as possible after 1 April 2012.

Pay Grade: 57 60 (NOK 456 100-480 900 per year depending on qualifications)

Application Deadline: 19 February 2012.

Informal inquiries to associate professor Arild Johnsen (arild.johnsen@nhm.uio.no).

For full announcement and details on how to apply, please see <http://uio.easycruit.com/vacancy/675379/-71922?iso=no> arild.johnsen@nhm.uio.no

## UppsalaU Genomics of Metabolic Rate

< <http://www2.personalavd.uu.se/ledigaplatser/-67postdokENG.html> >

Uppsala University hereby declares the following position to be open for application:

Postdoctoral Researcher in Evolutionary Biology (\*UFV-PA 2012/68)\*

at the Animal Ecology Program, the Department of Ecology and Genetics, Evolutionary Biology Centre (EBC) with starting date being May 1<sup>st</sup>, 2012, or as soon as possible after this date. The Evolutionary Biology Center hosts one of the world's largest aggregations of evolutionary biologists, and is a prime research

environment for a wide range of fields in evolutionary biology and genetics (see "<http://www.ebc.uu.se/>" for more information). The working atmosphere is very international with English as our operational language. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful surroundings conveniently situated 40 minutes with train from Stockholm.

\*Brief research outline: \*\*The holder of this position will direct research towards an evolutionary understanding of \*\*the genomics of metabolic rate\*\*. Insects (seed beetles) will serve as the model system. The candidate will first complete a collaborative effort to produce a /de novo/ complete genome sequence of our main model system (/Callosobruchus maculatus/) which is currently underway. The holder of this position will then concentrate on the genetics of metabolic rate using focussed genotype-phenotype matching and upon sex-specific selection on discrete genotypes using experimental genomics. This research will involve whole-organism phenotyping of metabolic rate (using a state-of-the art respirometry system) and will focus on those nuclear and mitochondrial genes that are involved in the oxphos pathway and epistatic interactions between these.\*

\*This post\*doctoral position forms a part of a new project on genetic conflict, funded by the European Research Council and the Swedish Research Council. The entire project will employ some 6-8 postdocs and PhD students, apart from a full time TA and the PI, and will strongly encourage interactions and collaborations within the group.\*\*

\*Salary and appointment\*: The period of initial appointment is two years, with the possibility of prolonging the contract with another two years \*(i.e., 2+2 years)\*. Uppsala University adopts an individual salary policy but the starting salary for postdoctoral researchers is typically about 29.000 SEK per month and includes full social benefits.

\*Eligibility\*:The successful candidate must have a Ph.D, or an exam which is judged comparable to a PhD, that was completed within three years of the application deadline. Applicants that received their PhD earlier than this date will be considered if special circumstances exist (such as prolonged periods of illness, parental leave, military service, union duties and others of similar character).

\*Qualifications and merits\*: The ideal candidate has a documented expertise in using genomic tools in evolutionary biology and has a documented interest in the study of phenotypic selection and/or general evolutionary theory. Experience of /de novo/ next-generation

sequencing is a merit, as is experience of genotype-phenotype matching using genomic data and/or comparative genomics. Experience of laboratory work with insects and/or previous experience of work with respirometry phenotyping of metabolism will also be considered merits. Because the holder of this position will interact and collaborate closely with other members of the group, we will put emphasis on both independence and ability to collaborate. The holder of this position will be responsible for orchestrating part of the larger research project as an independent junior scientist and the ideal candidate therefore already has some postdoctoral research experience.\*\*

\*To apply:\*Candidates should submit a cover letter, a curriculum vitae including a list of publications and a short (1-3 pages) description of past research accomplishments and future research ambitions. Applicants should also include names and e-mail addresses of two referees and should specify the date they will be available to start the position.

\*For further information\*about the position, please contact the PI of the group: Professor Göran Arnqvist (phone +46 18 471 2645, e-mail Goran.Arnqvist@ebc.uu.se). The trade union representatives are Anders Grundström, Saco (the Swedish Confederation of Professional Associations), phone +46 18 471 5380, Carin Söderhäll, TCO/ST (the Swedish Confederation of Professional Employees), phone +46 18 471 1996, and Stefan Djurström, Seko (the Union of Service and Communication Employees), phone +46 18 471 3315.

\*You are welcome\*to submit your application no later than \*March

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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>

## UppsalaU Sexually Antagonistic Variation

Uppsala University hereby declares the following position to be open for application:

Postdoctoral Researcher in Evolutionary Biology (\*UFV-PA 2012/67)\*

at the Animal Ecology Program, the Department of

Ecology and Genetics, Evolutionary Biology Centre (EBC) with starting date being May 1<sup>st</sup>, 2012, or as soon as possible after this date. The Evolutionary Biology Center hosts one of the world's largest aggregations of evolutionary biologists, and is a prime research environment for a wide range of fields in evolutionary biology (see "<http://www.ebc.uu.se/>" for more information). The working atmosphere is very international with English as our operational language. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant student town with beautiful surroundings conveniently situated 40 minutes with train from Stockholm.

\*Brief research outline: \*\*The research will aim at improving our understanding of the \*\*architecture of sexually antagonistic genetic variation\*\*. Insects (seed beetles and/or fruit flies) will serve as main model systems and the research will primarily employ quantitative genetic techniques. The research will establish a series of discrete genotypes and use crosses between these to describe and understand the architecture of sexually antagonistic genetic variation. Traits in focus are sex specific measures of life history traits (especially metabolic parameters) and life-time fitness. \*\*\*

\*This post\*doctoral position forms a part of a new project on genetic conflict, funded by the European Research Council and the Swedish Research Council. The entire project will employ some 6-8 postdocs and PhD students, apart from a full time TA and the PI, and will strongly encourage interactions and collaborations within the group.

\*Salary and appointment\*: Period of appointment is two years. Uppsala University adopts an individual salary policy but the starting salary for postdoctoral researchers is typically about 29.000 SEK per month and includes full social benefits.

\*Eligibility:\*The successful candidate must have a Ph.D, or an exam which is judged comparable to a Ph.D, that was completed within three years of the application deadline. Applicants that received their PhD earlier than this date will be considered if special circumstances exist (such as prolonged periods of illness, parental leave, military service, union duties and others of similar character).

\*Qualifications and merits\*: We seek candidates with a documented expertise in quantitative genetic analyses and with a firm understanding of life history theory. Experience of laboratory work with insects is a merit as is previous experience of work with respirometry assays of metabolism. Because the holder of this position will collaborate and interact closely with other members of the group, we will put emphasis on both independence

and ability to collaborate.

\*To apply:\*Candidates should submit a cover letter, a curriculum vitae including a list of publications and a short (1-3 pages) description of past research accomplishments and future research ambitions. Applicants should also include names and e-mail addresses of two referees and should specify the date they will be available to start the position.

\*For further information\*about the position, please contact the PI of the group: Professor Göran Arnqvist (phone +46 18 471 2645, e-mail Goran.Arnqvist@ebc.uu.se). The trade union representatives are Anders Grundström, Saco (the Swedish Confederation of Professional Associations), phone +46 18 471 5380, Carin Söderhäll, TCO/ST (the Swedish Confederation of Professional Employees), phone +46 18 471 1996, and Stefan Djurström, Seko (the Union of Service and Communication Employees), phone +46 18 471 3315.

\*You are welcome\*to submit your application no later than \*March 20\*\*,\*\*2012 (UFV-PA 2012/67)\*. Please use the link below for access to an on-line application portal:

<http://www2.personalavd.uu.se/ledigaplatser/-67postdokENG.html> Prof. Göran Arnqvist Animal Ecology Department of Ecology and Evolution Evolutionary Biology Centre University of Uppsala Norbyvägen 18d SE - 752 36 Uppsala Sweden

Email:Goran.Arnqvist@ebc.uu.se Phone: +46-(0)18-471 2645 Cell phone: +46-(0)70-2935032 Fax: +46-(0)18-471 6484 NEW homepage with PDF reprints and more at: <http://www.anst.uu.se/goarn789/index.html> Goran.Arnqvist@ebc.uu.se

enzymes from a variety of mammalian species and comparing predicted protein sequence with respect to degree of dietary specialization. For more information on previous research, see

[http://biologylabs.utah.edu/dearing/2011/-Publications/Woodrats/mec\\_4171.pdf](http://biologylabs.utah.edu/dearing/2011/-Publications/Woodrats/mec_4171.pdf)  
<http://biologylabs.utah.edu/dearing/2011/-Publications/Woodrats/Xeno-Haley.pdf> <http://biologylabs.utah.edu/dearing/2011/Publications/-Woodrats/Skopec2007.pdf>

The ideal candidate will have a strong interest and experience in theories and techniques of molecular evolution or molecular ecology. Knowledge of the literature on plant-mammal interactions or pharmacology desired but not required. Possible field work. The candidate should have at least one first authored publication in press and a track record of mentoring undergraduate researchers.

The position is available beginning April 2012 for up to three years contingent on annual progress. Please send a C.V., statement of research interests and career goals (2 pages), pdfs of papers, and contact information (emails and phone numbers) for at least 3 references to Dr. Denise Dearing, denise.dearing@utah.edu; please put Postdoctoral Applicant in the Subject Line.

Denise Dearing, Ph.D Professor, Department of Biology Associate Dean, College of Science University of Utah Salt Lake City, UT 84112

Phone: 801-585-1298 Fax: 801-581-2174

[http://biologylabs.utah.edu/dearing/-2011/Index\\_New.html](http://biologylabs.utah.edu/dearing/-2011/Index_New.html) Denise Dearing  
 <u0028665@utah.edu>

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## UUtah MolecularEvolution

Postdoctoral Fellowship: Molecular Evolution: The Dearing lab at the University of Utah invites applications for a postdoctoral fellow to participate in a study on the evolution of detoxification enzymes in mammalian herbivores. Our preliminary data implicates the cytochrome P450 subfamily 2B as being critical in the biotransformation of plant secondary compounds, particularly terpenes. The structure and copy number of CYP2B enzymes may be key in an herbivores ability specialize on a terpene-rich diet. Future work on this project will consist of cloning and sequencing CYP2B

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## UValladolid EvolutionCooperation

Post-doctoral contract offered

We offer a post-doctoral research contract of 12 months (renewable for other 12 months) in behavioural ecology, starting between October and December 2012. The position will be held at the University of Valladolid, Department of Agroforestry (Spain) in collaboration with the University of Oviedo (Research Unit of Biodiversity; UO-CSIC) to investigate cooperative behaviour, sociality and communication in a captive colony of carrion crows.

Our main lines of investigation address individual and social factors promoting the evolution of cooperation,

reciprocity and communication in the carrion crow, a bird species characterized by an extreme plasticity in social and reproductive behaviour, from social monogamy and weak territoriality to kin-based social living, cooperative breeding and strong territorial behaviour. The aims of our current projects are to investigate sociality, cooperation and reciprocity outside the context of reproduction, using captive crows as study subjects. Besides the current research lines, the candidate will propose and develop his/her own ideas and will help supervising one-two PhD students.

#### WHO WE LOOK FOR

The ideal candidate should possess the following characteristics:

- PhD in biology with expertise in behavioural ecology and/or animal cognition
- Good scientific skills including experimental design, statistical treatment of data and scientific writing
- Research experience with captive (or habituated) animals
- Excellent knowledge of English
- Good aptitudes for working in a group and supervising students
- Propensity for working with basic facilities
- Valid driving licence for Europe

Knowledge of Spanish is recommended and use of a private car would be desirable

#### WHAT WE OFFER

- A captive colony of 11 well habituated carrion crows of both sexes, comprising 4 pairs of siblings and 3 unrelated individuals. It will be possible to increase the colony. Our birds are housed in a spacious, outdoors aviary divided into 4 main compartments (12 x 6 mt each) plus 8 experimental compartments (3 x3 m each) visually isolated from each other.

- Funds to cover research expenses through national and regional research grants
- Top quality audio and video recording equipments

The deadline for applications is 15 APRIL 2012

Candidates should present:

- a complete CV
- 2 recommendation letters (one from the thesis supervisor)
- A research proposal of maximum 2 A4 sheets

The application should be prepared in an electronic for-

mat (PDF or WORD) and sent as attached file to canestraridaniela@uniovi.es

See [www.cooperativecrows.com](http://www.cooperativecrows.com) for more details

Daniela Canestrari <canestraridaniela@uniovi.es>

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### UWesternAustralia EvolutionaryBiol

Dear Colleagues,

Call for applications -

The Centre for Evolutionary Biology is seeking applicants for the 2012 University of Western Australia Postdoctoral Research Fellowships.

University wide, up to 3 new 3-year (full-time) or 4-year (75% research/25% teaching) University Postdoctoral Fellowships will be awarded.

Proposals will be selected where the case has been established for a postdoctoral research fellow, who will bring special new expertise together with a high level of relevant experience not otherwise available to the University. Applications must be endorsed, as detailed in the Guidelines and Conditions, by the Head of the relevant University school.

We Centre for Evolutionary Biology at UWA are keen to recruit new members through these fellowship opportunities. For further information about the Centre for Evolutionary Biology (CEB) please see <http://www.ceb.uwa.edu.au/> or contact Leigh Simmons, Joseph Tomkins or another member of the Centre.

The Guidelines and Conditions are available at

<http://www.research.uwa.edu.au/staff/funding/-postdoctoral-research> \*\*Please note: because there

are a limited number of cases that each school can support, applications must be made through the School of Animal Biology. Last year the School was allowed to support up to 3 applicants. Potential applicants should ensure that they discuss their application with a member of the CEB (or School) and forward a CV, and a 300 word statement of their proposed research plus a 300 word strategic statement outlining what they will bring to the school in terms of expertise. These documents should be sent to Kerry Knott <kerry.knott@uwa.edu.au>. They will be assessed by the Research Committee who will select applicants to

proceed to full proposal.

CVs and statements should be submitted to the Research Committee by 5pm, Friday 2nd March.

The University's closing date for applications is 5pm, Friday 13 April 2012.

For the University's administrative information regarding the position please contact:

Olivia Langensiepen [olivia.langensiepen@uwa.edu.au](mailto:olivia.langensiepen@uwa.edu.au)

Cheers

Dr Joseph Tomkins Room 2.15, The Centre for Evolutionary Biology, The Zoology Building, The School of Animal Biology, The University of Western Australia, WA 6009. Australia <http://www.ceb.uwa.edu.au/>  
<http://alternativetactics.org/index.html> Joseph Tomkins <[joseph.tomkins@uwa.edu.au](mailto:joseph.tomkins@uwa.edu.au)>

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## UWisconsinMadison DrosophilaEvolutionaryGenomics

Postdoctoral Researcher in Drosophila Evolutionary Genomics

A postdoctoral position is available in the recently-formed research group of John Pool at the University of Wisconsin-Madison. The focus of our research group is on (1) analyzing population genomic data, including the development of new statistical methods, and (2) integrating population genomic data with other information sources - such as mapping, expression, and phenotypic data - to investigate the genetic basis of adaptive evolution. This position is targeted for the latter focus.

We use *Drosophila melanogaster* as a model system to pursue the genes and mutations that underlie adaptive phenotypic differences between populations from contrasting environments. An example from previous work is melanism, which occurs in African highland populations. Previous population genetic work identified ebony as a candidate gene in one melanic population (Pool and Aquadro 2007 *Mol. Ecol.*), and a subsequent collaboration with Mark Rebeiz and Sean Carroll resulted in the identification of five causative mutations around the abdominal enhancer of ebony (Rebeiz et al. 2009 *Science*). However, at least one additional pigmentation locus awaits discovery in this population (Uganda), and for two other populations (Cameroon and Ethiopia), the genetic basis of melanism is com-

pletely unknown. I'd also like to broaden our focus to other traits involved in *Drosophila* altitude adaptation.

Strategies for finding genes underlying adaptive population differences may include: \* Analysis of existing population genomic data. More than 100 genomes from African populations have already been sequenced ([www.dpgp.org/dpgp2/DPGP2.html](http://www.dpgp.org/dpgp2/DPGP2.html)). Population genetic scans for loci with elevated genetic differentiation between high and low altitude populations would be relevant. For larger sample sizes, genotype-phenotype associations may also be informative. \* Generation (and analysis) of new population genomic data. In terms of lab work, this would involve identifying haploid embryos, genome amplification, and DNA library preparation for the Illumina HiSeq platform. After receiving sequence data, reference alignment and quality filters are needed to produce a data object for population genomic analysis. \* Phenotypic measurements - quantification of *Drosophila* pigmentation (using digital photography and analysis) and other adaptive traits. The use of inbred lines allows replicated phenotyping to reduce measurement error in tests of genetic and geographic associations. \* Transcriptome analysis - to the extent that adaptive changes are regulatory, gene expression differences within and between populations could offer a valuable bridge between genomes and phenotypes. This would involve RNA isolation and bioinformatic analyses.

Our research group was started in fall 2011 and currently consists of the PI, one postdoc focusing on the analysis of population genomic data, and undergraduate researchers. I can offer a new postdoc plenty of individual attention, broadly applicable training in population genomics, and a first-hand understanding of the current faculty job market. I encourage postdocs to develop as independent scientists, and I will support you in putting together a research program that you can carry beyond this appointment.

UW-Madison offers a superb scientific environment, with colleagues in population genetics and evolutionary genomics including David Baum, Sean Carroll, Cameron Currie, Colin Dewey, John Doebley, Audrey Gasch, John Hawks, Chris Hittinger, Carol Lee, Lawrence Loewe, Bret Payseur, and Nicole Perna. There are roughly a dozen *Drosophila* groups on campus, including the labs of Bill Engels and Barry Ganetzky in our building.

Madison offers an exceptional quality of life in a beautiful natural setting. Downtown and campus are bordered by lakes, and the area includes a number of long distance bike trails. Madison features diverse art, music, and cultural offerings. A great farmers market and



a focus on local food are complemented by a wide range of international restaurants.

Applicants should send a CV and contact information for three references to [jpool@wisc.edu](mailto:jpool@wisc.edu). In addition, applicants should send a statement of interest addressing their background and interests related to the following points (note that the successful candidate may not have every skill that I inquire about): \* Intellectual background and interests; career goals. \* Computer programming (language, experience level) and other bioinformatic skills. \* Statistical experience (such as population genetic or quantitative genetic analyses). \* Molecular lab skills relevant to the work described above. \* Experience working with *Drosophila*; knowledge of *Drosophila* biology.

Potential start dates are between April 1 and July 1, 2012. Please indicate the earliest start date you would consider.

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## UWisconsin Madison MicrobialEvolution

Postdoctoral position in Evolutionary Systems Biology Vetsigian lab at the University of Wisconsin-Madison is seeking Postdoctoral Associates in the area of Microbial Evolution. The Lab is part of the Systems Biology Theme at the Wisconsin Institute for Discovery and the Department of Bacteriology. It focuses on experimental and theoretical approaches to studying microbial evolution in a community setting. We are developing methods for quantifying microbial interactions in a high-throughput fashion, and use them to characterize interactions in co-evolved natural communities and track their evolution in laboratory microbial communities.

We are looking for two types of candidates:

1) Ph.D in microbiology or a related field. Previous experience with any of the following is a plus but not required: microbial ecology, actinomycetes, secondary-metabolism, next gen sequencing, microfluidics, imaging.

2) Strong quantitative background and a record of accomplishments in the areas of complex systems, bioinformatics and/or evolutionary biology. Previous work on biological questions or laboratory experience are a plus but not required. In fact, the lab offers an ideal opportunity for ambitious candidates with a theoretical background to learn experimental techniques.

The postdoctoral positions will prepare candidates for a career in the rapidly expanding fields of Systems Biology, Microbial Ecology and Genomics. The specific research projects will be based on the candidate's experience and interests. The positions are for two years with the potential for extension upon satisfactory performance. Start day is negotiable.

To apply, please send one document that includes a cover letter, CV and statement of research accomplishments to [kalin@discovery.wisc.edu](mailto:kalin@discovery.wisc.edu). Also, arrange for 3 letters of recommendation to be e-mailed directly to the above address.

Kalin Vetsigian Assistant Professor of Bacteriology <http://www.bact.wisc.edu/~faculty.php?init=3DKAV&show=3DPEP> < <http://www.bact.wisc.edu/faculty.php?init=3DKAV&show=-3DPEP> > Wisconsin Institute for Discovery Systems Biology Theme, Room 3116 330 N. Orchard Street

[Kalin@discovery.wisc.edu](mailto:Kalin@discovery.wisc.edu) [Kalin@discovery.wisc.edu](mailto:Kalin@discovery.wisc.edu)

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## Vienna DrosophilaExperimentalEvolution

Senior postdoc position in Experimental Evolution in *Drosophila*

By allowing for replication, experimental evolution studies provide the fantastic opportunity to distinguish between directional forces (selection) and random changes (drift). While adaptive responses on the phenotypic level are well studied, the potential of experimental evolution studies to link genotypic, transcriptional and phenotypic responses is just starting to be recognized. In a five-year ERC funded project, we are using experimental evolution in *Drosophila* to study the architecture of adaptation to a novel environment, by linking genotypes, phenotypes and gene expression data to variation in natural *Drosophila* populations.

We are searching for a senior postdoc, to work on this project. The postdoc will serve a central role in manag-

ing the project, which includes the supervision of three technicians and the collaboration with two other postdocs and several PhD students. Qualified candidates will be offered the opportunity to develop into an independent group leader working on experimental evolution in *Drosophila*.

Since the project requires a diverse set of skills ranging from functional *Drosophila* genetics to bioinformatics and statistical genetics, successful candidates will have a solid background in at least one of the core areas and a keen interest to collaborate with an interdisciplinary team.

The position will be based at the Institute of Population Genetics at the Vetmeduni Vienna (Austria). The research focus of the Institute is on understanding the genetics of adaptation. This central question in evolutionary biology is being tackled using up-to-date methods and a variety of approaches, including experimental evolution, quantitative genetics, examination of life history traits, Evo-Devo, empirical population genetics, bioinformatics and statistics.

In recent years, Vienna has developed into one of the leading centers in evolutionary biology (<http://www.evolvienna.at>). In addition, Vienna is home to the VDRC Stock Center, and a high-profile *Drosophila* research community, most notably at the IMP (<http://www.imp.ac.at/>) and the IMBA (<http://www.imba.oeaw.ac.at/>). In addition to a stimulating scientific environment, Vienna also offers an extraordinarily high quality of life. Affordable housing, excellent public transport, great restaurants, a range of international schools, two operas, two music centers, many theaters and museums in combination with a pleasant climate make Vienna one of the most attractive cities in Europe.

The position is available from May 2012. The minimum salary will be 47334euro /year. The application should be emailed to [christian.schloetterer@vetmeduni.ac.at](mailto:christian.schloetterer@vetmeduni.ac.at) as a single pdf containing CV, list of publications, a statement of research interests, and the names of three references with contact details. While the search will continue until the position is filled, applications should be received by March 30, 2012 to ensure full consideration.

Christian Schlotterer Institut für Populationsgenetik  
Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390  
<http://i122server.vu-wien.ac.at/pop> Vienna Graduate School of Population Genetics <http://www.popgen-vienna.at> [schlottc@gmail.com](mailto:schlottc@gmail.com)

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## Vienna EvolDrosophila GeneExpression

Postdoc position in Evolution of Gene Expression in *Drosophila*

We are searching for a highly motivated postdoc to study how changes in gene expression contribute to adaptation of populations encountering a novel environment. Particular attention will be given to the contribution of cis- and trans-effects. We are using natural populations as well as experimental evolution populations of *D. melanogaster* and *D. simulans*. Given the scale of the experiment, sound statistical knowledge is essential and programming skills are beneficial.

The successful candidate will be based at the Institute of Population Genetics (<http://i122server.vu-wien.ac.at/pop>). The research focus of the Institute of Population Genetics is on understanding the genetics of adaptation. This central question in evolutionary biology is being tackled using up-to-date methods and a variety of approaches, including experimental evolution, quantitative genetics, examination of life history traits, Evo-Devo, empirical population genetics, bioinformatics and statistics. In addition, the thriving community of evolutionary scientists (<http://www.evolvienna.at>) and the Vienna Graduate School of Population Genetics (<http://www.popgen-vienna.at>) provide a stimulating environment.

The position is available from May 2012. The minimum salary will be 47334/year. The application should be emailed to [christian.schloetterer@vetmeduni.ac.at](mailto:christian.schloetterer@vetmeduni.ac.at) as a single pdf containing CV, list of publications, a statement of research interests, and the names of three references with contact details. While the search will continue until the position is filled, applications should be received by March 30, 2012 to ensure full consideration.

Christian Schlotterer Institut für Populationsgenetik  
Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390  
<http://i122server.vu-wien.ac.at/pop> Vienna Graduate School of Population Genetics <http://www.popgen-vienna.at> [schlottc@gmail.com](mailto:schlottc@gmail.com)

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## WashingtonStateU NematodeGenomics

Postdoctoral position. Use genomics approaches to determine interspecific and intraspecific variability in entomopathogenic nematodes, to explore the relationship between biodiversity and pest suppression in sustainable farming systems (e.g., *Science* 321:1488-1490; *Nature* 466:109-112). Applicants are expected to have outstanding molecular biology skills and experience in analyzing large-scale next-generation sequencing data sets; experience with entomology or nematology is not required. The holder of this exciting position will provide genomics data to complement large-scale, ecological field experiments, as one part of an interdisciplinary team. Start date is flexible, but ideally by summer 2012. Submit CV and cover letter to Bill Snyder, Department of Entomology, Washington State University, wesnyder@wsu.edu, or Axel Elling, Department of Plant Pathology, elling@wsu.edu.

ian.warren@wsu.edu

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## WrightStateU Insect Phylogenetics

### POSTDOCTORAL POSITION IN INSECT PHYLOGENETICS & EVOLUTION (TACHINID FLIES)

I am seeking a postdoc to join my lab at Wright State University in Dayton Ohio ([www.wright.edu/biology/-department/directory/faculty/stireman/](http://www.wright.edu/biology/-department/directory/faculty/stireman/)) and collaborate on an NSF funded project focused on understanding the phylogeny and evolution of parasitoid flies in the family Tachinidae. See the NSF project summary below for a brief overview of our goals. The postdoc will participate in collecting expeditions to Australia, S. Africa, S. America, and elsewhere, acquire morphological and molecular data and conduct molecular phylogenetic analyses (including genomic data), aid in development of web pages and identification resources, contribute to outreach activities, and help to develop grant proposals to secure additional funding. The successful candidate will be expected to interface with co-PIs and collaborators, become an integral member of the lab, and to help supervise and/or mentor students. The ap-

plicant should have experience with insect systematic and modern phylogenetic and comparative methods. Knowledge of and experience with Diptera is preferred.

Funding is available for up to two years, pending performance. The start date is flexible but ideally by Summer 2012.

Please contact John Stireman (john.stireman@wright.edu) for more information prior to submitting an application. For primary consideration, applicants should apply by March 15, 2012. To apply, please send the following:

1. A curriculum vitae
2. Names of 3 referees willing to provide a letter of recommendation upon request
3. A brief statement of research interests and goals and how they are related to the goals of the current project on tachinid phylogeny and evolution.

E-mail applications are preferred: john.stireman@wright.edu

Project Summary: Collaborative Research: Phylogeny and Evolution of World Tachinidae (Diptera)

Tachinidae are the most diverse and important group of insect parasitoids outside the Hymenoptera. They are also among the youngest and most rapidly diversifying families of flies. All tachinids are endoparasitoids, attacking as a group at least 14 arthropod orders. They parasitize this diversity of hosts with a remarkable array of oviposition and reproductive strategies. As enemies of other insects, particularly herbivores, tachinids play important ecological roles in both natural and managed ecosystems. Despite their diversity and importance, there has never been a comprehensive phylogenetic study of the family. Relationships among tribes and subfamilies are obscure and the family is among the most taxonomically difficult of Diptera. The lack of a robust and predictive classification of Tachinidae has hindered both basic and applied research on the family. The goals of the proposed research are: (1.) Robust reconstruction of phylogenetic relationships among major tachinid lineages. (2.) Production of a stable, predictive classification of Tachinidae. (3.) Focused phylogenetic analyses of two biologically interesting and agronomically important groups, the tribe Blondeliini and the subfamily Phasiinae. (4.) Analysis of the evolution of reproductive traits, oviposition strategy, and host associations and their effects on diversification and biological control success. And (5.), dissemination of taxonomic and biological information on Tachinidae.

Intellectual Merit: A sound tachinid phylogeny and a reliable taxonomic infrastructure are necessary to understand their roles as enemies, the evolution of their diverse attack strategies, and the causes of their rapid

evolutionary diversification. With the aid of a network of collaborators, relationships of world Tachinidae (200+ genera, 50+ tribes, all four subfamilies) will be inferred using 8-10 genes and a large (150+) array of morphological characters. RNAseq methods will permit new markers to be developed, establish robust basal relationships, and provide a foundation for future genomic research on the family. We will provide an unprecedented, broad scale phylogeny of Tachinidae with which we can revise existing classifications and analyze the evolution of key traits using comparative methods. An understanding of the phylogenetic relationships and evolution of Tachinidae will also inform broader issues in biology such as historical biogeography, ecological specialization, and adaptive radiation.

Broader Impacts: A stable and predictive phylogeny based classification of Tachinidae will benefit applied and basic research and spur future work on this diverse family. One post-doc, two graduate, and several undergraduate students (as well as many collaborators) will be involved in the research, receiving training in systematics, molecular techniques, and evolutionary analyses. Research results will be used to develop college courses/modules

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### Arolla Switzerland EvolBiol Jun23-29

A few places are still available for the following course; please note the deadline at the end of the week.

\*Evolutionary Biology Workshop in the Alps\*

23-29 June 2012, Arolla, Switzerland

3 ETSC credit points

Faculty: \*Trevor Price\* (University of Chicago) <http://home.uchicago.edu/~pricet/home.html>  
 \*Anurag Agrawal\* (Cornell University) <http://www.eeb.cornell.edu/agrawal/index.html> \*John Pannell\* (University of Lausanne) <http://www.unil.ch/dee/page86963.html> \*Tad Kawecki\* (University of Lausanne) <http://www.unil.ch/dee/page47578.html>

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. There is no tuition fee.

More information under <http://biologie.cuso.ch/-ecologie-evolution/activities/detail-activity/item/-courses/evolutionary-biology-workshop-in-the-alps-1/>

To apply, send a single file (pdf or rtf) containing a short motivation letter, a cv, and the name of your scientific advisor to Nadia Bruyndonckx <Nadia.Bruyndonckx@unil.ch>.

Deadline for application: 18 February 2012.

Greetings, Tad Kawecki

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

tadeusz.kawecki@unil.ch

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**Arolla Switzerland EvoBiol  
Jun23-29 Correction**

Dear Colleagues, the link in the ad I posted on

Monday was outdated; I apologize. Here is the correct link: <http://biologie.cuso.ch/ecologie-evolution/dpee-activities/detail-activity/item/courses/evolutionary-biology-workshop-in-the-alps-1/> We still accept applications until the end of the week.

EVOLUTIONARY BIOLOGY WORKSHOP IN THE ALPS

23-29 June 2012, Arolla, Switzerland

3 ETSC credit points

Faculty: Trevor Price (University of Chicago) <http://home.uchicago.edu/~tprice/home.html>

Anurag Agrawal (Cornell University) <http://www.eeb.cornell.edu/agrawal/index.html> John Pannell

(University of Lausanne) <http://www.unil.ch/dee/-page86963.html> Tad Kawecki (University of Lausanne)

<http://www.unil.ch/dee/page47578.html> 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. There is no tuition fee.

More information under <http://biologie.cuso.ch/-ecologie-evolution/dpee-activities/detail-activity/-item/courses/evolutionary-biology-workshop-in-the-alps-1/>

To apply, send a single file (pdf or rtf) containing a short motivation letter, a cv, and the name of your scientific advisor to Nadia Bruyndonckx <Nadia.Bruyndonckx@unil.ch>.



Deadline for application: 18 February 2012.

Greetings, Tad Kawecki

– Tadeusz J. Kawecki Associate Professor Department of Ecology and Evolution University of Lausanne Le Biopore, CH 1015 Lausanne, Switzerland tadeusz.kawecki@unil.ch

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### Barcelona Evolutionary Analysis Mar5-9 LastCall

I work in evolutionary biology and have used this technique myself to deepen in the relationship between function and phenotypic evolution (Fortuny J, Marcé-Nogué J, De Esteban-Trivigno S, Gil L, Galobart A. 2011. Temnospondyli bite club: ecomorphological patterns of the most diverse group of early tetrapods. *Journal of Evolutionary Biology* 24: 2040-2054.), that is the reason I have sent the info to the list. May will work that way?:

This is the last call for the course “Biomechanics and Finite Elements Analysis (FEA)”, which may be of your interest. This course will be held in the Museum of the ICP in Sabadell (Barcelona, Spain) on March 5-9 2012. Instructors: Dr. Richard Fariña (Universidad de La República, Montevideo) and Dr. Jordi Marcé-Nogué (Universitat Politècnica de Catalunya, Barcelona).

Biomechanics and FEA would allow you to evaluate the response of biological structures (e.g. skulls) to different forces, thus emulating the different behaviours of animals. That could help to understand the evolution of particular behaviours, paleontological inferences, etc.

You can find more information at: <http://www.icp.cat/index.php/en/activities/courses/-biomechanics-fea> or writing to [courses@icp.cat](mailto:courses@icp.cat)

There are few places left and will be occupied by strict inscription order.

With best regards

Sole

Soledad De Esteban Trivigno Area de Paleobiología Institut Català de Paleontologia Edifici ICP, Campus de la UAB 08193 Cerdanyola del Vallès Barcelona. Spain 00-34-935868334 [www.icp.cat](http://www.icp.cat) Soledad Esteban <[soledad.esteban@icp.cat](mailto:soledad.esteban@icp.cat)>

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### Barcelona PhylogeneticCompMethods Mar26-29

Course on Phylogenetic Comparative Methods

This is the last call for the workshop “Applying Phylogenetic Generalized Least Squares methods: A theoretical-practical workshop”, which may be of your interest. This course will be held in the Museum of the ICP in Sabadell (Barcelona, Spain) on March 26-29 2012. Instructor: Dr. Alejandro González-Voyer (Estación Biológica de Doñana).

The workshop will provide an introduction to Phylogenetic Comparative Methods (PCM), which use information on the evolutionary relationships of organisms to compare species, focusing on Phylogenetic Generalized Least Squares (PGLS).

You can find more information at: <http://www.icp.cat/index.php/en/activities/courses/pgls> or writing to [courses@transmittingscience.org](mailto:courses@transmittingscience.org)

There are few places left, and will be occupied by strict inscription order.

With best regards

Soledad De Esteban Trivigno Area de Paleobiología Institut Català de Paleontologia Edifici ICP, Campus de la UAB 08193 Cerdanyola del Vallès Barcelona. Spain 00-34-935868334 [www.icp.cat](http://www.icp.cat) Soledad Esteban <[soledad.esteban@icp.cat](mailto:soledad.esteban@icp.cat)>

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### Berlin MASAMB 2012 Apr10-11

Mathematical and Statistical Aspects of Molecular Biology 22nd annual MASAMB workshop Magnus-Haus Berlin 10/11 April 2012

\*\*\* Reminder - Call for Abstracts \*\*\*

The 22nd annual MASAMB workshop will be held on April 10/11th 2012 at Magnus-Haus in Berlin, Germany.

We would like to kindly remind you that the deadline for registration and abstract submission for MASAMB

2012 is approaching quickly. We will accept abstracts until February 17th.

More details may be found at <http://masamb2012.molgen.mpg.de/> Please feel free to forward this email to your colleagues.

\*\*\* MASAMB \*\*\*

Bioinformatics and statistical genetics, twin themes of the long-running series of annual MASAMB meetings, have gained huge impetus from large-scale genome sequencing projects and development of high-throughput biological assay systems, including gene-expression microarrays, next generation sequencing, proteomic and metabolomic technologies. These immense data resources, and the underlying complexities of molecular and cell biology, provide exciting research opportunities for numerate scientists.

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

\*\*\* Topics \*\*\*

Next Generation Sequencing Population Genetics RNA Bioinformatics Phylogeny and Comparative Genomics Systems Biology Gene Regulation and Epigenetics

\*\*\* Important dates \*\*\*

Registration opens: 25th November 2011 Abstract submission: 25th November 2011 Registration closes: 17th February 2012 Conference: 10th-11th April 2012

We look forward to seeing you in Berlin!

Alena Mysickova, Julia Lasserre and Martin Vingron  
– Dr Julia Lasserre Max Planck Institute for Molecular Genetics Computational Molecular Biology Ihnestrasse 63-73 14195, Berlin, Germany Tel.: +493084131168  
kelleher@molgen.mpg.de

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## Guarda Switzerland EvoBiol Jun16-23

Course: Workshop in evolutionary biology for master students and first or second year PhD students.

It is my pleasure to announce this years Guarda work-

shop 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 16.-23. June 2011 in the Swiss mountain village Guarda. Faculty includes Douglas Schemske, Andrew Read, 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.

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://evolution.unibas.ch/> Universität Basel, Zoologisches Institut, Vesalgasse 1 4051 Basel, Switzerland Tel. +41-(0)61-267 03 60

dieter.ebert@unibas.ch

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## HarvardU FlowerMicroevolution May11-13

Dear Colleagues,

microMORPH is pleased to announce our second interdisciplinary workshop, 'Microevolution of Flower Form and Function' to be held at the Arnold Arboretum of Harvard University in Boston, MA on May 11-13, 2012. We are soliciting participation of graduate students and post docs interested in exploring the intersection of development and microevolution.

MICROMOPRH is an NSF funded Research Coordination Network (RCN). The goal of the RCN is to promote interdisciplinary interactions in evolutionary developmental biology at the emerging interface between molecular developmental biology and the study of natural intraspecific and interspecific variation.

THE INTERDISCIPLINARY WORKSHOPS bring together small groups of graduate students, post docs, and faculty with very different interests and expertise to interact and discuss critical concepts, intellectual objectives, emerging technologies, and analytical approaches

that have the potential to advance our understanding of the evolution of plant form. All participants give presentations on their research and there is extensive discussion following each presentation. These workshops provide students and faculty with unique opportunities to explore new and challenging frontiers of knowledge.

We encourage applications from graduate students (at all stages of their dissertation research) and post doctoral researchers now through March 9th, 2012. microMORPH will pay for travel, accommodations, and meals for a select set of applicants who are US-citizens or currently at US institutions (although non-US citizens not currently associated with US institutions are encouraged to apply, we cannot supply funding for them).

#### FACULTY PARTICIPANTS:

John Willis, Duke University Deborah Charlesworth, University of Edinburgh Mark Johnston, Dalhousie University Chris Kuhlemeier, University of Bern Michael Donoghue, Yale University Elena Kramer, Harvard University Beverly Glover, University of Cambridge Steve Weller, University of California, Irvine

For information about the application process see:

<http://www.colorado.edu/eeb/microMORPH> For additional information, please contact Pamela Diggle (Pamela.Diggle@colorado.edu)

If you would prefer not to receive any more emails from me about the microMORPH RCN, please email me back with the word 'NO' in the subject line and I will remove you from the mailing list. I will use this list for occasional updates on funding opportunities through the microMORPH RCN, and yearly workshops hosted by microMORPH.

"Robert L. Baker" <robert.baker@Colorado.EDU>

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### MichiganStateU NGSDataAnalysis Jun4-15

Analyzing Next-Generation Sequencing Data

June 4th - June 15th, 2012 Kellogg Biological Station, Michigan State University

Instructors: Dr. C. Titus Brown, Dr. Ian Dworkin, and Dr. Istvan Albert, with several guest instructors. Guest instructors: Dr. Corbin Jones (University of North Carolina Chapel Hill, Faculty Director for the UNC high-throughput sequencing center) and Erich M

Schwarz (Senior Research Fellow, Cornell University)

Board of advisors: Dr. Kevin White; Dr. Paul Sternberg; Dr. Rich Lenski; Dr. Robin Buell; Dr. Jim Tiedje; Dr. Lincoln Stein

Applications are being accepted through March 1st (midnight Pacific)! Please note that in 2011 we received over 130 applications for 24 spots, so admission is competitive. In general we will not take multiple people from the same institution.

More information and application link here:

<http://bioinformatics.msu.edu/ngs-summer-course-2012> Course Description

This intensive two week summer course will introduce attendees with a strong biology background to the practice of analyzing short-read sequencing data from Roche 454, Illumina GA2 and HiSeq, ABI SOLiD, Pacific Biosciences, and other next-gen platforms. The first week will introduce students to computational thinking and large-scale data analysis on UNIX platforms. The second week will focus on mapping, assembly, and analysis of short-read data for resequencing, ChIP-seq, and RNAseq.

No prior programming experience is required, although familiarity with some programming concepts is helpful, and bravery in the face of the unknown is necessary. 2 years or more of graduate school in a biological science is strongly suggested. Faculty, postdocs, and research staff are more than welcome!

Students will gain practical experience in:

- Python and bash shell scripting - cloud computing/Amazon EC2 - basic software installation on UNIX
- installing and running maq, bowtie, and velvet - querying mappings and evaluating assemblies

Materials from last year's course are available at <http://ged.msu.edu/angus/tutorials-2011> under a Creative Commons/use+reuse license.

You can read a blog post about last year's course at <http://ivory.idyll.org/blog/jun-11/ngs-2011> . Ian Dworkin <idworkin@msu.edu>

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### Montreal PopulationGenomics May28-Jun1

Montreal Spring School of Population Genomics and Genetic Epidemiology

May 28 - June 1, 2012

The objective of the School is to provide training in genetic epidemiology, human evolutionary genetics, population genomics and bioinformatics.

The School consists of five days of lectures and computer labs. Days 1 and 2 will cover introductory concepts in human population, medical genomics, and genetic epidemiology. Days 3 to 5 will consist of concurrent sessions in advanced concepts in population genomics/statistical genetics and in genetic epidemiology (see detailed program below).

If you wish to participate in the workshop, please visit our website for instructions and to download the application form. All applications should be submitted no later than Friday, March 23, 2012. Because of a limited number of places, participants will be selected based on their academic and scientific background.

See < <http://www.montrealsschool.ca> > [www.montrealsschool.ca](http://www.montrealsschool.ca) for details

#### Program

Day 1 - May 28th Introductory Concepts in Human Populations and Medical Genomics Instructor: Laurent Excoffier Time: 8:00 - 12:00 Place: Room 1

§Principles of population genetics: This lecture will cover some of the major concepts in human population genetics including random genetic drift and the derivation and properties of the basic coalescence model.

##### o Random Genetic Drift

Â§The Hardy-Weinberg equilibrium law

Â§The Wright-Fisher Model of random genetic drift

Â§Effective population size

##### o Gene trees and the basic coalescence model

Â§Coalescence under different demographic scenarios (e.g. population growth)

Introductory Concepts in Genetic Epidemiology Instructors: Alexandre Alcaïs and H el ene V ezina Time: 13:00 - 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.

§Finally, a brief introduction to the BALSAC genealog-

ical resource and presentation of existing tools for their analysis will be presented.

Day 2 - May 29th Introductory Concepts in Human Populations and Medical Genomics Instructors: Luis B. Barreiro and Llu s Quintana-Murci Time: 8:00 - 12:00 Place: Room 1

§Human population genomics: This lecture will introduce the students to the most recent genomic datasets on human genome diversity. We will discuss the contribution of HapMap and the 1000 Genomes Project to the better understanding of human evolution and the development of genome-wide association studies. The following concepts will be presented:

o Mutation and recombination

o Recombination at pedigree level - concept of linkage disequilibrium (LD)

o Measures of LD and its decay

o Tagging SNPs

o Population mutation parameter, population recombination rate

The lab will introduce methods of analyzing data from the HapMap project.

§Demography of human populations: 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.

Introductory Concepts in Genetic Epidemiology Instructor: Alexandre Alca s Time: 13:00 - 16:15 Place: Room 1

§This 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.

Invited Lecture Speaker: Ellen Wijsman Time: 16:30 - 18:00 Place: Albert-Royer Auditorium at CHU Sainte-Justine (3175 C te-Ste-Catherine Road)

Day 3 -May 30th (Concurrent Sessions - lectures and computer labs, except for the first session)

Presentation of current research by a Faculty member in Population Genomics Speaker: Laurent Excoffier Title: The complex making of humans: relationships with

archaic hominins Time: 8:00 - 8:40 Place: Room 1

Advanced Concepts in Population Genomics Instructors: Laurent Excoffier, Nicolas Lartillot, and Luis B. Barreiro Time: 8:45 - 17:00 Place: Room 1

§Extension of the coalescence theory: this lecture will cover the following topics:

o Probabilistic modeling in population genetics: principles of simulation, maximum likelihood and Bayesian inference.

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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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## NESCent Anatomy Ontologies Jul30-Aug3

Title: Anatomy Ontologies in evolutionary biology and genetics Primary instructors: Melissa Haendel, Matt Yoder Guest instructors: Jim Balhoff, Chris Mungall, Carlo Torniai, Erik Segerdell Dates: July 30 - August 3, 2012 Application deadline: April 6, 2012 Website: [academy.nescent.org](http://academy.nescent.org) Where: National Evolutionary Synthesis Center, Durham, NC

Evolutionary research has been revolutionized by the explosion of genetic information available, and anatomy ontologies must play a central crucial in relating this knowledge to observable diversity. Anatomy ontologies and vocabularies are widely used to index data and are critical for relating gene expression and phenotype data across taxa. Within a single species, anatomy ontologies provide scaffolding that interconnects many kinds of observations; across species, they provide evolutionary, developmental, and mechanistic insights. In order for anatomy ontologies to successfully serve all of these purposes, they must be constructed consistently so that they can be utilized and understood by both researcher and software alike. This course aims to teach proper ontology design principles and practices such that anatomical interoperability across evolutionarily disparate taxa is achieved. It further seeks to promote community growth and adoption of ontology-based methods and tools. The subsequent benefit is in the form of shared access to the unique data store of each community (e.g. genetic, genomic, developmental, and evolutionary data).

The course covers a basic introduction to ontology design principles and usage, specific ontology considerations for anatomy, application of anatomy ontologies in the context of evolutionary phenotype comparison, and use of anatomy ontologies for image annotation in different taxa. There will be strong emphasis on hands-on exercises that will develop ontology skills and provide exposure to different software applications that are useful in variety of areas of evolutionary biology.

This course is co-sponsored by the Phenotype Ontology Research Coordination Network (<http://www.phenotypercn.org/>)

Questions? Email [academy@nescent.org](mailto:academy@nescent.org).

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Karen Cranston, PhD Training Coordinator and Informatics Project Manager [nescent.org](http://nescent.org)

Karen Cranston <[karen.cranston@nescent.org](mailto:karen.cranston@nescent.org)>

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## NESCent Evolutionary Quantitative Genetics Aug6-11

Title: Evolutionary Quantitative Genetics Primary instructors: Stevan Arnold and Joe Felsenstein Guest instructors: Marguerite Butler, Luke Harmon, Adam Jones, Jonathan Losos, Liam Revell Dates: August 6-11, 2012 Application deadline: April 6, 2012 Website: [academy.nescent.org](http://academy.nescent.org) Where: National Evolutionary Synthesis Center, Durham, NC

As part of the NESCent Academy, we are pleased to open applications for Evolutionary Quantitative Genetics. In this workshop we will review the basics of theory in the field of evolutionary quantitative genetics and its connections to evolution that is observed at various time scales. Quantitative genetics deals with the inheritance of measurements of traits that are affected by many genes. Quantitative genetic theory for natural populations was developed considerably in the period 1970-90 and up to the present time. It has been applied to a wide range of phenomena including the evolution of differences between the sexes, sexual preferences, life history traits, plasticity of traits, as well as the evolution of body size and other morphological measurements. Textbooks have not kept pace with these developments, and currently few universities offer courses in this subject aimed at evolutionary biologists. There is a need for evolutionary biologists to understand this field because of the ability to collect large amounts of



data by computer, the development of statistical methods for changes of traits on evolutionary trees and for changes in a single species through time, and the realization that quantitative characters will not soon be fully explained by genomics. This workshop aims to fill this need by reviewing basic aspects of theory and illustrating how that theory can be tested with data. Participants will learn to use R, an open-source statistical programming language, to build and test evolutionary models. The intended participants for this workshop are graduate students, postdocs, and junior faculty members in evolutionary biology.

The course is co-sponsored by the American Society of Naturalists, and reduced tuition will be offered to participants who are ASN members.

Questions? Email [academy@nescent.org](mailto:academy@nescent.org).

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Karen Cranston, PhD Training Coordinator and Informatics Project Manager [nescent.org](mailto:nescent.org)

Karen Cranston <[karen.cranston@nescent.org](mailto:karen.cranston@nescent.org)>

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### NESCent Next-gen Sequencing Jun11-19

Title: Next-gen sequencing in evolutionary biology  
Instructors: Greg Caporaso, Jose Carlos Clemente Litran, Francesc López, Alexie Papanicolaou, Konrad Paszkiewicz, Sergei L Kosakovsky Pond, Jeffrey Townsend  
Dates: June 11-19, 2012  
Application deadline: March 9, 2012  
Website: [academy.nescent.org](http://academy.nescent.org)  
Where: National Evolutionary Synthesis Center (NESCent), Durham, NC

As part of the NESCent Academy, we are pleased to open applications for 'Next-gen sequencing in evolutionary biology'. This course will provide computational training required for those working with Next-generation sequencing data and is aimed in particular at senior graduate students, research fellows and faculty that are producing genomic data. The course aims to lower the learning curve and increase familiarity of wet-lab scientists with informatic techniques. We will cover manipulation of next-gen sequencing data, analysis of metagenomic data, phylogeny reconstruction from NGS and RNA quantification with and without a reference genome. We will use tools such as Amazon EC2, Galaxy, Geneious, SAMtools, QIIME, Trinity RNA-Seq, edgeR, TopHat, LOX and PhyDesign.

At the end of this course, participants will \* have a concrete understanding of the general power and limitations of NGS \* understand which tools should be used and why \* be able to address biological questions of interest using the raw data from the sequencing machine.

There is no pre-requisite knowledge of programming or computational skills; the course will begin with an introduction to the required skills.

Questions? Email [academy@nescent.org](mailto:academy@nescent.org)

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Karen Cranston, PhD Training Coordinator and Informatics Project Manager [nescent.org](mailto:nescent.org)

Karen Cranston <[karen.cranston@nescent.org](mailto:karen.cranston@nescent.org)>

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### Norway StochasticDemography Apr23-27

We will remind you of the workshop in Stochastic Demography in northern Norway April 23 - 27 2012 lead by Russell Lande, Steinar Engen and Bernt-Erik Saether. For further information, see attached. Travel funds will be available for accepted participants. Deadline for application: 15 February 2012.

Regards Ingunn Yttersian NTNU Centre for Conservation Biology

[ingunn.yttersian@bio.ntnu.no](mailto:ingunn.yttersian@bio.ntnu.no)

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### Norway StochasticDemography Apr23-27 Deadline

Deadline.Workshop.Stochastic Demography. Norway. 23-27.4

The deadline for the workshop Stochastic demography in fluctuating environments: theory and empirical patterns in northern Norway April 23-27, 2012 is February 15. The workshop will be aimed at young scientists in the initial stages of their scientific career. The focus will be on models for describing the demography of populations in fluctuating environments, methods for estimation of parameters from data and presentations of empirical examples that illustrate the practical ap-

plication of this quantitative approach for understanding dynamics of populations. Topics that will be covered are the concepts of demographic and environmental stochasticity, density-dependence in age-structured populations, techniques for estimating key parameters in age-structured models, spatial synchrony in population fluctuations, population viability analyses and community dynamics.

The workshop is primarily aimed at young (<37 years old) researchers (e.g. graduate students and post docs) in the beginning of their research career, but applications from more senior persons will also be considered. All expenses will be covered.

The application should contain a CV, including all contact details. In addition, a summary (<200 words) of the current research interests, the three most relevant papers (if applicable), whether you need travel funds and the airport of departure for the travel to Helgeland should be included. The application should be emailed as pdf or Word files to Ingunn Yttersian (Ingunn.Yttersian@bio.ntnu.no). For further details, see:

<http://www.ntnu.edu/ccb/events>

Ingunn Yttersian <ingunn.yttersian@bio.ntnu.no>

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## Oeiras Portugal Genetics Mar6-8

\*\*\* Announcement / reminder \*\*\*

The next course in the 2012 edition of GTPB is GACT12, Genetic Architecture of Complex Traits. The instructors will be

Arcadi Navarro Hafid Laayouni Gabriel Santpere

all from the Universitat Pompeu Fabra, Barcelona, Spain

This course aims at providing an update on the increasingly popular techniques to link phenotypes and genotypes, with emphasis on Genome-Wide Scans to perform association studies. A wide perspective of the field will be provided, with lectures covering from technological and design issues to new data analysis and interpretation strategies.

The course starts on March 6th and lasts until March 8th (3 days) Applications are open until Feb 27th, but can be closed earlier due to the predictably high level of demand.

For further information and instructions, please check

the course website:

<http://gtpb.igc.gulbenkian.pt/bicourses/GACT12/>

Thank you for your interest!

Pedro Fernandes GTPB Coordinator

Pedro Fernandes Instituto Gulbenkian de Ciência Apartado 14 2781-901 OEIRAS Tel +351 21 4407912 <http://gtpb.igc.gulbenkian.pt> Upcoming GTPB Courses TA-AFADM12, GACT12, IB12A, RNA12, BIG12 Paper: "Training Experimental Biologists in Bioinformatics" < <http://downloads.hindawi.com/journals/abi/2012/672749.pdf> > (open access) Workshop in ABRF 2012, SW2: Pathway Analysis in Transcriptomics, Proteomics and Metabolomics <http://conf.abrf.org> Pedro Fernandes Instituto Gulbenkian de Ciência Apartado 14 2781-901 OEIRAS Tel +351 21 4407912 <http://gtpb.igc.gulbenkian.pt> Pedro Fernandes <pfern@igc.gulbenkian.pt>

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## OxfordBrookesU EvoDevo Aug5-11

Dear Colleagues,

We are delighted to offer an Eco-Evo-Devo Postgraduate Summer School from August 5th to 11th at Oxford Brookes University. For full details please see the Summer School website:

<http://bms.brookes.ac.uk/courses/postgraduate/eco-evo-devo> We would very much appreciate it if you could advertise the Summer School in your Institution and encourage your post-graduate students to apply. If you would like our poster to advertise it, we will be more than happy to send you the PDF of it (see contact details below).

The application deadline is May 20th.

Apologies for multiple postings.

Thanks and best wishes,

The organisers: Casper J. Breuker (cbreuker@brookes.ac.uk) and Alistair McGregor (amcgregor@brookes.ac.uk)

Evolutionary Developmental Biology Research Group  
Dpt of Biological and Medical Sciences, Faculty of Health and Life Sciences Oxford Brookes University  
Gipsy Lane, Headington, Oxford, OX3 0BP, UK

cbreuker@brookes.ac.uk

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## Portugal Introductory Bioinformatics Mar12-16

The GTPB course IB12, “Introductory Bioinformatics” is now open for applications. The instructors will be

David P Judge (Cambridge University) Phil Cunningham (Kings College, London) Pedro Fernandes (IGC, Oeiras)

The level of the course is intermediate. The reason why it is called “Introductory” is the low level of the prerequisites: no previous contact with Bioinformatics will be required.

In this course we will use a set of biological questions to illustrate several techniques that altogether enable the participant to acquire practical skills on how to analyse biological sequences and produce inferential results. The participants will exercise these skills to the point of being able to use them autonomously. We will dedicate one day to train the participants with short read sequencing data, also called Next Generation Sequencing (NGS).

The course starts on March 12th and lasts until March 16th (5 days) Applications are open until March 5th, but can be closed earlier due to the predictably high level of demand.

For further information and instructions, please check the course website:

<http://gtpb.igc.gulbenkian.pt/bicourses/IB12/> Thank you for your interest!

Pedro Fernandes GTPB Coordinator

Pedro Fernandes <pfern@igc.gulbenkian.pt>

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## Seattle StatGenet Jul9-27

Details for the 17th Summer Institute in Statistical Genetics are available at the “Summer Institutes” tab of <http://www.biostat.washington.edu> The 2012 dates have changed to July 9-27. New modules include “Systems Genetics for Experimental Crosses,” “High Dimensional Omics Data,” and “Network and Pathway

Analyses of Omics Data.” There are 19 other modules covering a wide range of topics in population, quantitative and statistical genetics.

Scholarships are available for graduate students.

A subset of the modules will be offered in Edinburgh, June 13-15 and June 25-29, adjacent to the 4th International Conference on Quantitative Genetics.

Hope to see you in Seattle or Edinburgh,

Bruce Weir

Bruce Weir <bsweir@u.washington.edu>

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## Tubingen Morality Evolution Jun12-16

Call for Applications

International Interdisciplinary Summer School:

“The Evolution of Morality”

Tübingen, June 12th - 16th

Topic It is a well known saying that “nothing in Biology makes sense except in the light of evolution” (Dobzhansky). Thus, what kind of new perspectives and implications can be drawn from insights of the theory of evolution for the understanding of the morality of human beings? Therefore, this year’s Unselde summer school will focus on the evolutionary fundamentals of morality presenting as lecturer the primatologist Frans de Waal. Spending much time watching the behavior of apes and monkeys, de Waal brings forward the argument that the core concept of morality has already been present in the pre-social tendencies of nonhuman primates. As a consequence he attacks what he calls the “Veneer Theory”, which holds that human ethics and morality - established as a cultural innovation - would only be a thin crust masking our Hobbesian brutish nature. On the contrary, de Waal proposes that moral actions are direct consequences of social instincts and capabilities common to humans and nonhuman primates. This claim is based on emotive theories of ethics, which claim that morality is “determined by sentiment” (Hume): In this respect the capacities for sympathy, empathy and cooperation as well as reciprocal psychological altruism are crucial.

Taking its cue from de Waal’s position the summer school will confront this position with others, and particularly with philosophical perspectives. Philip

Kitcher, for example, has pre-sented a careful discussion of the degrees of reciprocal psychological altruism which are beyond the nonhuman primates' capacities. Consequently he holds that this disposition is no sufficient condition for the rise of moral behaviour. Also, it has been argued that empathy does not constitute a fundamental criterion of moral agency. In this way Christine M. Korsgaard, one among de Waal's commentators in his book "Primates and Philosophers", puts forward the argument that nonhuman primates are creatures that act on whatever desire or impulse is the strongest at a given moment, but they lack the autonomy with which a person can evaluate those impulses and thus choose intentionally. Without the ability to step back and reflect on these impulses, nonhuman primates fail to satisfy a necessary condition for moral agency.

As a consequence the criteria of human moral agency should include far more than empathic or altruistic dispositions. Ultimately, according to our second lecturer Gerhard Ernst it is problematic to state that morality has evolved out of sentiments and dispositions. He disagrees with the emotivists' view that the truth or justification of moral judgments were relative to emotional attitudes of the speaker since then moral judgments would lack the normative force that we contend these judgments may have. Thus, Ernst suggests to think of morality as being related to the natural world in a similar way as sciences are themselves. Both, science and morality are faculties of human reason.

The summer school will focus on the hotly debated discourse of what constitutes morality. It will be discussed what it precisely means that human moral agency has its roots in our evolutionary ancestors. Hence, it will be reflected both, the importance and the difficulty of the question about the criteria of human moral agency.

#### Program

This year's Unseld summer school organized by the Forum Scientiarum of Tuebingen University will take place from June 12th afternoon to June 16th noon. Twenty graduate students and junior scientists from all over the world will have the opportunity to work on the question of the evolution of morality with Professor Frans de Waal and Professor Gerhard Ernst. In the mornings selected participants will have the opportunity to present their own projects pursuing the evolution of morality and discuss these with the lecturers and the group. The afternoon sessions of the summer school will focus on the works of Frans de Waal and Gerhard Ernst. The attendees of the summer school will also follow the Unseld Lecture on the Evolution of Morality held by Frans de Waal and an interdisciplinary discussion between Frans de Waal and Gerhard Ernst

open to the public, both events taking place during the course schedule.

#### Application procedure

To apply for the international summer school, participants need to submit an abstract of up to 1000 words presenting their own projects on the topic of the evolution of morality. From these we will select a number to be presented during the morning sessions of the course. In addition, an application form downloadable from our website ([www.unseld-lectures.de/cfa](http://www.unseld-lectures.de/cfa)), including a statement of motivation, and

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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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## U**ModenaReggioEmilia** ComparativeMethods May14-18

I am pleased to announce that the fourth edition of the \*Italian workshop on phylogenetic and comparative methods\* will take place from May 14th-18th at the University of Modena and Reggio Emilia. The workshop will introduce participants to some of the main methods of phylogenetic inference, the use of phylogenetic trees in comparative studies, and some of the main computer programs currently available. The workshop will consist in lectures and software demonstrations, and is open to anybody with an interest in phylogenetics and comparative biology. Some previous experience with phylogenetic methods is recommended.

The workshop registration fee is 115 euro for undergraduate students; 165 euros for graduate students (master or PhD programs) and postdocs and 230 euros for senior scientists. The fee includes the annual membership to the Societa' Italiana di Biologia Evolutionistica -Italian Society for Evolutionary Biology (SIBE), one of the sponsors of the workshop. Ten awards of 115 euros each will be available to subsidize the registration fee for students and postdocs (see instruction on workshop website). Enrollment in the workshop will be limited to 25 participants.

For any question regarding the workshop please contact Francesco Santini at \*phylogenyworkshop1 [at] gmail.com\* or consult the workshop website: <https://sites.google.com/site/italianphylogenyworkshop/home>

– Francesco Santini Senior Research Associate Department of Ecology and Evolutionary Biology University of California at Los Angeles

610 Charles E. Young Drive South Room 2153, Terasaki Life Sciences Building Los Angeles, CA 90095, USA

Phone: 424-442-4348 (Office); 310-206-2240 (Lab) Fax: 310-206-3987

santini@eeb.ucla.edu

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### UNottingham MolEvol Jul30-Aug3

BBSRC Summer School July 30th - 3rd August 2012

Applications are invited for a BBSRC-Sponsored Summer School in Molecular Evolution and Diversity, to be held at Lincoln Hall of the University of Nottingham, from midday on Monday the 30th July 2010 until midday on Friday, the 3rd August 2012. The Summer School is designed for researchers in quantitative aspects of Evolutionary Biology, looking at genetic variation both between- and within- species.

The course is mainly, although not exclusively, for early career researchers who wish to gain a greater understanding of the quantitative and theoretical tools that will aid their interpretation of evolutionary data. The course will include plenary talks from experts in population genetics and molecular evolutionary analyses. There will be practical (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. Attendees will be asked to present a short talk or a poster about their research 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. We are unable to pay travel expenses for those attending the course. Places are not restricted to BBSRC-funded researchers.

Applications will be via the website: <http://www.nottingham.ac.uk/biology/resources/bbsrc-summer-school.aspx> The closing date for applications will be Friday, the 20th April 2012. Successful applicants will be expected to attend the whole meeting. Those who have attended previous Summer Schools in this series will not be selected. We aim to inform candidates whether their application has been successful

by Friday, 4th May 2012.

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 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 of Genetic Variation The Detection of Selection from Population Genetic Data Genetic Diversity Between Populations Phylogeography of Humans and Other Species Measurement of Interpopulation Genetic Variation Genetic Variation Between Species Alignment of DNA sequences Tree-Building Microbial Evolution and Systems Biology Recombination, Selection and Genetic Variation in Microbial Populations

Plenary Speakers include: Brian Charlesworth, Deborah Charlesworth, Penny Haddrill, Dan Halligan, Peter Keightley, Paul Sharp (University of Edinburgh) John Brookfield, John Armour (University of Nottingham) Ed Feil (University of Bath) Simon Whelan (University of Manchester)

Please contact [john.brookfield@nottingham.ac.uk](mailto:john.brookfield@nottingham.ac.uk) if you have any questions.

Professor John Brookfield Professor of Evolutionary Genetics Centre for Genetics and Genomics Room B112 School of Biology University of Nottingham University Park Nottingham NG7 2RD Ext 30392 Tel:0115-8230392

John Brookfield <[John.Brookfield@nottingham.ac.uk](mailto:John.Brookfield@nottingham.ac.uk)>

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### UppsalaU EvolQuantGenet Jan30-Feb10 Website

After a very successful course on 'Evolutionary Quantitative Genetics' (30 Jan - 10 Feb 2012 at Uppsala University), the course leader Prof. Bruce Walsh has put together a website with all the lectures that were given during the course. The website includes both Power Point presentations and more detailed course notes for each lecture. This should be of great interest to people working in the field of quantitative genetics.

<http://nitro.biosci.arizona.edu/workshops/-Uppsala2012/Uppsala.html> Best regards,

Lára R. Hallsson, PhD Course organiser



(lara.hallsson@ebc.uu.se)

Lára Hallsson <lara.hallsson@ebc.uu.se>

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## WellcomeTrust HumanGenomeAnalysis Apr6

Human Genome Analysis: Genetic Analysis of Multifactorial Diseases 11-17 July 2012

Wellcome Trust Genome Campus, Hinxton, Cambridge  
Deadline for applications: 6 April 2012

<http://www.wellcome.ac.uk/Education-resources/-Courses-and-conferences/Advanced-Courses-and-Scientific-Conferences/Advanced-Courses/-WTX026851.htm>

Course summary An intensive, residential, computer-based course aimed at scientists actively involved in genetic analysis of multifactorial traits.

Course organisers \* Daniel Weeks (University of Pittsburgh, USA) \* Mark Lathrop (Centre National de Genotypage, Evry, France)

Course instructors \* Heather Cordell (Institute of Human Genetics, University of Newcastle upon Tyne, UK) \* Janet Sinsheimer (University of California, Los Angeles, USA) \* Eric Sobel (University of California, Los Angeles, USA) \* Joe Terwilliger (Columbia University, New York, USA) \* Chad Garner (University of California, Irvine, USA) \* Simon Heath (Centre Nacional d'Anàlisi Genòmica (CNAG), Barcelona, Spain)

Programme This advanced course covers statistical methods currently used to map disease susceptibility genes, with an emphasis on (but not limited to) methods that can analyse family data or a combination of families and individuals. Discussions of the latest statistical methodology are complemented by practical hands-on computer exercises using state-of-the-art software. The statistical basics behind each method will be carefully explained so that participants with a non-statistical background can understand.

With a focus on family data, we will discuss fundamental issues needed to increase success in gene mapping studies including: optimal study design, power to detect linkage and association, determining the most appropriate statistical methods and software, interpretation of statistical results and trouble shooting. We will also cover the basic principles of statistical inference, hypothesis testing, population and quantitative

genetics and Mendelian inheritance. Our interactive and intensive educational program will enable one to better carry out sophisticated statistical analyses of genetic data, and will also improve one's interpretation and understanding of the results. All the software used is freely available, so that skills learned can be easily applied after the course.

2011 Guest speakers (2012 guest speakers TBC shortly) Professor William O. Cookson (Imperial College London, UK) Professor Elizabeth R. Hauser (Duke University Medical Center, USA) Professor Aarno Palotie (Wellcome Trust Sanger Institute, UK) Professor Mingyao Li (University of Pennsylvania School of Medicine, USA) Professor Sebastian Zöllner (University of Michigan, USA)

Feedback from previous courses

"The course was highly relevant for my current work and I am sure it will shape my next steps in my career."

"I wish to thank the course instructors and the Wellcome trust for providing me the opportunity [to] gain knowledge and share thoughts."

"Thanks a lot for this great course and the great time we have spent here!"

JanetS@mednet.ucla.edu

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## West Virginia HaemosporidianEvolution Aug6-9

\*FIRST ANNOUNCEMENT\*

Second Annual International Workshop on Malaria and Related Haemosporidian Parasites of Wildlife

Monday August 6th - Thursday August 9th, 2012

National Conservation Training Center, Shepherdstown, West Virginia

Sponsored by the NSF Research Coordination Network for Haemosporida of Terrestrial Vertebrates (1)

Dear Colleagues,

The NSF-sponsored Research Coordination Network for Haemosporida of Terrestrial Vertebrates (MalariaRCN) is pleased to announce our second annual workshop on the malaria parasites and closely related haemosporidians of natural populations of vertebrates.

The four day workshop will include both field and laboratory exercises as well as lectures and discussions led by RCN members (2).

Topics to be covered throughout the workshop include vertebrate field capture techniques, blood sampling and preparation of blood smears, sample vouchering and preservation, parasite taxonomy, light microscopy for parasite identification and parasite and cell counts, sequence data analysis, phylogenetics, parasite evolution, and databasing. Discussion topics will include, but are not limited to, the basic biology, phylogenetics and systematics of Haemosporida, community ecology of parasites, coevolution and the evolution of virulence, and conservation and disease.

All food, lodging and workshop events will take place at the US Fish & Wildlife Service's National Conservation Training Center in Shepherdstown, West Virginia, a site easily accessible through Washington, D.C. area airports. The workshop will commence on Monday morning, August 6th, and continue through until the evening of Thursday, August 9th.

The workshop is geared towards graduate students, postdoctoral researchers, and other investigators new to the field of wildlife haemosporidians. We will be accepting applications in early 2012 and encourage individuals from outside the United States, particularly from developing countries. Applications will be available in early February 2012 through the RCN website. Workshop cost, accommodations, meals, and transportation from the Washington Dulles International Airport will be covered by the RCN grant for workshop participants. In addition, applications for travel funds will be considered. Additional information on the workshop including an overview of the four days of events will be provided with the Second Workshop Announcement as well as on the RCN website (<http://malariarcn.org/>). We encourage you to register on the RCN website and become a member of the Malaria Research Coordination Network. In the meantime, further information can be obtained from the workshop organizers (email: [MalariaRCNWorkshop@gmail.com](mailto:MalariaRCNWorkshop@gmail.com)).

(1) The Research Coordination Network for Haemosporida of Terrestrial Vertebrates ("Malaria RCN"), sponsored by the U. S. National Science Foundation and funded through 2015 at the University of Missouri-St. Louis, was established to promote communication among researchers working on the ecology and evolution of haemosporidian parasites of vertebrate wildlife populations. Please visit the website for the network ([www.malariarcn.org](http://www.malariarcn.org)) for more information.

(2) Workshop organizers include Robert Ricklefs (University of Missouri - St. Louis), Ellen Martinsen

(Smithsonian Institution), Staffan Bensch (Lund University), Gediminas Valkiunas (Nature Research Center, Vilnius), Carter Atkinson (USGS), and Ravinder Sehgal (San Francisco State University). Other members of this RCN include Patricia Parker (University of Missouri - St. Louis), Robert Fleischer (Smithsonian Institution), Susan Perkins (American Museum of Natural History), Tom Smith (University of California, Los Angeles), and Robert Adlard (Queensland Museum).

\*The workshop is likely to be of interest to evolutionary biologists as it will center around the systematics of a very successful and diverse group of parasites of natural vertebrate populations. The workshop will include readings and discussions on the evolution of the haemosporidian parasites and include laboratory exercises involving phylogenetic analysis of parasite lineages.

[ellensarah.martinsen@gmail.com](mailto:ellensarah.martinsen@gmail.com)

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## WoodsHole MolEvolution Jul22-Aug1

The 25th Workshop on Molecular Evolution at the Marine Biological Laboratory in Woods Hole will be offered 22 July to 1 August 2012. Application forms and information may be found at [http://www.mbl.edu/education/courses/special\\_topics/mole.html](http://www.mbl.edu/education/courses/special_topics/mole.html) Workshop on Molecular Evolution Directors: David M. Hillis, University of Texas, Austin, and Mitchell L. Sogin, MBL

Course Date: July 22 V August 1, 2012

Online Application: <http://ws2.mbl.edu/studentapp/studentapp.asp?courseID=MOLE> Deadline: April 10, 2012

Course website (to see list of faculty, schedule, topics, etc.): [https://molevol.mbl.edu/wiki/index.php/Main\\_Page](https://molevol.mbl.edu/wiki/index.php/Main_Page) Now in its 25th year, the MBL's Workshop on Molecular Evolution at Woods Hole presents a series of lectures, discussions, and bioinformatic exercises that span contemporary topics in molecular evolution. The workshop encourages the exchange of ideas among leading theoreticians, software developers, and workshop participants. The workshop serves graduate students, postdoctoral students, and established faculty from around the world. The 2012 Workshop will use computer packages including AWTY, BEAST, Clustal W/X, FASTA, FigTree, GARLI, MIGRATE, LAMARC, MAFFT, MrBayes, PAML, PAUP\*, PHYLIP, and SeaView to address the

following topics:

Phylogenetic analysis: theoretical, mathematical, and statistical bases; sampling properties of sequence data; Maximum likelihood theory and practice; Bayesian analysis; hypothesis testing

Population genetics analysis using coalescence theory; maximum likelihood and Bayesian estimation of population genetic parameters

Databases and sequence matching: database searching: protein sequence versus protein structure; homology; mathematical, statistical, and theoretical aspects of sequence database searches; multiple alignment

Molecular evolution integrated at organism and higher levels: population biology; biogeography; ecology; sys-

tematics 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

Students will work with computer packages on their own laptops and have the opportunity to use the high performance computer clusters at the MBL.

David Hillis <dhillis@mail.utexas.edu>

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## Instructions

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

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

To send messages to the EvolDir direct them to the email `evoldir@evol.biology.McMaster.CA`. Do not include encoded attachments and do not send it as Word files, as HTML files, as  $\text{\LaTeX}$  files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

## 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  $\text{\LaTeX}$  do not try to embed  $\text{\LaTeX}$  or  $\text{\TeX}$  in your message (or other formats) since my program will strip these from the message.