

# 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.

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

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# Conferences

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# AsconaSwitzerland PopGenomicsFungalPathogens May7-11

AsconaSwitzerland.PopGenomicsFungalPathogens.May7-11

POPULATION GENOMICS OF FUNGAL AND OOMYCETE PATHOGENS OF ANIMALS AND PLANTS

### 7-11 May 2017

Monte Verita Conference Center, Ascona, Switzerland

Conference website: http://www.path.ethz.ch/education/population-genomics-of-fungal-and-oom ycete-diseases-of-animals-a.html

Conference email inquiries to: ascona\_2017@usys.ethz.ch

Porto Portugal EvoKE17 Feb5-88
Portugal TrendsBiodiversity Nov28-299
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UChicago CoyneFest Speciation Oct14-1511
UUtah SpeciesConcepts Mar23-2511
Vienna ConservationBiol Apr19-2112
Vienna MindTheGap Oct31-Nov1 reminder12
Vigo Spain EvolutionMussels Oct26-2713
WashingtonDC GlobalBiodiversityGenomics Feb21-23
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Zaragoza ancientDNA May9-1314

#### CONFERENCE OVERVIEW:

The population genomics of fungal and oomycete pathogens is a rapidly growing area of research. New datasets, new sequencing methodologies and new analytical methods are enabling a deeper understanding of the evolutionary processes driving the emergence of fungal and oomycete pathogens. This conference aims to enrich our understanding of the processes driving the evolution of plant, animal and human pathogens, with an over-riding goal of identifying the genomic changes responsible for adaptation to novel hosts and environments. A secondary goal will be to determine how the relevant genes (and their underlying functions) vary along ecological/agronomic gradients associated with host specialization, including quantitative adaptation to host resistance. The conference will be oriented around genome-based approaches, including; 1) using population genomics to understand pathogen emergence and host specialization, 2) using genome-wide association studies to identify key genes and genomic regions associated with pathogen local adaptation, 3) using population

genomics to understand pathogen divergence/speciation, 4) developing new analytical methods for population genomic analyses.

#### CONFIRMED SPEAKERS:

Daniel Croll (University of Neuchatel, Switzerland)

Barbara Dunn (Stanford University, USA)

Matthew Fisher (Imperial College London, UK)

Tatiana Giraud (CNRS-Universite Paris Sud, France)

Pierre Gladieux (INRA BGPI, France)

Michael Hood (Amherst College, USA)

Hanna Johannesson (Uppsala University, Sweden)

Sophien Kamoun (The Sainsbury Laboratory, John Innes Center, UK)

Anna-Liisa Laine (University of Helsinki, Finland)

Gianni Liti (IRCAN, France)

Bruce McDonald (ETH Zurich, Switzerland)

Joseph Spatafora (Oregon State University, USA)

Jason Stajich (University of California Riverside, USA)

John Taylor (University of California Berkeley, USA)

VENUE:

~75 conference participants will be able stay on-site at the Monte Verita conference center. The remaining ~35 participants will be able to find accommodation in the nearby city of Ascona. All lunches and dinners will take place at the Monte Verita conference center. More details, including off-site housing options, will be provided on the conference website.

#### REGISTRATION:

Though the entire conference is subsidized by the Swiss National Science Foundation, the ETH Zurich CSF, and BASC LabEx, the cost of attending this meeting will be approximately CHF1100 = euro1000 = \$1130 for each conference delegate. This estimate includes a registration fee, all meals and lodging, and is based on double-occupancy. Travel costs are not included in this estimate. A more precise calculation of the expected costs will be posted on the conference web site after we have finished negotiations with the Monte Verita conference center.

Participation in the conference will require preregistration because only 110 places are available. Participants are required to fill out a form and submit a 250-word abstract for an oral and/or poster presentation. The form can be downloaded on the conference website.

Pre-registration opens on 1 November 2016 and closes

on 31 December 2016.

Bruce McDonald Plant Pathology Institute of Integrative Biology, Zurich (IBZ) ETH Zurich, LFW B16 8092 Zurich Switzerland Office: +41 44 632 3847 FAX: +41 44 632 1572 Assistant: +41 44 632 3848 (Sandra Galfetti) Email: bruce.mcdonald@usys.ethz.ch Web (Group): http://www.path.ethz.ch McDonald Bruce <bruce.mcdonald@usys.ethz.ch>

## Austin Texas SMBE Jul2-6 CallForSymposia

SMBE 2017 | Call for Symposia

We're delighted to announce that the Society for Molecular Biology & Evolution is now accepting proposals for symposium topics for the 2017 Annual Meeting, taking place in Austin, Texas, USA, from July 2nd - 6th, 2017. Selection of proposals will be aimed at spanning the range of interests of SMBE members, including exciting new scientific developments, and representing the geographic and gender diversity of members. For each accepted symposium we provide substantial financial support to facilitate symposia organizers in attracting outstanding invited speakers including free registration and partial travel costs for invited speakers (up to two per symposium). To submit your proposal please click on http://www.smbe2017.org/call-for-symposia and follow the instructions. Please complete and submit the form by Friday, 28th October, 2016. Successful applications will be confirmed by 4th November. Please email us at SMBE2017@mci-group.com for any questions.

Call for Symposia Details ...

... SMBE 2017 Website | Registration | Industry | Contact | Unsubscribe

SMBE 2017 <SMBE2017@mci-group.com>

# Cambridge PopulationGeneticsGroup

This is to announce that registration is now open for the 50th Population Genetics Group (aka Pop Group) Meeting in Cambridge, UK, January 4-7th 2017. This meeting will be a celebration as the 50th meeting in the series. Although named "Population Genetics Group" in the 1960s the meeting now covers most areas of evolutionary genetics and genomics.

Plenary speakers are: Doris Bachtrog, Nancy Moran, Eske Willerslev and Howard Ochman

Registration includes a conference dinner in St John's College and is excellent value! As little as £180 for non-residential student, GenSoc member, or £390 for standard registration with accomodation. More details on our web site: http://populationgeneticsgroup.org.uk < http://populationgeneticsgroup.org.uk/ >

#### Chris Jiggins

Professor of Evolutionary Biology Department of Zoology University of Cambridge Tel: (+44)(0)1223 769021 Mob: (+44)(0) 7549-524-481 http://www.heliconius.org/ http://heliconius.zoo.cam.ac.uk/ @mel\_rosina

Fellow of St John's College, Cambridge, UK. CB2 1TP

Chris Jiggins <c.jiggins@zoo.cam.ac.uk>

CityULondon MathModelsInEcolEvolution Jul10-12

#### CALL FOR MINISYMPOSIA

Mathematical Models in Ecology and Evolution

10<sup>th</sup> - 12<sup>th</sup> July 2017

http://i.emlfiles1.com/cmpimg/2/8/2/-1/3/files/imagecache/7502468/w640\_7 755971\_charlesdarwinstatue.jpg

City, University of London is proud to announce that it will be hosting the 6<sup>th</sup> conference in the bi-annual series on Mathematical Models in Ecology and Evolution. Mathematical Modelling plays a central and increasingly important role in ecology and evolution. The object of this conference is to showcase the latest developments of mathematical models in ecology and evolution and to demonstrate its important role to a new generation of researchers. Following the same programme structure as the last conference in Paris, this conference will feature a range of sessions with submitted talks and minisymposia.

The Organising Committee are now welcoming submis-

sions for minisymposia. Submissions should be no more than 250 words and should include a topic title, along with a description and a list of up to 5 speakers who will be giving presentations.

Submissions should be made using the online submission form by 1<sup>st</sup> December 2016.

#### KEY DATES

The conference will take place from the 10<sup>th</sup> to 12<sup>th</sup> July 2017 inclusive. Abstract submission 1<sup>st</sup> December 2016 - Submission deadline for minisymposia including a title, description and suggested list of speakers and should be no more than 250 words in total.

15<sup>th</sup> March 2017 - Submission deadline for talk or poster abstracts of no more than 150 words. Online submissions for abstracts will open on 15<sup>th</sup> January 2017.

1<sup>st</sup> June 2017 - Early bird registration closes.

SUBMIT YOUR MINISYMPOSIUM VISIT THE EVENT WEBSITE VIEW THE EVENTS CALENDAR

http://i.emlfiles1.com/cmpimg/t/s.gif Events Team

Contact us

+44 (0)20 7040 8037

events@city.ac.uk

city.ac.uk/events

"Broom, Mark" <Mark.Broom.1@city.ac.uk>

### KansasCity EcolGenomics Oct28-30

We are less than 2 weeks out from the early registration deadline! To find out more details and register, check out , http://ecogen.k-state.edu/symposia/2016/2016.html . \*\*\*\*\*\*\*

14th Annual Ecological Genomics Symposium October 28-30, 2016 Kansas City Country Club Plaza Symposium website: http://ecogen.k-state.edu/symposia/-2016/2016.html This year marks the 14th anniversary of the Ecological Genomics Symposium. We have put together an outstanding lineup of ten speakers. Symposium details can be found at http://ecogen.k-state.edu/symposia/2016/2016.html. The meeting will convene at 7:00 p.m. on Friday, October 28, and conclude at Noon on Sunday, October 30. REGISTRATION: Please register online today at: http://ecogen.k-state.edu/symposia/2016/-2016registration.html. You may also register to attend the optional Saturday night banquet for an additional fee of \$50.

POSTER ABSTRACTS: Poster topics should be related to the field of Ecological Genomics. A LIMITED NUMBER OF SUBMITTED POSTER ABSTRACTS WILL BE SELECTED FOR ORAL PRESENTA-TIONS. Instructions for submitting your abstract online are at: http://ecogen.k-state.edu/symposia/2016/-2016abstract.html .DEADLINE to be considered for oral presentation: September 16, 2016.

VENUE: The symposium will take place at the Kansas City Marriott on the beautiful Country Club Plaza in Kansas City, Missouri. Reserve your hotel room online by visiting the Symposium website. Deadline: October 7, 2016.

#### FEATURED SPEAKERS:

§Hans Hofmann, University of Texas at Austin

§Kirsten Hofmockel, Iowa State University

§Robin Hopkins, Harvard University

§Christian Landry, Département de biologie, Université Laval, Québec, Canada

§Blake Matthews, Eawag, Swiss Federal Institute of Aquatic Science and Technology

§Suzanne McGaugh, University of Minnesota

§Geoffrey P. Morris, Kansas State University

§Kenneth M. Olsen, Washington University in St. Louis

§Amy Toth, Iowa State University

§James R. Walters, University of Kansas

DEADLINES: Friday, 9/16 Early Registration at discounted rates Friday, 9/16 Poster Abstracts for oral presentation consideration Friday, 10/7 Hotel Reservations Friday, 10/21 Poster Abstract for poster presentation

ADDITIONAL INFORMATION will be posted on our website, http://ecogen.kstate.edu/symposia/2016/2016.html, as details are finalized.

FUNDING for this symposium is provided by Kansas State University and Genome.

Jennifer Rhodes <jenniferrhodes@ksu.edu>

### KansasCity EcolGenomics Oct28-30 3

Early registration deadline has been extended to Friday, September 30! Don't miss your opportunity to attend this event!

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FUNDING for this symposium is provided by Kansas State University and Genome.

Jennifer Rhodes <jenniferrhodes@ksu.edu>

"We cannot fathom the marvelous complexity of an organic being [...] Each living creature must be looked at as a microcosm-a little universe, formed of a host of self-propagating organisms, inconceivably minute and as numerous as the stars" \_ Darwin 1868, p.453.

Dr. Anne Duplouy Postdoctoral Researcher The University of Helsinki Metapopulation Research Centre PL 65 Viikinkaari 1 00790 Helsinki Finland

E-mail: anne.duplouy@helsinki.fi web: www.anneduplouy.net

Anne Duplouy <anne.duplouy@helsinki.fi>

# Lammi Finland Evolution Oct12-14

Symposium: Finnish Molecular Ecology and Evolution

We are pleased to announce that the 2nd Finnish Molecular Ecology and Evolution Symposium will be held at the Lammi Biological Station in Finland between the 12th and 14th of October. Invited presentations and discussion will cover a broad array of topics in Molecular Ecology and Evolution. A preliminary scientific and social program for this Symposium is now posted.

The Symposium is a student friendly event. Registration fee include transport from Helsinki to Lammi Biological Station and return, accommodation at the station and all meals.

Invited speaker, Dr. Luisa Orsini (Birmingham University), UK Dr. Orsini is studying Biosystems and Environmenal Changes, with her main objective being to identify evolutionary causes and effects of population responses to climatic and other anthropogenic changes and predict their adaptive potential and survival to future changes.

The online abstracts submission for the symposium is now open until the 10th of September 2016.

For more information about the meeting, please visit: https://molecular-ecology-kjvq.squarespace.com/?p For abstract submission, please visit: https://elomake.helsinki.fi/lomakkeet/71923/lomake.html Looking forward to meeting you in Lammi, Finland.

On behalf of the organizing committee,

Dr. Anne Duplouy

# Lisbon Portugal EvoDevo Nov9-11

It is our pleasure to invite you to the Neptune Evo Devo Symposium, which will take place on 9th-11th November 2016 in Lisbon, Portugal.

The Neptune Evo Devo Symposium is organized by the Neptune Network students, a Marie Curie-funded European project with focus on evo devo and neurobiology of marine animal models.

Speakers will cover topics including evolution of the nervous system and evolution of body plans. In line with Neptune's core interest, emphasis will be put on marine organisms, though not exclusively, and on recent technologies which are becoming increasingly suitable for use in non-model organisms, e.g. CRISPR genome editing and Light Sheet Microscopy, enabling broader comparative studies.

This symposium aims to attract enthusiastic, international scientists, as well as to foster interactions between communities. It will be a friendly event, in which participants will be able to present their work (short talks or poster sessions) and to exchange with leading researchers.

You can find all the information about the event, including the provisional programme, here:

https://evodevoneptune.org contact: evodevoneptune@gmail.com

evodevoneptune@gmail.com

# LundU SwedishOikos2017 Feb7-9 CallSatelliteSymposia

#### Swedish Oikos Meeting 2017

Call for the submission of satellite symposium and workshop proposals

>From 7 to 9 February 2017 the 33rd Swedish national Oikos meeting (http://oikos2017.event.lu.se) will be held in Lund. The meeting is open to all ecologists and evolutionary biologists regardless of subdiscipline, and we hope to have a wide breadth of talks and plenaries.

We would like to give the opportunity to attendees to organize satellite symposia and workshops. This would be an excellent opportunity to have a specialized meeting with colleagues from all over Sweden and abroad. The submission of proposals is now open. Details on the submission process can be found on our website:

#### http://oikos2017.event.lu.se/programme/satellite-

symposia Deadline for the submission is the 7th of October 2016. Registration for the meeting itself will open later.

Reinder Radersma <reinder.radersma@biol.lu.se>

## Marseilles 20thEvolBiol Sep20-23 RegDeadline

Dear all the registration dead line for the

 $20\mathrm{th}$  evolutionary biology meeting at Marseilles: September 20-23

(sites.univ-provence.fr/evol-cgr/ or aeeb.fr) is September 10. We have still few spots for poster presentations

Best regards

Pierre

PONTAROTTI Pierre <pierre.pontarotti@univ-amu.fr>

### Marseilles EvolBiol Sep26-29 2017

#### Dear All

The next evolutionary biology meeting will take place September 26-29 2017

The registration will start in mid october

see

sites.univ-provence.fr/evol-cgr/ or aeeb.fr

best regards

Pierre

PONTAROTTI Pierre <pierre.pontarotti@univ-amu.fr>

# MaxPlanckInst Ploen MigrationGenetics Apr4-7

\*GENETICS OF MIGRATION\* Tuesday 4th April -Friday 7th April 2017 Venue: Max Planck Institute of Evolutionary Biology, Plön, Germany

We are pleased to announce that a symposium on the Genetics of Migration will be held at the Max Planck Institute of Evolutionary Biology (Plön, Germany) in spring 2017 (April 4th-7th).

The aim of the symposium is to bring together a multidisciplinary group of scientists working on the ecology, genomics, epigenetics, evolutionary theory and biostatistics of animal migration. The development of next generation sequencing technology and improvements in tracking the movement of migratory species is certain to advance this field of science in the coming years so now is an excellent time to synthesize what we currently understand about the genetic basis of migration as well as highlight future avenues of research. The symposium will be based on a series of talks, posters, workshops and discussions and will encompass a wide range of migratory taxa including birds, fish and insects.

Keynote speakers: Jochen Wolf - Ludwig Maximilian University of Munich Claudia Bank - Gulbenkian Institute Guojie Zhang - Beijing Genomics Institute/University of Copenhagen Melinda Baerwald - University of California, Davis Nancy Chen - University of California, Davis Christine Merlin - Texas A&M University

Further details including registration information can be found at https://genmig.wordpress.com/ Any queries please email the organising committee (Miriam Liedvogel, Kira Delmore, Christopher Jones) at mailto:genmig@evolbio.mpg.de

Christopher Jones <christopher.jones@rothamsted.ac.uk>

# NHM London YoungSystematists Nov25

#### 18<sup>th</sup> YOUNG SYSTEMATISTS' FORUM

Friday, 25 November 2016, 9:30 am

Venue: Flett Lecture Theatre,

Natural History Museum, London, UK

The annual Young Systematists' Forum represents an exciting setting for Masters, PhD and young postdoctoral researchers to present their data, often for the first time, to a scientific audience interested in taxonomy, systematics and phylogenetics. This well-established event provides an important opportunity for budding systematists to discuss their research in front of their peers within a supportive environment. Supervisors and other established systematists are also encouraged to attend.

Prizes will be awarded for the most promising oral and poster presentation as judged by a small panel on the day.

Registration is FREE.

Send applications by e-mail to (YSF.SystematicsAssociation@gmail.com), supplying your name, contact address and stating whether or not you wish to give an oral or poster presentation. Please also tell us your academic stage - e.g., Masters, PhD or postdoc. Space will be allocated subject to availability and for a balanced programme of animal, plant, algal, microbial, molecular and other research. Non-presenting attendees are also very welcome - please register as above.

Again the YSF will be held the day after the Molluscan Forum (http://www.malacsoc.org.uk/-MolluscanForum.htm) also at the Natural History Museum. This has been arranged so both meetings can be attended, although if attending both you will have to register for both meetings separately.

Abstracts must be submitted by e-mail in English no later than Friday 28 October 2016. The body text should not exceed 150 words in length. Title, authors, and their professional affiliations should be included with the abstracts. If the presentation is co-authored, the actual speaker (oral) or presenter (poster) must be clearly indicated in BOLD text. If you have presented a talk at the YSF before, we ask that you submit only for a poster presentation, as speaker slots are limited and we want to give as many people a chance as possible. Similarly, if you are presenting at both the YSF and MF, we ask that you not apply for speaking slots in both (or let us know so we can assess).

All registered attendants will receive further information about the meeting, including abstracts, by email one week in advance. This information will also be displayed on the Systematics Association website (www.systass.org).

Dr Ellinor MICHEL Department of Life Sciences The Natural History Museum Cromwell Road SW7 5BD London UK tel: +44-207-942-5516

http://nhm.academia.edu/EllinorMichel www.researchgate.net/profile/Ellinor\_Michel YSF Organising Team

YSF 2013 <ysf.systematicsassociation@gmail.com>

#### Porto Portugal EvoKE17 Feb5-8

Registration opens for EvoKE 2017 the first meeting on Evolutionary Knowledge for Everyone in Porto 6-8 February 2017

EvoKE 2017 aims to attract a diverse community of evolutionary biologists, science communicators, science education researchers, teachers, museum practitioners and policy makers to plan and discuss the implementation of collaborative European wide projects that will contribute to increasing the European public's literacy in evolutionary biology.

The three day conference is structured around a select number of plenary talks and several break-out sessions on diverse topics ranging from evolution in formal education to evolution in art. Participants will actively work together to identify key issues and to pave the way towards collaborative projects.

Registration fee: 65 Euros

Besides covering meeting expenses, the price of the registration also includes 3 nights (5th, 6th and 7th) accommodation at Moov Porto Hotel ( http://hotelmoov.com/en/hoteis/moov-hotel-downtown-oporto/), 3 lunches and the coffee breaks.

Participants are expected to arrive on the Sunday 5th Feb and stay for the full length of the meeting.

Applications are now open at http://bit.ly/-EvoKE2017\_registration Deadline for registration: 7th November 2016

For more information on the meeting, see: https://evokeproject.org/ For questions please contact us at registration@evokeproject.org

Tania Jenkins

science communicator

@tania\_jenkins

tania.jenkins@gmail.com

### Portugal TrendsBiodiversity Nov28-29

TiBE 2016 - TROPICAL BIODIVERSITY | November 28-29, 2016 @ CIBIO-InBIO, Vairao, Portugal

TiBE, Trends in Biodiversity an Evolution, is an annual meeting organized by CIBIO-InBIO, which aims to bring together senior researchers, post-graduate and graduate students working on the field of evolutionary biology to present and discuss cutting-edge findings in relevant topics related with speciation, molecular evolution, comparative genomics, population and conservation genetics research, among others. Held in an informal but stimulating scientific atmosphere, these conferences provide an excellent opportunity for strong interaction and brainstorming between students and more experienced researchers.

TiBE 2016 will be devoted to Tropical Biodiversity and we believe that it will be an excellent opportunity to hear and share the work that is being done in tropical areas. These conferences will take place on November 28 - 29, 2016 at Campus de Vairao (https://cibio.up.pt/venue-facilities), University of Porto, and will be hosted by CIBIO-InBIO's Tropical Biology group - TROPBIO (https://cibio.up.pt/research-groups-1/details/tropbio).

#### PRELIMINARY PROGRAMME

Click here (https://cibio.up.pt/upload/filemanager/-TiBE2016\_Preliminary\_program\_1 .pdf) to access the preliminary programme

#### IMPORTANT DATES

Abstract submission deadline / Early registration deadline: October 21, 2016

Abstract acceptance / Late registration deadline: November 21, 2016

To know more about this event, please visit CIBIO-InBIO's website (https://cibio.up.pt/tibe/details/tibe2016) or contact us at tibe2016@cibio.up.pt

CIBIO-InBIO Divulgação

### Seville EcolEvol Jan31-Feb4

Deadline for registration in MEDECOS Conference to be held in Seville, Spain, is coming. There are plenty of symposia devoted to different fields within the interface between ecology and evolution:

- On-line abstracts submission is available until the 5th of September 2016.

- The scientific preliminary program with the list of sessions and symposiums scheduled is already available.

- On-line registration at Early Registration rates is available until 30th of October 2016. Due to space limitations registration will be open up to 600 seats. Do not wait until the last minute!

- See fieldtrips, workshops, mentoring program and other items scheduled at our site: www.medecosaeet-meeting2017 THE ORGANIZING COMMITEE LOOKS FORWARD TO MEET YOU IN SEVILLE NEXT YEAR!!

We would appreciate if you can circulate this announcement to your colleagues and networks.

Best regards

Leyre	Jimenez-Eguizabal	[mede-
cos.aeet.me	eting2017@aeet.org]	-

Technical Secretariat of XIV MEDECOS & XIII AEET meeting

Seville, Spain from 31st January to 4th February 2017.

www.medecos-aeet-meeting2017 Dr. Juan Arroyo arroyo@us.es XIV MEDECOS & XIII AEET meeting

Seville, Spain from 31<sup>st</sup> January to 4<sup>th</sup> February 2017. www.medecos-aeet-meeting2017 Departamento de Biologia Vegetal y Ecologia. Dept. of Plant Biology and Ecology Universidad de Sevilla Apartado 1095 -E41080 Sevilla, Spain phone: desk office: +34 954 557 058 lab: +34 955 420 845 fax: +34 954 557 059 Research group: http://grupo.us.es/grnm210/ https://www.researchgate.net/profile/Juan\_Arroyo3/ Juan Arroyo <arroyo@us.es>

# Stockholm ScandinavianOrigins Nov7-8 RegistrationOpen

Dear all,

Registration is now open for the Symposium on the "Origins and Natural History of the Scandinavian Biota" taking place 7-8 November 2016, at the Swedish Museum of Natural History in Stockholm.

The deadline for registration is on October 16th.

Scandinavia was covered by a large ice sheet during the last glacial maximum, which means most modern-day animals, plants and humans have a recent origin in the region. But their origins and subsequent history have until recently remained unresolved.

The Swedish Museum of Natural History invites you to a symposium where some of the world's leading researchers in genetics, paleobiology and archaeology present the latest research results on the origins and natural history of the Scandinavian biota.

The following speakers will present their research: Inger Alsos - University of Tromsø Ingela Bergman - Institute for Subarctic Landscape Research Love Dalén - Swedish Museum of Natural History Äystein Flagstad - Norwegian Institute for Nature Research Anders Götherström - Stockholm University Rolf Ims - University of Tromsø Sven Isaksson - Stockholm University Mattias Jakobsson - Uppsala University Jan StorÄ¥ - Stockholm University Kristiina Tambets - Estonian Biocentre Per Möller - Lund University

Please visit the following link for registration: www.nrm.se/scandorigins Love Dalén

``Love.Dalen@nrm.se'' < Love.Dalen@nrm.se >

#### EvolDir October 1, 2016

### Tours PlantInsectInteractions Jul2-5

We are happy to report that the 2017 International Symposium on Insect-Plant interactions (SIP2017) will be held from 02nd to 5th of July 2017 in Tours, France.

Speakers and sessions are the following:

**Plenary Speaker** 

Lee Dyer (USA)

Multitrophic interactions and ecological networks

Keynote speaker: Theodora Petanidou (Greece)

Keynote speaker: Einat Zchori-Fein (Israel)

Community ecology and phylogenetics

Keynote speaker: Atsushi Kawakita (Japan)

Keynote speaker: Todd Palmer (USA)

Global change and thermal ecology

Keynote speaker: John Terblanche (South Africa)

Insect effectors and plant responses

Keynote speaker: Isgouhi Kaloshian (USA)

Insect plant-interactions in forests and agrosystems

Keynote speaker: Hervé Jactel (France)

Evolutionary genomics

Keynote speaker: Noah Whiteman (USA)

Keynote speaker: Michael Poulsen (Denmark)

We are looking forward to seeing you in Tours in 2017!!!

More information will be provided soon.

Best Regards,

David

Organizing committee

\* Université Confédérale Léonard de Vinci/Université François-Rabelais/CNRS - Tours

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#### October 1, 2016 EvolDir

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http://irbi.univ-tours.fr Directeur IRBI - David Giron <directeur.irbi@univ-tours.fr>

# UChicago CoyneFest Speciation Oct14-15

Dear Colleagues,

Please join us for a two day symposium honoring the career of Dr. Jerry Coyne, Professor Emeritus, Department of Ecology and Evolution.

Friday, October 14, 2016 - 9:00 am until 5:00 pm

Saturday, October 15, 2016 - 9:30 am until 11:00 am

Location: Gordon Center for Integrative Science, 929 E. 57<sup>th</sup> Street, Room W301.

Symposium speakers include: Bruce Grant, Grey Mayer, Mohamed Noor, Manyuan Long, John Willis, Kelly Dyer, Ana Llopart, Doug Schemske, Michael Turelli, Amanda Moehring, Colin Meiklejohn, Daven Presgraves, Nick Barton, Brian Charlesworth, Daniel Matute, Leonie Moyle, Corbin Jones, Allen Orr, Matthew Cobb, Nitin Phadnis.

A more detailed itinerary will follow, but for now please mark your calendars.

Thank you,

Mary

Mary M. Johnson

Department of Ecology and Evolution The University of Chicago 1101 E. 57<sup>th</sup> Street, Zoology 114 Chicago, IL 60637 (773) 702-1988 - phone (773) 702-9740 - fax Email: mmjohnson@uchicago.edu

Jerry Coyne <c525@uchicago.edu>

## UUtah SpeciesConcepts Mar23-25

Call for Abstracts Species in the Age of Discordance University of Utah Department of Philosophy Annual Conference Series March 23rd - 25th 2017 Salt Lake City, Utah

The University of Utah Department of Philosophy cordially invites submissions of abstracts or prospecti (up to 1000 words) for paper and poster presentations at our upcoming conference ?Species in the Age of Discordance?. Submissions should be prepared for blind review and uploaded at https://easychair.org/conferences/?conf=-3Dsitaod2017. Please be sure to indicate whether your submission is for a paper or a poster. The submission deadline is Nov. 15, 2016.

Biological lineages move through time, space, and each other. As they do, they diversify, diverge, and grade away from and into one another. One result of this is genealogical discordance, i.e., the lineages of a biological entity may have different histories. We see this on numerous levels, from microbial networks, to holobionts, to population-level lineages.

The focus of this project is whether and how genealogical and other sorts of biological discordance impact our views on species. Other kinds of relevant discordance might include geographic discordance due to habitat fragmentation and human mediated dispersal of species in new environments, discordant government policies which affect populations that straddle or migrate across international borders, and discordant use of language or theoretical terms between researchers in different disciplines.

To promote a cross-disciplinary examination of this question, investigators from a variety of fields will participate in a series of interdisciplinary meetings. This includes researchers working on phylogenetics, microbiology, symbiosis, population genetics, taxonomy, philosophy, and history.

The Utah meeting is the first of three meetings on this topic. Follow up sessions are tentatively planned for the 2017 Evolution Meeting (Portland, OR) and the 2017 ISHPSSB Meeting (Sao Paulo, Brazil). The Utah meeting will be a mix of invited and refereed papers and posters.

For a list of invited speakers, please visit our conference webpage: http://philosophy.utah.edu/-conferences\_workshops/species.php For questions, please contact dan.molter@utah.ed or matt.haber@utah.edu.

\*Thanks to the University of Utah Center for Latin American Studies, we have a limited amount of travel funds available for scholars traveling from Lain America. Please inquire for availability.

speciesdan@gmail.com

## Vienna ConservationBiol Apr19-21

Dear colleagues,

the 10th Annual Meeting of the Specialist Group on Macroecology of the Ecological Society of Germany, Austria and Switzerland (GfO) will take place in Vienna (Austria) between the 19-21 April 2017. The meeting will be held under the theme "Macroecology in Space and Time".

This conference will cover a wide range of topics at the crossroads of conservation biology, biogeography, macroecology, evolution and global change. Suitable presentations may include various approaches and analytical methods that explain patterns of abundance, distribution and diversity from genes to ecosystems, and ecosystem services. We particularly encourage the submissions of interdisciplinary studies (including socioecological studies and studies on historical (palaeontological) biodiversity), submissions that propose novel approaches, and submissions that advance or test recent concepts and theories.

We especially encourage young and early career researchers to submit their abstracts. Submission deadline is the 1st December 2016. For more information and updates please check out the website http://cvl.univie.ac.at/macro2017/. Best wishes, The Organizing Committee (Franz Essl, Bernd Lenzner, Stefan Dullinger) -

Gerald M. Schneeweiss, Assoc.-Prof. Dr. Department of Botany and Biodiversity Research University of Vienna

gerald.schneeweiss@univie.ac.at

# Vienna MindTheGap Oct31-Nov1 reminder

The students of the Vienna Graduate School of Population Genetics are proud to announce the fifth MIND THE GAP conference to be held on October 31 and November 1, 2016 at the campus of Vetmeduni Vienna.

MIND THE GAP aims at bringing together theoretical and empirical population geneticists. This conference is the fifth meeting in a series of conferences held in Freiburg (2009), Plon (2010), Cologne (2011), and Vienna (2013).

As in these past meetings, there are different main topics for this conference. This year's themes are:

- Evolutionary inference using time series data - Adaptive QTLs and their genomic signatures - Phenotypic plasticity - Introgression: signatures of selected and neutral alleles

The program is now online: http://www.popgenvienna.at/news/mind-the-gap-5.html Attendance to the conference will be free of charge but space is limited. Applications for poster contributions and attendance are still being accepted. Details about registration can be found on our website: http://www.popgen-vienna.at/news/mind-the-gap-5.html julia.hosp@gmail.com

# Vigo Spain EvolutionMussels Oct26-27

Conference:

Vigo\_Spain.Marine\_Mussels.Oct26-27

I International Symposium on Advances in Mussel Research (AMMR2016), Vigo, Spain, 26-27 October 2016

#### Dear colleagues,

We are pleased to announce the AMMR 2016 symposium, which will be held at the University of Vigo -Faculty of Biology, Vigo (Spain).

This symposium aims to highlight the latest research on marine mussels (Mytilus spp.) from a multidisciplinary perspective, including studies from the fields of genomics, proteomics, immunology, physiology, ecology and aquaculture among others. Marine mussels represent an excellent study system in evolutionary biology, ecology, ecotoxicology, climate change and more importantly, they are a key species in aquaculture, being commercialised worldwide.

The symposium will include 7 talks from the invited speakers, 5 short talks from participants and a poster session on Wednesday 26. On Thursday 27 we will have a boat trip to Cies Islands.

#### Invited Speakers:

Nicolas BIERNE, University of Montpellier (France) Carlos CANCHAYA, University of Vigo (Spain) Ibon CANCIO, University of the Basque Country (Spain) Antonio FIGUERAS, IIM CSIC (Spain) Beatriz NOVOA, IIM CSIC (Spain) David SKIBINSKI, Swansea University (UK) Antonio VILLALBA, CIMA - Xunta de Galicia (Spain)

Organizers:

Ángel Pérez Diz, University of Vigo Juan Galindo, University of Vigo Armando Caballero, University of Vigo Antonio Villanueva, ECIMAT - University of Vigo

For more information about the symposium:

http://advmusselres16.webs.uvigo.es/home.html contact: advmusselres16@uvigo.es

**APPLICATION DEADLINE 20 October 2016** 

Juan Galindo <galindo@uvigo.es>

# WashingtonDC GlobalBiodiversityGenomics Feb21-23

The Smithsonian Institute for Biodiversity Genomics and BGI are co-organizing the inaugural Global Biodiversity Genomics Conference in Washington, D.C. February 21-23, 2017 at the Smithsonian's National Museum of Natural History.

The Global Biodiversity Genomics Conference will bring together thought leaders, researchers, and academics who are leading the charge in applying genomic technologies to understand all of life. The conference will be one of the first to address the transition from a scientific emphasis on human genomics to one on global biodiversity genomics, as investigations in this arena are rapidly on the increase. The meeting will also focus on interactions and synergies among biodiversity researchers, computational scientists, sequencing technologists, and software developers.

The conference will have sessions that cover a broad array of relevant topics, including specific evolutionary and ecological questions and the genomics of broad taxonomic groups (e.g. plants, vertebrates, invertebrates, and microbes) as well as critical technological and analytical tools.

The conference is being planned in conjunction with major genomics initiatives, such as G10K (https://-genome10k.soe.ucsc.edu/), GIGA (http://giga-cos.org/-), i5K (http://arthropodgenomes.org/wiki/i5K), and the Global Genome Initiative (http://gigi.si.edu/). Pre

conference activities will commence Feb. 20.

Attendance will be capped at 450 participants. Further announcements providing details of additional sponsors, activities, and registration procedures will be available at .

For more information and early registration information visit: http://biogenomics2017.org/ or contact Warren Johnson at:contactbiogenomics@si.edu

JohnsonWE@si.edu

### Zaragoza ancientDNA May9-13

Dear all,

We would like to call your attention to our session "Ancient DNA for understanding past biodiversity, human history, and drivers of ecosystem changes: achievements, limits and perspectives" at the PAGES OSM < http://www.pages-osm.org/ > 2017 in Zaragoza, 9-13 May 2017.

The Open Science Meeting (OSM) and the associated Young Scientists Meeting (YSM) < http://www.pagesosm.org/index.php/ysm > are the premier scientificevents of Past Global Changes (PAGES < http://www.pages-igbp.org/ >), a core project of Future Earth < http://futureearth.org/ > and a scientific partner of the World Climate Research Programme < http:/-/www.wcrp-climate.org/ >. Our session will bring together researchers using aDNA from a variety of archives (sediments, bones, ) to study the history of ecosystems and populations in relation to climatic and anthropogenic factors. We particularly welcome contributions showcasing methodological developments of aDNA analyses to understand and account for taphonomic processes and biases. Abstract submission is open until 20 December.

For more information, please visit: http://www.pagesosm.org/ - our session is number 33. Looking forward to receiving your contributions and seeing you at the PAGES OSM!

Best regards, Charline Giguet-Covex, Laura Epp, Isabelle Domaizon, Inger Greve Alsos

33. Ancient DNA for understanding past biodiversity, human history, and drivers of ecosystem changes: achievements, limits and perspectives Co-conveners: Charline Giguet-Covex (University of York), Laura Epp (Alfred Wegener Institute), Isabelle Domaizon (Institut National de la Recherche Agronomique) and Inger Greve Alsos (Tromsø University Museum)

Use of ancient DNA (aDNA) has made a major contribution to our understanding of past ecosystems and human history. Recent studies have for instance addressed ecosystem and population changes both in relation to climatic and anthropogenic factors, as well as the history of agro-pastoral activities. However, compared with other proxies, it is still in its infancy in particular for its application to continuous sedimentary records. Hence, whereas, in theory, it can offer to directly identify organisms living in the surrounding of the archive down to species level, and even capture intraspecific or morphologically cryptic variants, we still know little about to what extent the biota is actually represented in the DNA records. Especially, biases or imprecisions related to both taphonomic processes and analytical procedures are not yet fully understood.

In this session, we will bring together specialists using aDNA applied to sediments and bones to study the history of ecosystems and populations in different contexts (e.g. ecology, genetics, archaeology). In particular, we welcome contributions showcasing methodological developments of aDNA analyses, to understand and account for taphonomic processes and biases. Contributions integrating different kinds of data and considering the different spatial and/or temporal scales of these analyses are also highly appreciated.

Dr. Laura Epp Alfred Wegener Institute Helmholtz Centre for Polar und Marine Research Research Unit Potsdam Telegrafenberg A 43 14473 Potsdam, Germany Telefon:+49-331-288-2208 laura.epp@awi.de

Laura Epp <lauraepp.nhm@gmail.com>

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### **Barcelona Bioinformatics**

Bioinformatics PhD position at the Evolutionary and Functional Genomics Lab. Institute of Evolutionary Biology (CSIC-UPF). Parc de Recerca Biomedica de Barcelona (PRBB). Barcelona, Spain.

The Evolutionary and Functional Genomics Lab, led by Josefa Gonzalez, is seeking a highly motivated PhD student to join our research team at the Institute of Evolutionary Biology. Funding for this PhD position is supported by the European Research Council through a Consolidator Grant aimed at identifying the genetic basis, the molecular mechanisms, and the functional

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traits relevant for environmental adaptation (http://cordis.europa.eu/project/rcn/199661\_en.html).

Candidates should hold a MasterÂs degree in Biology, Computer science, or similar. Candidates with very strong computational background are especially encouraged to apply.

The position will start early 2017.

Please send your CV and a brief letter of motivation before the 23rd October 2016 to: josefa.gonzalez@ibe.upfcsic.es.

Josefa Gonzalez, PhD Ramon y Cajal Researcher Institut de Biologia Evolutiva (CSIC-UPF) Passeig MarÃtim de la Barceloneta 37-49 08003 Barcelona. Spain.

+34 932309637 Our most recent publication in PLoS Genetics New lab preprint in bioRxiv Lab website: www.biologiaevolutiva.org/gonzalez\_lab Science Out- in a field station in Ein Gedi Nature Reserve, Israel. reach: La Ciencia Al Teu Mon

"GONZALEZ PEREZ, JOSEFA" <josefa.gonzalez@ibe.upf-csic.es>

### BarIlanU Israel SexualNetworks

Searching for an outstanding graduate student (MSc or PhD) for an exciting, multidisciplinary project that involves extensive fieldwork in the Ein Gedi Nature Reserve, near the Dead Sea, Israel. The project is titled: "Linking wildlife social and sexual networks", and will attempt to create a framework that integrates sexual networks with social network theory. For more information, please contact Dr. Lee Koren (Lee.Koren@biu.ac.il). Please include your CV and a cover letter with your field experience and interests.

Lee Koren, PhD The Mina and Everard Goodman Faculty of Life Sciences Bar-Ilan University Ramat Gan, 5290002 Israel Institute of Nanotechnology and Advanced Materials (Building 206) Office B-940; Lab B-935 (9th floor) Telephones: office +972-3-7384371 lab +972-3-7384372 Skype: leezik Lee.Koren@biu.ac.il http://faculty.biu.ac.il/~korenle1/ Lee Koren Lab (Facebook page)

Lee Koren <Lee.Koren@biu.ac.il>

## BarIlanU Israel **SocialNetworkEvolution**

Two MSc/PhD positions are available at a new lab in Bar-Ilan University, Israel:

1. Studying the effect of fear on social networks in a wild rock hyrax population. The goal of this project is to learn how social networks change in response to perceived elevation in predation risk. We will use a range of methods to simulate high predation risk, and will record the effect on the social network using proximity sensors.

Requirements: - Behavioral ecology background. - Experience in fieldwork, preferably with mammals in warm climate. - Willingness to spend 5 months every year

Excellent data analysis skills, preferably using R.

2. Fitness consequences of social network dynamics. This is a theoretical project that is aimed at extending previous work (http://www.nature.com/articles/ncomms12084) on the fundamental structure of social networks. We will simulate social network dynamics to identify how several factors such as environmental effects and individual traits affect social structure; and how in turn the social structure contributes to variation in survival and reproductive success.

Requirements: - Background in computational biology. - Proficiency in at least one programming language.

The start date of both positions is flexible.

Applicants should send the following to Dr. Amiyaal Ilany at amiyaal@gmail.com : - Cover letter - CV -Names and email addresses of 2 references Please note the position you are applying to.

Applications will be reviewed until the positions are filled.

– Dr. Amiyaal Ilany Senior Lecturer Faculty of Life Sciences Bar-Ilan University

amiyaal@gmail.com amiyaal@gmail.com

### **CornellU FisheriesGenomics**

The lab of Nina Overgaard Therkildsen in the Department of Natural Resources at Cornell University is looking for a highly motivated PhD student to start in the fall of 2017.

Research in the lab focuses on how contemporary environmental change and human impacts shape demographic, ecological, and microevolutionary processes within marine species. We are particularly interested in how human activities cause rapid evolution in many wild populations and in the roles that ongoing genetic adaptation and geographic distribution shifts will play for species persistence in our rapidly changing world. Our core tools to address these questions are high-throughput DNA sequencing methods that are opening completely new opportunities for population genomic studies of non-model organisms. A cornerstone of our research is to analyze time series of genomic data, which allow for direct tracking of changes over known time scales and therefore provide a unique opportunity to observe recent dynamics and microevolution in retrospective real time. Insights gained through this approach can also be important for characterizing population structure in exploited species, and we are working actively to develop ways to use genomic analysis for improving marine conservation and fisheries management.—

PhD students will have the opportunity to develop their own project that aligns with the overarching lab interests or to join ongoing projects relating to fisheries-induced and climate-driven adaptation (based on experimental data and historical samples collected from wild fish stocks), harnessing genomic data for better delineation of biologically relevant units for fisheries management, and estimation of contemporary connectivity between populations.

Applicants should have a strong background and interest in evolutionary biology, fisheries, population genetics, bioinformatics or a related field. Familiarity with molecular laboratory techniques, computational skills and previous experience working with large genomic data sets will be advantageous. However, the most important qualifications are enthusiasm, drive, excellent written and oral communication skills, and demonstrated ability to work independently as well as in collaborative teams.

Interested candidates should send an email describing their motivation and research interests along with a CV, GPA, GRE scores (if available), and names of three references to Nina Overgaard Therkildsen (nt246@cornell.edu). Qualified candidates will be contacted to apply for sponsored admission through the Cornell Graduate Field of Natural Resources by December 1, 2016. Funding for the position is available through research assistantships, teaching assistantships, and university fellowships, but candidates will also be encouraged to apply for external fellowships (in-progess fellowship applications will be viewed very favorably). The Natural Resources Graduate Program offers an exciting inter-disciplinary environment for graduate training with ample opportunity for interaction with the vibrant and diverse research community across the Cornell campus.-

"nt246@cornell.edu" <nt246@cornell.edu>

# DTUAqua Denmark SharkPopulationGenomics

PhD Scholarship in Population Genomics of tiger sharks A PhD Scholarship in Population Genomics of tiger sharks is available at the National Institute of Aquatic Resources (DTU Aqua) with starting time December 2015. The project will be carried out in affiliation to the Section for Marine Living Resources' population genetics research group in Silkeborg, Denmark. DTU Aqua is an institute at the Technical University of Denmark.

The purpose of DTU Aqua is to provide research, advice and education at the highest international level within the sustainable exploitation of living marine and freshwater resources, the biology of aquatic organisms and the development of ecosystems as well as their integration in ecosystem-based management. The institute has an international research staff comprising approx. 120 academic employees.

Project description Knowledge of species responses to past environmental changes is vital for understanding current patterns of biodiversity. In this context, collections of archived specimens in museums and other repositories represent exclusive DNA "log-books" for climate change research. Virtually nothing is known about the genetic impact of past environmental changes and exploitation on sharks and other elasmobranchs, which are keystone species for healthy marine ecosystems. Shark jaws are abundant in museums and as trophies with recreational anglers constituting one of the world's most abundant sources of DNA for retrospective genetic analysis. However, until now the potential of genomic analysis of these unique samples remain largely unexplored. The aim of this project is to apply cutting edge genomic tools to abundant samples of tiger sharks (Galeocerdo cuvier) in order to describe historical changes in population distribution, abundance and evolutionary response to global change and exploitation. The project will comprise sample collection of archived tiger and possibly white sharks in Australia. The majority of molecular genomic work, bioinformatics and population genomics analyses will be conducted at DTU Aqua in Denmark, in tight collaboration with researchers at University of Queensland, Australia. Accordingly, the applicant should have an interest in working in an international atmosphere in the interphase between basic and applied research.

Qualifications We are looking for a candidate who has:

\* Master of Science (M.Sc.) degree in Aquatic Science & Technology or similar

- \* Experience in population genetics/genomics
- \* Experience with bioinformatics will be advantageous
- \* Proficiency in written and spoken English
- \* Keen interest in research within a field combining molecular genomics with aquatic sciences

Approval and Enrolment Scholarships for a PhD degree are subject to academic approval, and the successful candidate will be enrolled in one of the general degree programmes at DTU. For information about the general requirements for enrolment and the general planning of the scholarship studies, please see the DTU PhD Guide < http://www.dtu.dk/english/education/phd/rules/phdguide >.

Assessment The assessment of the applicants will be made by Professor Einar Eg Nielsen and Senior Scientist Jakob Hemmer-Hansen, DTU Aqua.

Salary and appointment terms The salary and appointment terms are consistent with the current rules for PhD degree students at DTU. The period of employment is 3 years.

Further information For further information about the project, please contact Professor Einar Eg Nielsen, een@aqua.dtu.dk General information may be obtained from Laura Mundus Nielsen, launie@dtu.dk

Application Please submit your online application no later than 15 October 2016.

Applications must be submitted as one pdf file containing all materials to be given consideration. To apply, please open the link "Apply online," fill in the online application form, and attach all your materials in English in one pdf file. The file must include: \* A letter motivating the application (cover letter) \* Curriculum vitae \* Grade transcripts and BSc/MSc diploma \* Excel sheet with translation of grades to the Danish grading system (see guidelines < http://www.dtu.dk/english/education/phd/rules/phdguide/admission/calculation\_grade\_average > and excel spread sheet < http://www.dtu.dk/english/-/media/DTUdk/Uddannelse/PhD-Udannelse/-

 $Dokumenter/grades_UKny.ashx > here)$ 

Einar Eg Nielsen <een@aqua.dtu.dk>

# FloridaStateU EcolEvolutionaryGenetics

Graduate positions in ecological, evolutionary, and behavioral genetics and genomics

Florida The Hughes lab State Uni- $\mathbf{at}$ (http://www.bio.fsu.edu/kahughes/versitv Hughes\_Lab\_Home\_Page.html) is recruiting new graduate students in Fall 2017. The lab is broadly interested in evolutionary, ecological and behavioral genetics and genomics. Our goal is to understand how natural selection, mediated by the physical, biological, and social environment, interacts with other evolutionary processes to maintain genetic diversity in ecologically important traits. We want to know how much of the ubiquitous genetic diversity in natural populations is adaptive and how much is non-adaptive, and we are interested in the consequences of both kinds of variation for individuals, populations, and species. We work mainly with natural populations of poeciliid fish and fruit flies, but are open to students who wish to study other organisms. We use techniques that include field studies, lab and field experiments, and genetic, genomic and behavioral analysis. Students are encouraged to develop their own projects within this broad framework. Current student projects include investigating the interaction of inheritance and social environment in determining alternative male life histories in mollies, the genetic and genomic consequences of sexual selection and mate preference in guppies; genetic, social, and physiological modifiers of aggression and dominance in mosquitofish, and the genetics and evolution of immunity and aging in fruit flies.

The Ecology and Evolution Graduate Program at FSU has a long history of excellence in student training and research (http://www.bio.fsu.edu/ee/eealumni.php), and includes many faculty with overlapping interests at the interface of ecology, evolution, and genetics (http://www.bio.fsu.edu/ee/). Graduate students are provided with teaching or research assistantships which supply a stipend, and with tuition waivers and health insurance. FSU also offers competitive graduate Fellowships, which have an early deadline for application. The Tallahassee area is a hotspot for biodiversity and offers access to diverse habitats including terrestrial, freshwater, and marine ecosystems. Interested students should contact Kim Hughes (kahughes@bio.fsu.edu) prior to applying to the graduate program and to discuss application procedures. FSU is an equal opportunity employer.

Kim Hughes Professor Department of Biological Science Florida State University Tallahassee, FL 32306 850-645-8553 kahughes@bio.fsu.edu

kahughes@bio.fsu.edu

### GeorgetownU EvolutionaryBiol

#### Dear Colleagues,

The Department of Biology at Georgetown University has multiple opportunities for doctoral study in ecology, evolution and behavior (EEB). Georgetown faculty are dedicated to the development of doctoral candidates into insightful and skilled scientists, scholars and teachers. Funding for graduate study is supported by a combination of assistantships, teaching fellowships and research grant support. Our program and institution welcomes students of all racial, ethnic and religious backgrounds.

Students interested in any of the opportunities listed below should contact the relevant faculty member(s) via email.

The Department of Biology graduate program is described at http://biology.georgetown.edu/graduate/applicants/. Information about graduate school application procedures and deadlines can be found at http://grad.georgetown.edu/pages/admissions.cfm . Molecular basis of adaptation: Dr. Peter Armbruster seeks a highly motivated PhD student to join his laboratory's research program on the molecular basis of adaptation in natural populations. The Armbruster lab is currently focusing on the invasive and medically important mosquito Aedes albopictus. This mosquito invaded the US in 1985 and spread rapidly over approximately 15 degrees of latitude. A major focus of work in the Armbruster lab is the use of transcriptome sequencing and genomics approaches to elucidate the genetic basis and molecular physiology of photoperiodic diapause in Ae. albopictus. Interested students should contact Dr. Peter Armbruster (paa9@georgetown.edu). For further information on the Armbruster lab see: http://faculty.georgetown.edu/paa9/ Ecological interactions, behavior & learning: Research in Dr. Martha Weiss' lab focuses on ecological interactions (between plants and animals, as well as predator and prey), with an emphasis on behavior and learning. Ongoing or recent projects include investigations of the ecological factors supporting shifts in host plant usage, butterfly and caterpillar learning, retention of memory across complete metamorphosis, and the ecological context of defecation behavior. We are also working on development of hands-on science curricular materials, mostly related to plants and insects, for use in K-12 classrooms. We seek an outstanding graduate student interested in these or related projects. For more information see the Weiss Lab website: http://www.weisslab.org/ Butterfly responses to climate change: Dr. Leslie Ries is seeking a PhD student interested in field, laboratory and data-intensive approaches to ecology to join her lab's research program on butterfly responses to climate change. The Ries lab uses both experimental approaches, measuring thermal tolerances of caterpillars in the lab and data-intensive approaches, exploring large-scale spatiotemporal patterns using data sets mostly derived from citizen science monitoring programs. Students with previous independent research experience and/or excellent quantitative or computational skills will be given precedence. In addition, the ability to start work during the summer of 2017 would be highly advantageous. Interested students should contact Dr. Leslie Ries (Leslie.Ries@georgetown.edu). For further information on the Ries lab see: http:/-/www.butterflyinformatics.org/ Disease ecology and network epidemiology: Dr. Shweta Bansal is seeking outstanding PhD students to collaborate on mathematical modeling projects for infectious disease dynamics. The Bansal Lab (http://bansallab.com) focuses on the feedback between host behavior and disease transmission using tools from network theory, statistical modeling, and computer science. Current study systems include influenza in humans, pathogen spread in ant colonies, and foot and mouth disease in cattle, with support from the NIH and NSF. Interested students should contact Dr. Bansal (shweta.bansal@georgetown.edu) with a description of their research interests.

Behavioral ecology, development, reproduction & life history of Bottlenose Dolphins: Professor Mann is seeking outstanding PhD students in 2016-17 to collaborate on one or both of her field studies: (1) a 30 year study of wild bottlenose dolphins in Shark Bay, Australia (monkeymiadolphins.org) or (2) a new study initiated in 2015 focusing on wild bottlenose dolphins in the Potomac River and Chesapeake Bay (PCDolphinprojet.org). Although members of her lab focus on a variety research questions related to behavioral development, life history, female reproduction, social networks, conservation, human impacts, and spatial ecology, we have two central foci: (1) maternal effects on offspring social, ecological and \_\_/\_\_

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# IowaStateU EvolutionInsecticideResistance

A graduate assistantship for a Ph.D. candidate is available in the Department of Entomology at Iowa State University to conduct research with Aaron Gassmann. Research within this laboratory group is focused broadly in three areas: 1) the evolution of insecticide resistance, 2) the management of agricultural pest insects, and 3) interactions among plants, insects and entomopathogens. This assistantship will cover tuition, stipend and health insurance. Iowa State University is ranked among the top 10 universities in the world for the study of agriculture and forestry, and graduates from the Department of Entomology have career opportunities in academia, government and industry. Iowa State University is located in Ames, which is ranked among the best cities to live in the United States. To learn more about the Department of Entomology, visit http://www.ent.iastate.edu/ . If you are interested in this assistantship, please contact Aaron Gassmann (aaronjg@iastate.edu).

Aaron Gassmann Associate Professor Dept. of Entomology 17 Insectary Bldg. Iowa State University Ames, IA 50011 Office: 515-294-7623 Lab: 515-294-8675 FAX: 515-294-7406

http://www.ent.iastate.edu/dept/faculty/gassmann/ "aaronjg@iastate.edu" <aaronjg@iastate.edu>

# JamesCookU LobsterPopulationGenetics

PhD project opportunity: Population connectivity, adaptation and dispersal in rock lobsters (PhD top up scholarship available) (James Cook University, Queensland, Australia)

Spiny rock lobsters are commercially important species with extremely long larval dispersal phases (up to 24 months). Because there are no obvious barriers to dispersal within the world's oceans, species with extremely long larval durations would be expected to have single, large open' (or panmictic) populations. Surprisingly, recent studies have detected significant population structure in this species however the processes underpinning this unexpected population genetic structure and allopatric species distributions are unknown. Local adaptation and self-recruitment are likely to play an important role in shaping the demography of marine lobsters because they can counteract the impact of an extremely long larval duration.

This PhD project will employ population genomic sequencing technologies with unparalleled spatial and temporal sampling to identify the factors shaping genetic structure in the commercially important spiny rock lobsters. This project will seek to:

- discover the factors causing fine-scale population differentiation within these species by examining the contribution of a) sweepstake reproduction, b) larval cohesiveness, c) self- recruitment and d) selection

- detect local adaptation by identifying signatures of adaptive genetic diversity a) within disjunct populations and b) at range margins, comparing these to central parts of the distribution

The PhD project will be co-supervised by Assoc. Prof. Jan Strugnell (James Cook University) and Dr Nick Murphy (La Trobe University).

Requirements: The successful applicant will have a First Class Honours (or equivalent) in biological science or a related field and will pick up extra points in the scoring system if they have a first authored paper. Applicants must be eligible for an Australian Postgraduate Award (APA). Preference will be given to those applicants with previous experience in genetics and/or evidence of strong technical and laboratory skills. Journal publications in these fields are desirable but not essential. A top-up (\$5,190) per year for three years are available for this project.

Enquiries are welcome. Please submit a CV with contact details for two referees by email to:

Assoc Prof Jan Strugnell and Dr Nick Murphy

jan.strugnell@gmail.com,

jan.strugnell@gmail.com

N.Murphy@latrobe.edu.au

e-mail:

### KansasStateU EvolutionaryBiol

The Graduate Program in the Division of Biology at Kansas State University (ksu.edu/biology) is currently accepting applications for M.S. and Ph.D. students for the Fall of 2017 semester. Our graduate program provides a broad, comprehensive, yet flexible graduate training in Biology. We have a strong core of 24 tenured or tenure-track faculty in ecology and evolutionary biology with interests that intercept with related fields of genomics, behavior, physiology, and conservation. In addition to strengths in EEB, the Division of Biology is composed of nearly 60 faculty members that span the biological sciences (i.e., cellular biochemistry to ecosystem function). This breadth of scientific inquiry within one department makes K-State a unique environment for graduate study through the exposure, perspective, and collaborations that exist across via intra- and interdepartmental interactions. Students can take advantage of a wide variety of cutting-edge laboratory facilities in the division and elsewhere on campus, including genomics and bioinformatics cores, microscopy laboratories, and Konza Prairie Biological Station. We offer competitive research assistantships and fellowships that cover stipend, tuition, and medical insurance. Kansas State University is located in the heart of the Flint Hills, home to the last large tracts of tallgrass prairie on the continent. The city of Manhattan, Kansas is a young and vibrant community of about 50,000 located in north central Kansas, about 2 hours west of Kansas City. —For more information on our graduate program, visit http://www.k-state.edu/biology/grad/why.html "tobler@ksu.edu" <tobler@ksu.edu>

### KielU EvolutionaryMedicine

#### KielU.MasterstudiesEvoMed.spring2017

Master studies in Evolutionary Medicine Kiel University, Germany, offers the Master's programme Medical Life Sciences, which focuses on Evolutionary Medicine. No study fees are charged apart from university admin costs (ca. 120 EUR/semester), the 2-year course leads to a Master of Science degree. Evolutionary medicine is a You look at the dynamic interrelations between environmental factors and the human genetic make-up influencing the development of and susceptibility to diseases.

Translational research "from bench to bedside" is one of the fastest growing fields of knowledge and Evolutionary Medicine is getting increasingly more attention. The focus on Evolutionary Medicine is supported by classes in bioinformatics, molecular biology, immunology, or epidemiology. It teams up with electives such as biomolecular paleopathology to diagnose and trace disease through human history using a biomolecular toolkit and to discuss what medical researchers today can learn from that.

In Kiel, the research environment is extremely well established, with high-throughput sequencing facilities, a state-of-the-art ancient DNA lab, computer clusters for data analysis and research institutes that offer Master's theses on Evolutionary Medicine employing microbiome analysis, population genetics or ancient DNA analysis for topics in oncology, inflammation, neurosciences or ageing, to name a few.

BSc graduates with sound knowledge in molecular and evolutionary biology are invited to apply.

Application periods: 1 September - 15 October 2016 and 16 November - 31 December 2016 Start of programme: 3 April 2017

For more information on Medical Life Sciences and the application process, go to: www.medlife.uni-kiel.de.

Almut Nebel <a.nebel@mucosa.de>

# LaTrobeU PlantConservation

Graduate position available in genetic rescue of a threatened grassland daisy at La Trobe University, Melbourne, Australia

A PhD project is available in the Plant Ecology Lab at La Trobe University's Department of Ecology, Evolution and Environment, supervised by John Morgan and Steve Sinclair.

The project will test genetic rescue as an efficient recovery technique for threatened plants. Genetic rescue is under-utilised, even though it is overwhelmingly beneficial. The project will convert management actions on an Endangered grassland species into rigorous experiments that measure the fitness benefits of genetic rescue, and demonstrate genome-wide consequences. Anticipated outcomes include innovative genetic rescue protocols and a framework for genetic rescue, with excellent science and leading-edge conservation training. The expected benefits will be increased persistence of species that are otherwise unresponsive to management, and aims to provide a new path to saving endangered species. See http://morganvegdynamics.blogspot.com.au/2016/-08/phd-opportunity.html for more information.

The project will be conducted under the umbrella of an Australian Research Council Linkage project for 2017-20 (LP160100482 Sunnucks P, Morgan J, Lintermans M, Magrath M, Sinclair S, Coates D, Young A, Kilian A, Beitzel M. Genetic rescue of Australian wildlife). In this project, three universities (Monash University, La Trobe University and University of Canberra) have teamed up with nationwide partners with a wide range of skills and responsibilities for wildlife, including Victorian Department of Environment, Land, Water and Planning (DELWP), Diversity Arrays Technology, Zoos Victoria, Environment and Planning Directorate (ACT Government), Department of Parks and Wildlife (WA) and CSIRO.

The PhD candidate will work in this multidisciplinary team investigating the genetic rescue of threatened species. The projects will involve biology, genomic analysis and conservation planning. The candidates will conduct excellent science publishable in top journals while engaging with hands-on conservation actions with leading institutions. There will be opportunity to develop independent questions within the major goals of the program - to conduct and monitor experimental genetic rescue and develop protocols for it within a framework of long-term species management. The project is expected to yield improved potential of threatened populations to persist and adapt to changing environments, and will provide novel insights into how genetic rescue works in populations and the genomes of individuals.

#### Eligibility & application

The candidates will have a Masters or 1st class Honours degree in a relevant field, enthusiasm for conservation biology, a good work ethic, relevant research experience, outstanding grades, and excellent English. Successful candidates must secure a La Trobe University PhD stipend scholarship. Applications for the next round close 5 PM, 31st October 2016. The successful candidate can commence the project from early 2017.

The successful student will be offered a scholarship (and fee-waiver in the case of international students) of approximately AU\$26,000 AUD, tax-free for 3.5 years, for full time research. Expenses for research, coursework,

and conference attendance are covered, although students are encouraged to apply for some funding to build track-record and experience.

The application process has two stages:

(1) Send an initial application to John Morgan (J.Morgan@latrobe.edu.au), consisting of: - a letter of motivation - a CV - overview of your academic results, preferably indicating cohort rank or percentiles - the names and contact details of 3 academic references.

The next deadline for applications to be fully considered is 7 October 2016; earlier applications are very welcome.

If you are selected, you will be sent an invitation to submit a formal application through the La Trobe University web portal.

Relevant background reading:

Frankham, R., 2015. Genetic rescue of small inbred populations: meta-analysis reveals large and consistent benefits of gene flow. Molecular Ecology 24, 2610-2618.

Professor Paul Sunnucks Room 315, 18 Innovation Walk School of Biological Sciences Monash University, Melbourne Clayton Campus 3800 Victoria Australia ph + 61 3 9905 9593 fax + 61 3 9905 5613 email Paul.Sunnucks@monash.edu webpages: Monash University website: http://monash.edu/science/about/schools/biological-sciences/staff2/sunnucks Persistence and Adaptation Research Team research website: https://sites.google.com/site/sunnucksresearchgroup/home

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# MaxPlanckInst Harvard Archaeogenetics

PhD-Fellowships in Bioarchaeology/Archaeology and Archaeogenetics

The Max Planck Harvard Project on the Ancient Mediterranean offers up to Three 5-Year Full Fellowships in Biological Archaeology/Archaeometry and Archaeogenetics to sponsor graduate study leading to a PhD in Harvard University's Faculty of Arts and Sciences. For further details check out: http://www.shh.mpg.de/mpiharvardproject Application deadline: 4<sup>th</sup> of October!!

Beate Kerpen

Assistant Managing Director

Max Planck Institute for the Science of Human History Kahlaische Strasse 10 D-07745 Jena, GERMANY

TEL: +49-3641-686 601 FAX: +49-3641-686 623

https://www.shh.mpg.de/ kerpen@shh.mpg.de

"Kerpen, Beate" <kerpen@shh.mpg.de>

### MaxPlanckInst Ploen PopGenetics

There is a Ph-D position open in the group of Molecular Systems Evolution at the Max Planck Institute for Evolutionary Biology in Plön, Germany.

The research project is at the interface of structural biology and population genetics, and candidates with experience from these two fields and a strong interest for evolutionary biology are welcome to apply. A complete description of the project can be found here: http://www.evolbio.mpg.de/3138354/job\_full\_offer\_10741139?c=3D2169. Questions regarding the position can be sent to dutheil@evolbio.mpg.de.

Applications should be sent to Dr Julien Dutheil <dutheil@evolbio.mpg.de>, together with a cover letter, a CV, Master degree grades and certificate, as well as coordinates of two referees.

Julien Dutheil dutheil@evolbio.mpg.de

julien.dutheil@gmail.com

### MonashU 2 EvolutionBehaviour

PhD scholarships to study free-living tropical fairywrens At the Behavioural and Evolutionary Ecology of Birds Group at Monash University, Melbourne, Australia, two PhD positions are available. Both projects will use our fully colour-banded known-age population with a wealth of information on life-history of individual birds. Field work takes place at AWC Mornington Wildlife Sanctuary in the Kimberley, a beautiful region in the monsoonal tropics of north-west Australia.

Project 1. "Genetic and environmental effects on success and aging" This project will use quantitative genetics models combined with our 7 generation pedigree and available data and existing samples to disentangle environmental and genetic effects on components of life-history and fitness. This student will investigate how performance in purple-crowned fairy-wrens changes with age and senescence (using telomere length as an indicator of remaining life-span), and how this relates to their genetic background, early-life and environmental conditions. For this project, strong interest in, and talent for, quantitative analyses are a must.

Project 2. "The function of female ornamental breeding plumage" This project will investigate the function of the female seasonal breeding plumage. Female ornamental plumages are fairly common, although they are less well understood than male ornaments. Female purple-crowned fairy-wrens are highly unusual in that they develop a distinctive seasonal breeding plumage. The student will test hypotheses of sexual and social selection against the background of what we know about seasonal plumages in male fairy-wrens. The student will analyse existing and to-be-collected data on plumage development, plumage reflectance (colour) and reproductive success, and use recently developed 3D models to experimentally test predictions.

Requirements and further information Students must have self-motivation, enthusiasm, a background in ecology and evolutionary theory, a passion for studying wild animals in their natural environment, a strong work ethic, experience with (tropical) fieldwork and/or bird handling and/or relevant quantitative skills. The student will have considerable flexibility in developing the project.

In order to be eligible, students must have four-year degree with relevant research experience, outstanding grades, and excellent English. Successful students will be offered a scholarship (and fee-waiver in the case of international students) of approximately AU\$ \$26,000 AUD, tax-free for 3.5 years, for full time research. Expenses for research, coursework, and conference attendance are covered.

Starting date is negotiable, between Jan and June 2017.

The application process takes place in two stages. Send your initial application to Anne Peters (anne.peters@monash.edu), consisting of: a letter of motivation; a CV; overview of your academic results, and translation if required, preferably indicating cohort rank or percentiles; English test results if available; and the names and contact details of 3 academic references. Deadline for applications to be fully considered is 30 September, earlier applications are very welcome.

If you are selected, you will be sent an invitation to submit a formal application through the Monash University web portal. See sites.google.com/site/petersresearchgroup/opportunities for details or contact Anne (anne.peters@monash.edu) if you would like any further information on the projects or the application process.

Anne Peters Associate Professor | Future Fellow School of Biological Sciences 108, 19 Rainforest Walk (enter via 25 Rainforest walk) Monash University VIC 3800, Australia phone: +61 3 9905 6287

http://sites.google.com/site/petersresearchgroup/ http://scholar.google.com/citations?user=jpoOPNEAAAAJ Anne Peters <anne.peters@monash.edu>

# **MonashU WildlifeGenetics**

Graduate positions are available in genetic rescue of wildlife at Monash University, Melbourne, Australia

Two PhD projects are available in the Persistence and Adaptation Research Team at Monash University's School of Biological Sciences. Supervisors will include Paul Sunnucks and Sasha Pavlova.

See https://sites.google.com/site/sunnucksresearchgroup/home for some additional details to supplement the following.

The project will test genetic rescue as an efficient recovery technique for threatened plants and animals. Genetic rescue is under-utilised, even though it is overwhelmingly beneficial. The project will convert management actions on five Endangered/Critically Endangered species into rigorous experiments that measure the fitness benefits of genetic rescue, and demonstrate genomewide consequences. Anticipated outcomes include innovative genetic rescue protocols and a framework for genetic rescue, with excellent science and leading-edge conservation training. The expected benefits will be increased persistence of species that are otherwise unresponsive to management, and aims to provide a new path to saving endangered species.

The project will be conducted under the umbrella of an Australian Research Council Linkage project for 2017-20

(LP160100482 Sunnucks P, Morgan J, Lintermans M, Magrath M, Sinclair S, Coates D, Young A, Kilian A, Beitzel M. Genetic rescue of Australian wildlife).

In this project, three universities (Monash University, La Trobe University and University of Canberra) have teamed up with nationwide partners with a wide range of skills and responsibilities for wildlife, including Victorian Department of Environment, Land, Water and Planning (DELWP), Diversity Arrays Technology, Zoos Victoria, Environment and Planning Directorate (ACT Government), Department of Parks and Wildlife (WA) and CSIRO.

The PhD candidates will work in a multidisciplinary team investigating the genetic rescue of one or more species of wildlife. The projects will involve wildlife biology, genomic analysis and conservation planning. The candidates will conduct excellent science publishable in top journals while engaging with hands-on conservation actions with leading institutions. There will be opportunity to develop independent questions within the major goals of the program - to conduct and monitor experimental genetic rescue and develop protocols for it within a framework of long-term species management. The project is expected to yield improved potential of threatened populations to persist and adapt to changing environments, and will provide novel insights into how genetic rescue works in populations and the genomes of individuals.

#### Eligibility & application

The candidates will have a Masters or 1st class Honours degree in a relevant field, enthusiasm for conservation biology, a good work ethic, relevant research experience, outstanding grades, and excellent English. Successful candidates must secure a Monash PhD stipend scholarship. Applications for the next round close 5 PM, 31st October 2016. Successful candidates can commence the project from early 2017.

Successful students will be offered a scholarship (and fee-waiver in the case of international students) of approximately AU\$26,000 AUD, tax-free for 3.5 years, for full time research. Expenses for research, coursework, and conference attendance are covered, although students are encouraged to apply for some funding to build track-record and experience.

The application process has two stages:

(1) Send an initial application to Paul Sunnucks (paul.sunnucks@monash.edu), consisting of: - a letter of motivation - a CV - overview of your academic results, and translation if required, preferably indicating cohort rank or percentiles - English test results if available - the names and contact details of 3 academic references.

The next deadline for applications to be fully considered is 30 September 2016, earlier applications are very welcome.

If you are selected, you will be sent an invitation to submit a formal application through the Monash University web portal.

Relevant background reading:

Frankham, R., 2015. Genetic rescue of small inbred populations: meta-analysis reveals large and consistent benefits of gene flow. Molecular Ecology 24, 2610-2618.

Frankham, R., Ballou, J.D., Eldridge, M.D.B., Lacy, R.C., Ralls, K., Dudash, M.R., Fenster, C.B., 2011. Predicting the probability of outbreeding depression. Conservation Biology 25, 465-475.

Harrisson KA, Pavlova A, Gonçalves da Silva A, Rose B, Bull JK, Lancaster ML, Murray ND, Quin B, Menkhorst P, Magrath M, Sunnucks P (2016) Scope for genetic rescue of an endangered subspecies though re-establishing natural gene flow with another subspecies. Molecular Ecology. 25, 1242-1258

Harrisson KA, Pavlova A, Telonis-Scott M, Sunnucks P (2014) Using

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of contemporarily fragmented midwestern prairies, but it is also common to disjunct alvar habitats around the Great Lakes region. Alvar habitats are characterized by thin layers of soil over limestone that harbor unique assemblages of plants that are largely isolated from the core of their continuous range.

The ideal MS student will be prepared to conduct fieldbased research in a common garden experiment that has been established in Minnesota, with an opportunity to expand locations. There is plenty of room to pursue particular interests in adaptive trait variation depending on the interest and experience of the candidate. The student will also be involved in outreach activities associated with the project engaging local state and NGO stakeholders in applied research.

For more information on the Hamilton Lab please visit the lab website at: http://www.jillahamilton.com and more information on the Department of Biological Sciences at NDSU at https://www.ndsu.edu/biology/. Fargo is the largest city in the northern Midwest and as 'Gateway to the West' is a vibrant, growing community that has access to numerous outdoor opportunities for all seasons.

Interested students are encouraged to contact Dr. Hamilton (jill.hamilton@ndsu.edu). Please include a brief description of your research interests and experience and a CV in your email. Funding options are available for both US students and international students.

jill.hamilton@ndsu.edu

# NorthDakotaStateU PlantConservationGenetics

A MSc position in evolutionary and ecological conservation genetics is available to study local adaptation of the perennial native prairie plant, Prairie Smoke with Jill Hamilton at North Dakota State University in Fargo, North Dakota.

Identifying the appropriate seed sources for restoration efforts can be challenging, particularly for geographically isolated populations where historical isolation or contemporary fragmentation may have contributed to differentiation in adaptive traits across a species range. In this project we are investigating the genetic basis of adaptation in Prairie Smoke (Geum triflorum) plant populations. Prairie Smoke is an herbaceous perennial that has a wide geographic distribution spanning much

# NorthwesternU PlantConservation

#### PLANT BIOLOGY AND CONSERVATION

The Graduate Program in Plant Biology and Conservation is a partnership between Northwestern University (NU) and the Chicago Botanic Garden (CBG). PhD, MS thesis-based, and MS internship-based degrees are offered. All the degree programs offer a unique opportunity to study ecology, evolution, and environmental issues at the interface of basic and applied plant science. Students apply to the program through Northwestern University and take their courses at both NU and CBG with faculty from both institutions. The Plant Conservation and Science Center at CBG is a valuable resource for students, and the Chicago region provides an excellent community at the forefront of research in conservation and sustainability. To learn more, contact program director, Nyree Zerega (nzerega@chicagobotanic.org) visit or our website: Graduate Program: http://www.plantbiology.northwestern.edu/ Application deadlines: PhD: December 1, 2016 MS (thesis-based): February 15, 2017 MS (internship-based): Applications will be reviewed beginning February 15 and review will continue through April 30, 2017. Admissions are on a rolling basis.

Nyree J C Zerega <n-zerega@northwestern.edu>

# NTNU Trondheim PlantConservationGenomics

The NTNU University Museum, Department of Natural History Ph.D. position in Plant Conservation Genomics

The NTNU University Museum is seeking a highly qualified, ambitious, and motivated candidate for a 4-year PhD position in herbarium-based conservation genomics (genomic sequencing, population genetics, phylogenetics, phylogeography, distribution modelling). The position is for 4 years and available from 1 November 2016.

#### THE POSITION

The successful candidate will be a member of the Systematics and Evolution Group at the Department of Natural History. He/she will be supervised by Associate Professor Mika Bendiksby and co-supervised by Associate Professor Mike Martin and Associate Professor James D. M. Speed. The successful candidate will use a comparative genomic approach to address conservation genetic questions, including the relationships between species and populations (e.g. delineation of conservation units and studies of hybridization), and to reveal processes that influence their diversity. The study objects will be vascular plant species prevalent in Central Norway and of concern in biodiversity management (e.g. red-listed species). High-Throughput Sequencing (HTS) approaches will be combined with morphological, ecological, and spatial information of georeferenced specimens, including both historical (herbarium) and modern (freshly collected) tissues. The successful candidate will be expected to apply various bioinformatics tools to genomic data. Spatial information will be used in phylogenetic contexts and to model species distributions. The research will involve (1) herbarium- and field-work, (2) molecular data-production, including work in an ancient DNA facility, (3) collection of distributional data. and (4) computational analyses. This project will have

direct implications for both taxonomy and biodiversity conservation.

#### QUALIFICATIONS

Essential qualifications of the successful applicant: - A Master's degree (or equivalent) in plant evolutionary biology or biodiversity conservation

The successful applicant will have knowledge in at least one of the following research areas: - Molecular systematics - Population genetics/phylogeography - Species distribution modelling - Bioinformatics

Desirable qualifications of the successful applicant: - Experience with genomic laboratory work (e.g., HTS library preparation, in-solution hybridization, RAD/GBS) - Experience in the analysis of HTS data - Fieldwork experience - Knowledge of Nordic vascular plants and their distribution

Evaluation of candidates will be based upon, at a minimum, the relevance and quality of: - The MSc thesis (or equivalent) - Letter of motivation - Scientific record of relevant experience (CV and publications) - Grades from relevant university-level courses - Co-operative skills (references) - An interview

WORKING ENVIRONMENT The NTNU University Museum is located in historic Trondheim, Norway's third most populous municipality. Nestled at the meeting of the Nidelva River and the Trondheim Fjord, the mountainous surrounding area boasts many opportunities for hiking, skiing, fishing, and other outdoor activities. Trondheim itself offers exciting activities for students as well as good connections to major European transport hubs. More information about Trondheim here: en.wikipedia.org/wiki/Trondheim. Information about Norway's consistent top placement in global quality-of-life rankings can be found here: oecdbetterlifeindex.org/countries/norway/.

SALARY The PhD position follows code 1017, starting grade 50, gross NOK 435 500 per year (before tax) [USD ca. 53,000]. There will be a 2% deduction to the Norwegian Public Service Pension Found from gross salary.

#### THE APPLICATION

Applications should be submitted electronically with: 1. An application/cover letter (max 1 page). 2. A Letter of Motivation detailing how this position matches the interests, experience, and career plan of the applicant. 3. CV, including a list of publications and contact information for at least two references willing to provide letters upon request 4. Copies of both BSc and MSc degrees 5. Copies of publications or other relevant scientific work authored by the applicant.

#### October 1, 2016 EvolDir

The application must be submitted electronically through www.jobbnorge.no .Please mark the application VM-16/22450. Please append all attachments as one file. Application deadline: 1 October, 2016. The official position is described in detail here: https://www.jobbnorge.no/en/available-jobs/job/-128984/phd-position-in-plant-conservation-genomics

Michael D. Martin NTNU University Museum Norwegian University of Science & Technology (NTNU)

Mike Martin <sameoldmike@gmail.com>

## Paris6U MicrobialEvolution

Hello,

Please find below the description of a doctoral position (PhD) to search for unknown environmental sequences of medical/biological interest using large sequence similarity networks.

We are offering a 3 year doctoral position, starting asap, ideally on october the 15th 2016.

Summary of the project:

Our knowledge on the evolution of important gene families etc. have so far largely relied on the comparative analysis of sequences from cultured microbial organisms and their MGE, both from a medical and from a more fundamental perspective. For example, the drug resistance genes we know, or the DNA and RNA polymerases, or ribosomal subunits we know, were mostly studied in organisms with cultured genomes, which represent a fraction of Life on Earth. The conservation, rate of transfer, mutation or recombination rates, and Ka/Ks ratio of these sequences have notably been investigated, suggesting which gene families are more conserved, and which ones are more evolvable. Importantly, the growing amount of molecular data from environmental samples or single cells (with the current development of single cell metagenomics) is now providing important additional data to test whether genetic diversity in environmental sequences is significantly larger than genetic diversity in the gene families of cultured organisms (and their MGE). A positive answer, indicating a potential greater evolvability of environmental gene families than currently known, would thus challenge much of our current biological inferences, because it would show to which extent the complexity of genes and genomes evolutionary history had been underestimated.

mentary approach to phylogenetics to analyze metagenomic and genomic data and to investigate highly divergent gene forms and relationships of distant homology. These graphs allow for mathematical analyses of genetic diversity and similarities over dozens of millions of sequences, providing a powerful framework to address the evolution of composite genes and genomes. Our lab is now looking for a PhD student in evolutionary bio-informatics, who will be funded for three years by an ERC grant (for a salary of 104 650 euro over 3 years, amounting to 1935 euro /month before taxes).

The candidate will take advantage of graph properties and algorithms from the graph theory, inspired from the study of social, regulatory, and interaction networks, and apply them on publically available and original environmental data to address questions such as: - Can we detect new forms of polymerases/restriction enzymes in temperate or cold environments? - Can we detect highly divergent drug resistance genes in the environment? -Can we identify divergent environmental homologs of usually strongly conserved gene families in each/all domain(s) of life (such as ribosomal protein coding genes)? The observation of conserved divergent groups of environmental sequences may suggest the existence of still undetected deep-branching microbial lineages in nature

He/she will also identify environments rich in divergent gene forms and design original primers to look for microbes with highly unusual genes through single cell genomic studies.

The candidate will work within a consortium of friendly bioinformaticians (Philippe Lopez, Eduardo Corel), evolutionary biologists (Eric Bapteste), and graph theorists (Michel Habib), and be hosted in the University Pierre and Marie Curie in the center of Paris, France. Ideally, the candidate should have a strong interest for evolutionary biology, microbial evolution and a good background in bio-informatics, or graph theory. Interested candidates are invited to apply immediately.

Applicants are requested to send a detailed resume, a motivation letter, a pdf copy of their master thesis, and the names of two scientific referees to : eric.bapteste[at]snv.jussieu.fr

The first round of applications will be closed September the 15th, 2016.

Eric Bapteste <epbapteste@gmail.com> Eric Bapteste <epbapteste@gmail.com>

Sequence similarity networks offer a promising comple-

### **Portugal ViralEvolution**

Research Fellowship MSc

Reference: ICETA 2016-83

Link to the call: http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId=85589 Main research field: Mathematics

Research field: Eco-epidemiology and viral evolution.

Job description:

Applications are invited for a Research Fellowship MSc (Referencia 2016-83) in the context of the project "Modelling and inference for population and ecosystem health" (IF/01346/2014), funded by FCT/MCTES (PIDDAC) and co-funded by FEDER through COMPETE (POFC):

#### Eligibility:

Candidates must hold an MSc or equivalent qualification and research experience in mathematical/computational modelling of complex systems.

#### Work plan:

Develop mathematical and computational models for the spread and evolution of rabbit hemorrhagic disease viruses (RHDV) in European rabbit populations. Models will be informed by demographic and genetic data from Portugal, where wild rabbit populations are declining rapidly. As the wild rabbit is an important prey for the already endangered Iberian Lynx, its decline raises wider concerns in ecosystem health and species conservation.

Legislation and regulations:

A fellowship contract will be celebrated according to the regulations defined by FCT "Regulations for Advanced Training and Qualification of Human Resources", in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 203/2012 of 29 October and by Law No. 12/2013, of 29 January, and Decree-Law No. 89/2013 of 9 July, to Fellowships Regulation of FCT (www.fct.pt/apoios/bolsas/docs/-RegulamentoBolsasFCT2015.pdf), and to Fellowships Regulation of ICETA approved by FCT.

#### Work place:

The candidate will be affiliated to CIBIO-InBIO - Centro de Investigacao em Biodiversidade e Recursos Geneticos do ICETA - Instituto de Ciencias, Tecnologias e Agro-Ambiente, and will spend periods at the Liverpool School of Tropical Medicine, United Kingdom, under joint supervision of Profs Gabriela Gomes, Ana Nunes and Pedro Esteves.

Duration of fellowship:

The fellowship will have the duration of 12 months, starting on November 01, 2016.

Monthly stipend:

The fellowship stipend will be euro980/month, according to the regulations of the FCT Postdoctoral Fellowships in Portugal (http://alfa.fct.mctes.pt/apoios/-bolsas/valores).

Selection procedures:

Applications will be evaluated based on Curriculum Vitae (25%), motivation letter (15%) and references (10%). Selected candidates will be invited for an interview (50%).

Selection Jury:

Prof. Gabriela Gomes (Chair)

Prof. Ana Nunes

Prof. Pedro Esteves

Prof. Joana Abrantes

Notification of results:

The results of this call will be published in CIBIO-InBIO, and sent by email to all candidates and to the FCT.

Application period and documents:

The call will be open from 29/09/2016 to 13/10/2016. Applications must include Curriculum Vitae (CV), motivation letter, certificate of degree and contact details of two references, sent to: bolsas.cibio@cibio.up.pt.

CIBIO - Centro de Investigacao em Biodiversidade e Recursos Geneticos/ InBIO Laboratorio Associado, Universidade do Porto

Campus Agrario de Vairao Rua Padre Armando Quintas 4485-661 Vairao Portugal

t: +351 252 660 411 Ext. 285 f: +351 252 661 780

e: divulgacao@cibio.up.pt w: http://cibio.up.pt | http://inbio.pt f: https://www.facebook.com/cibio.inbio CIBIO-InBIO Divulgação

# QueenMaryU InsectAdaptation

\*\*\* PhD position available\*\*\*

The role of beneficial microbes in insect adaptation

Background

It is only in the last few years that we have begun to uncover the full importance of microbial symbionts for their hosts, and the diverse nature of their benefits: in insects for example, they range from protection from natural enemies to assisting in plant feeding and even resistance to insecticides. More fundamentally these beneficial microbes may represent a novel evolutionary resource - a âgene pool', a reservoir of adaptations that insects can draw from when they adapt to new environments. If this interpretation is accurate, it would have important implications for the sharing of adaptive traits between species that could allow for rapid evolution to new environments.

o In this project you would rigorously test this interpretation using aphids and their symbionts as a model.

o You would have access to a large genetic database and insect collection, as well as in-house live organisms and cutting-edge research facilitates to fuel your investigation.

o You would gain experience of experimental manipulations, molecular techniques, bioinformatics, and statistics (e.g. comparative phylogenetics).

o You will be encouraged to develop your own ideas and hypotheses.

The studentship is fully funded and available to international, EU and UK citizens. It will cover tuition fees as well as provide an annual tax-free maintenance allowance for 3 years at Research Councils UK rates ( $\hat{A}$ £16,057 in 2015-16).

#### Skills preferred

In a multidisciplinary project such as this, candidates are unlikely to have a background in all disciplines involved. The most important qualification is motivation and that the project appeals to you. We can envisage strong candidates coming through various routes including:

- practical molecular biology
- evolutionary theory

- biological statistics

Applicants must have an excellent academic track record, with a bachelor's degree (UK 1<sup>st</sup> or high 2.1) in a relevant degree. A MSc in ecology, evolutionary biology or bioinformatics is also highly desirable.

For informal requests, do not hesitate to contact me at l.henry@qmul.ac.uk

\*\*\*Deadline for application: 05.10.2016\*\*\*

Supervisor Information

Dr. Lee Henry

Email: l.henry@qmul.ac.uk

Website: http://www.sbcs.qmul.ac.uk/staff/leehenry.html Related References

Henry LM, Peccoud J, Simon J-C, Hadfield J, Maiden MC, Ferrari J and Godfray HCJ (2013). Horizontally transmitted symbionts and host colonization of ecological niches. Current Biology. 23:1713-1717.

Lukasik P, Guo H, van Asch M, Henry LM, Godfray HCJ and Ferrari J (2015) Horizontal transfer of beneficial symbionts is limited by host relatedness. Evolution 69:2757-2766

Henry LM, Maiden MJC, Ferrari J and Godfray HCJ (2015). Insect life history and the evolution of bacterial mutualism. Ecology Letters 18:516-25

Lee Henry Senior Lecturer Queen Mary University of London School of Biological and Chemical sciences Mile End Rd London E1 4NS

lee henry <leehenrym@gmail.com>

# SmithC Massachusetts ProtistBiodiversity

The Katz Lab at Smith College is seeking a PhD student to join our marine microbe project starting in the fall of 2017. The goals of the project include elucidating patterns of diversity of ciliates and other protists in near-shore environments and exploring the ecological processes that underlie this diversity. The project is collaborative between Laura Katz at Smith College (http://www.science.smith.edu/departments/-Biology/lkatz/) and marine ecologist George Mc-Manus at the University of Connecticut (http://microzooplankton.uconn.edu/). Work on the project combines field work, high-throughput sequencing, microcosm analyses, and both light and fluorescence microscopy. Hence, applicants should have a desire to improve skills in microbiology, molecular biology and bioinformatics.

Research in the Katz lab aims to elucidate principles of the evolution in eukaryotes through analyses of microbial groups, and to assess how these principles apply (or fail to apply) to other organisms. Currently we focus on three interrelated areas: (1) Characterizing evolutionary relationships among eukaryotes; (2) Exploring the evolution of ciliate genomes; and (3) Describing the phylogeography of coastal marine ciliates.

Smith College is a member of the Five College Consortium with Amherst, Hampshire, and Mount Holyoke Colleges and the University of Massachusetts Amherst. Smith College is an equal opportunity employer encouraging excellence through diversity. Hence, Ph.D. students in my lab join through the Organismic and Evolutionary Biology (OEB; http://www.bio.umass.edu/oeb/) based at the University of Massachusetts Amherst.

Prospective students should email their c.v. and a brief statement of interest to Laura Katz (lkatz@smith.edu), and pursue the formal application through the UMass link < http://gpls.cns.umass.edu/oeb/admissions > above.

lkatz@smith.edu

### StockholmU SexualSelection

PhD position in Ethology

at the Department of Zoology, Stockholm University, Sweden

#### Deadline for application: November 1, 2016.

A PhD position focused on sexual selection is available in John Fitzpatrick's research group in the Department of Zoology at Stockholm University. The aim of this project is to generate an integrated understanding of how sexual selection operates, both before and after mating. To achieve this aim, the project will focus on halfbeak fishes (Dermogenys pusilla and Nomorhamphus liemi), small tropical freshwater fish that offer the rare opportunity to study both sexual weapons (their elongated beak used in male-male competition) and sexual ornaments (their orange colouration used to display to females) in the same individual. The project will evaluate how investment in weapons and ornaments influences male reproductive success, identify responses in sexual behaviours and traits following experimental evolution in male sexual weapons, assess trade-offs in male sexual investment, and determine which sexual behaviours and traits are preferred by females. This project will generate an integrated understanding of how sexual selection shapes male fitness.

The work will be lab-oriented, taking advantage of the brand new tropical freshwater fish labs in the Department of Zoology, with room for over 6,000 aquaria and several experimental rooms. The Department of Zoology is already home to state-of- the-art facilities to assess behaviour and sexually selected traits (e.g. unique 2D and 3D behavioural tracking software, computerassisted sperm analysis software (similar to what is used in human fertility clinics), an aquatic respirometer, highspeed cameras, spectrophotometers for colour analyses). Depending on the student's interest the project can be extended to incorporate phylogenetic, genomic, quantitative genetic and multivariate selection approaches to develop an integrated view of sexual selection. The successful candidate will join a rapidly growing sexual selection group in the Department and will be provided with excellent opportunities for personal and professional development towards a successful academic career.

#### Qualification requirements

To be qualified for research studies in the program, the applicant must have completed a Master degree (or equivalent) or have passed at least 120 hp (2 years) of biological studies, including an approved independent project of at least 30 hp at advanced level within Ethology, Zoology, Behavioural Ecology, Evolutionary Biology or a related subject. Applicants who have in principle acquired the corresponding competence in Sweden or in another country are also qualified. Therefore, overseas applications are encouraged. "We are looking in particular for candidates with a strong interest in sexual selection, with excellent analytical ability and experience with quantitative analyses of behaviour and other traits of interest. Experience in working with aquatic animals in the lab is especially meriting."

For more information on the position (Ref. nr. SU FV-2575-16) and to apply follow this link:

http://www.su.se/english/about/vacancies/vacanciesnew-list?rmpage=job&rmjob=1883&rmlang=UK Contact Questions? Please contact Dr John Fitzpatrick, john.fitzpatrick@zoology.su.se

For more information about research in the Fitzpatrick lab see: http://www.zoologi.su.se/en/about/staff/person.php?suuid=jfrit john.fitzpatrick@zoologi.su.se

### **UAberdeen MicrobialEvolution**

Funded PhD studentship in microbial ecology and/or microbial evolution at the University of Aberdeen (UK).

A 3-year PhD studentship in microbial ecology and/or microbial evolution, starting in January 2017 at the earliest, is now open for application at the University of Aberdeen, Scotland, UK. The deadline for applications is November 4th 2016 and there is no restriction regarding the nationality of the applicants.

The project will be designed with the PhD supervisors depending on the interest of the applicant, including on microbial ecology, evolution, physiology and/or bioinformatics. The PhD project will target key scientific questions with a special focus on Thaumarchaeota to align with the research thematic of the University of Aberdeen Nitrification Group.

Thaumarchaeota form an abundant and ubiquitous phylum of archaea on Earth. They perform a critical ecosystem function, ammonia oxidation to nitrite, which is subsequently oxidised to nitrate in the process of nitrification. Ammonia oxidisers limit nitrification, and thereby play a central role in the global N cycle. In soil, they lead to considerable loss of N fertiliser, nitrate leaching into groundwaters and production of greenhouse gases. Thaumarchaeotal cultivation is in its infancy, especially that of soil Thaumarchaeota, but is currently being achieved employing a combination of DNA-SIP soil incubations, innovative cultivation approaches and single-cell genomics and metagenomics. These approaches are being applied in the University of Aberdeen Nitrification Group to study environmental adaptation of these microbes in soil. In recent years, our research has demonstrated that pH is a key factor controlling the composition of the soil Thaumarchaeota community, which plays an important role in nitrification in acidic soils. In addition to influencing extant thaumarchaeotal niche specialisation, pH has also influenced their diversification and patterns of lineage formation through deep evolutionary time. The existence of several ecologically coherent dominant phylogenetic lineages ('pH-adapted lineages') has also been demonstrated and several mechanisms of specialisation for acidophilic growth have been suggested for the thaumarchaeotal strains acquired in the laboratory. Finally, our research expands to other Thaumarchaeota that do not perform ammonia oxidation in order to understand the evolution of these physiological metabolisms. The University of Aberdeen Nitrification Group, headed by Prof. James Prosser (https://www.abdn.ac.uk/ibes/people/profiles/j.prosser) and Dr Cecile Gubry-Rangin (https://www.abdn.ac.uk/ibes/people/profiles/c.rangin), is a well-established group with world-wide recognised reputation in microbial ecology and a high-impact track record.

The PhD student will join a dynamic team of researchers within the Institute of Biological and Environmental Sciences (https://www.abdn.ac.uk/ibes/) and the School of Biological Sciences (http://www.abdn.ac.uk/sbs/). The University of Aberdeen (UoA) was ranked 1st in the UK by the 'Agriculture, Veterinary and Food Science' REF2014 exercise and provides an excellent scientific environment. In addition, the University of Aberdeen provides state-of-the-art technological support facilities with a unique single-cell genomics platform, highly-specialised cytometry and genomic platforms, an exclusive thaumarchaeotal culture collection, molecular and environmental facilities and a High Performance Computing system. The University of Aberdeen also provides diverse training opportunities for all aspects of research and for transferable academic and generic skills. The academic requirement for entry is a first or upper second class degree or equivalent.

For any inquiry, please send an email describing your research interests directly to the principal investigator Dr Cecile Gubry-Rangin (c.rangin@abdn.ac.uk).

Application Process: Formal application should be made as described on: https://www.findaphd.com/search/projectDetails.aspx?PJIDw195 "Rangin, Cecile" <c.rangin@abdn.ac.uk>

### UAlabama BeePopulationGenomics

The Lozier Lab (lozierlab.ua.edu) at The University of Alabama, Dept. of Biological Sciences, is interested in recruiting graduate students to start in the Spring 2017 or Fall 2017 semester. Students would work on projects related to ongoing NSF-funded studies of bumble bee population genomics across spatial and environmental gradients (e.g., latitude, temperature) to uncover signatures of adaptative and demographic processes within and among species. Research projects in the lab utilize high throughput sequencing technologies, including RAD-tag sequencing and RNA sequencing, and new students would likely be involved in developing projects involving whole-genome sequencing approaches at the population level.

Students with an interest in population genomics, especially with uncovering signatures of selection in wild populations, should contact Jeff Lozier (jlozier@ua.edu) by November 1, with a brief statement of interest, a CV, an informal academic history (e.g., GPAs, GREs, and relevant coursework list, etc.), and an example of your writing (e.g., first-authored publication, lab report, class paper, etc).

I am especially interested in recruiting students who are interested in or have experience working with native pollinators and have a background working with high-throughput sequencing, however students with a more general background in population genetics and molecular ecology should also feel free to contact me.

Jeff Lozier Assistant Professor Biological Sciences The University of Alabama jlozier@ua.edu lozierlab.ua.edu

"Lozier, Jeffrey" <jlozier@ua.edu>

### **UBath CampylobacterEvolution**

PhD studentship in Campylobacter Genomics and Evolution (2017-2020)

This exciting project will be conducted under the direct supervision of Prof Samuel K. Sheppard, and based within Department of Biology and Chemistry at the University of Bath (UK) in the new Milner Centre for Evolution (http://www.bath.ac.uk/groups/milnercentre-for-evolution/).

#### Project description:

The successful applicant will join a multidisciplinary group focusing on comparative genomics and evolution of bacterial pathogens of public health importance. They will investigate the genetic basis and ecology of Campylobacter by explaining the factors involved in generating and maintaining genotypic and phenotypic diversity among isolates in the primary reservoir of human disease, poultry. Comparative and functional genomics approaches will examine genetic structuring and answer fundamental questions about how genetic variation and genome plasticity influence adaptation and the evolution of pathogens. Bioinformatics will be exploited for the design of vaccines for the control of Campylobacter in broiler chickens on farm. They will be responsible for culturing isolates, extracting DNA for genetic characterisation, analysing genomic data and carrying molecular and functional characterisation in the lab. The student will also spend a three month placement at Ridgeway Biologicals Ltd where he/she will be involved in the manufacture of autogenous vaccines prior to testing on farm.

#### Requirements:

Enthusiasm and practical experience in microbiology, molecular techniques (PCR, sequencing) and computer based genetic analysis, is necessary but training and support will be provided to strengthen these areas. The successful candidate will be highly motivated, creative, independent and have expertise in microbiology or bioinformatics (or both), and a relevant degree. Previous experience in a molecular biology laboratory or in genome analysis is also strongly desirable. Good English writing and oral skills are essential. The applicant must be a UK citizen or have resided in the UK for 3 years prior to appointment.

Details:

- The duration of a studentship is 3-4 years (2017-2020). -The position is open until filled, but a preferred deadline for application is 1st Dec 2016, to allow for registration and the project to start ASAP from Feb 2017. - Salary will be commensurate with regular UK postgraduate stipends, i.e. ??14,000 per annum tax-free. - Please contact Samuel Sheppard (sheppardlab@gmail.com) for informal inquiries or applications (please attach CV and describe motivation).

Application: To apply by e-mail, please describe motivation and attach a CV to sheppardlab@gmail.com. More details about the laboratory on http://www.sheppardlab.com/ Guillaume Meric Research Fellow, The Milner Centre for Evolution Department of Biology and Biotechnology University of Bath, 4 South 0.39 https://www.sheppardlab.com/people/gmeric/ Guillaume Meric <G.Meric@bath.ac.uk>

# UBergen AvianPaleozoology

I am based at the University of Bergen in Norway and have a Ph.D. position available in avian osteology/palaeozoology that could be of interest to the Evoldir audience. The full text of the advertisement is as follows:

PhD position in paleozoology/osteology

There is a vacancy for a PhD position at the University Museum of Bergen, Department of Natural History within the field of osteology and paleozoology. The position is for a fixed-term period of 4 years, of which 25% is work duty in in the osteology collection.

About the project The project will focus on Scandinavian faunal history using avian faunal material from archaeological sites, mainly in Norway. A central research task for this position will be to document, identify and interpret avian faunal remains from a number of sites across Norway, to reconstruct recent avifaunal history, as well as to elucidate the impact of climate change and humans on past bird distributions. This project builds on competence in avian osteology and paleozoology, including molecular methods such as isotope analyses and ancient DNA methods.

Qualifications and personal qualities The applicant should hold a master's degree (or the equivalent) in zoology or paleontology, or a similar field with relevant experience in osteology. The master's degree must have been submitted and graded before the application deadline. Experience in the use of isotope analyses and/or ancient DNA methods are an advantage. The applicant should be highly motivated, have the ability to work independently and in a well-structured manner, and to cooperate closely with members of the research group. Proficiency in both written and oral English is required. About the research training The PhD Candidate must participate in an approved educational programme for a PhD degree for a period of 3 years. A final plan for the implementation of the research training must be approved by the faculty within three months after you have commenced in the position. It is a condition that you satisfy the enrolment requirements for the PhD programme at the University of Bergen.

We can offer A professionally challenging working environment. Modern laboratories with diverse research activities in a comprehensive osteological collection.

Salary at pay grade 50 (Code 1017/Pay range 20, alternative 8) in state salary scale. (NOK 435.500 gross). Further promotions are made according to length of service in the position.

Enrolment in the Norwegian Public Service Pension Fund.

A position in an inclusive workplace (IA enterprise).

Good welfare benefits.

Your application must include:

A brief account of the applicant's research interests and motivation for applying for the position.

Curriculum Vitae.

A complete list of any scientific publications.

The names and contact information for two reference persons. One of these must be the main advisor for the master's thesis or equivalent thesis.

Transcripts and diplomas showing completion of the bachelor's and master's degrees.

Relevant certificates/references.

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge.

General information: Detailed information about the position can be obtained by contacting: Associate Professor Hanneke Meijer, phone +47 55 58 29 18 / email Hanneke.Meijer@uib.no

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. It is also a goal to recruit people with immigrant background. People with immigrant background and people with disabilities are encouraged to apply for the position. We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met. The successful applicant must comply with the guidelines that apply to the position at all times. A link to the online advertisement is here: https:/- -Jeremy Fox /www.jobbnorge.no/en/available-jobs/job/129130/phd-position-in-paleozoology-osteology Dr. Hanneke J.M. Meijer Associate Professor University Museum, Department of Natural History University of Bergen, Bergen, Norway tel: +47 55 58 29 18

Research Associate, Human Origins Program Smithsonian National Museum of Natural History Washington, D.C., USA

Hanneke Meijer <Hanneke.Meijer@uib.no>

**UCalgary SpeciesSelectionPaleontology** 

I am seeking a graduate student (ideally a PhD student) interested in paleontology and/or macroevolution, for a project applying the Price equation to fossil data to detect and quantify species selection. My collaborators (Jessica Theodor and her group) and I recently published a paper using this approach to detect surprising species selection for smaller mammalian body size across the PETM thermal maximum (Rankin et al. 2015 Proceedings B; DOI: 10.1098/rspb.2015.1097). I'm looking for a student to build on this work by applying the approach to other suitable fossil datasets to be identified (invertebrates and/or vertebrates).

The ideal candidate would have some experience working with fossils and fossil datasets, and have a strong interest in working collaboratively on conceptual, quantitative questions of broad interest in evolutionary biology. UCalgary has a critical mass of paleontologists here and nearby, as well as others with broad conceptual interests in paleontology and evolutionary biology (e.g., in the philosophy dept.)

For more on my lab, see my website: https://foxlabcalgary.wordpress.com/ Guaranteed funding is available for 2 years (MSc) or 4 years (PhD). The UCalgary Dept. of Biological Sciences is a big active research department (~55 faculty, ~170 grad students including ~50 in EEB). The city has ~1.2 million people, is safe and vibrant, and is close to the mountains with all the opportunities for recreation that implies.

shouldInterested candidates email me (jefox@ucalgary.ca) with a short introductory note, cv, transcripts (unofficial is fine), and contact details for 3 references.

"jefox@ucalgary.ca" <jefox@ucalgary.ca>

# **UCentralFlorida EvolutionBehaviour**

UCF, College of Sciences, Biology Department: Graduate student positions parasitic manipulation of animal behavior

De Bekker Lab in the Biology Department at the University of Central Florida (UCF) is recruiting Master's and PhD students to start in Fall 2017. We are looking for self-motivated, inventive and pro-active students who seek to work within an interdisciplinary environment.

The general interest of the lab is elucidating how fungi of the genus Ophiocordyceps are able to precisely change the behavior of their ant hosts. We combine behavioral ecology and field studies with molecular microbiology and genetics, genomics and transcriptomics, and chronobiology. Your personal interests could therefore range from genetic regulation of ant behavior, to fungal genetics and genomics, to chronobiology of infectious diseases. Recent studies have provided us with invaluable genome and transcriptome data, tools to infect ants and study parasitic manipulation of behavior in detail, and the first candidate genes, compounds and mechanisms that might be involved in establishing manipulation. It is expected that projects will be in line with previous and current work, but students are also strongly encouraged to develop their own research lines within the scope of the lab. <> Students are supported by UCF's Department of Biology with teaching and research assistantships, tuition waivers, and health insurance. Other opportunities, in the form of fellowships and summer supplements, are also available. In addition, students are expected to apply for external funding to both supplement these funds, as well as gain valuable grant writing experience. Moreover, interaction with both scientists and non-scientists through publications, conference attendance, collaborations, outreach events, online media etc. are highly encouraged.

UCF, located in Orlando, is an emerging preeminent research institution and America's Partnership University. Major investments in research are being made by hiring many new faculty and increasing graduate program enrollment. UCF is a modern R1 university and has been ranked among the Most Innovative Universities by U.S. News & World Report this year! Its

13 colleges < http://www.ucf.edu/academics > provide education and opportunities to more than 63,000 students from all 50 states and more than 150 countries. The College of Sciences is the largest college of UCF with programs spanning the natural, computational, social, and behavioral sciences. The Biology Department consists of faculty with diverse interests ranging from ecology and conservation, to evolution and genetics, and physiology and behavior. Research facilities available to students include a new insectory, curated insect collection, greenhouses, field sites close to campus as well as collaborations with field stations throughout Central Florida, a state-of-the-art genomics core facility, general molecular microbiology equipment and a range of microscopes.

Interested students should make sure they meet the admission requirements (https://biology.cos.ucf.edu/-graduate-program/applying) and contact Dr. Charissa de Bekker at cdebekker.parasitebehavior@gmail.com with a statement of interest and CV.

The applications for Fall 2017 admission are due on January 15.

For more information about the lab visit: https://biology.cos.ucf.edu/debekkerlab For more information about the graduate program visit: https://biology.cos.ucf.edu/graduate-program/phd-program Charissa de Bekker <chadebekker@gmail.com>

### UCentralFlorida SquamateEvolution

Ph.D. positions in Evolution, Systematics and Biogeography of Squamates Lab of Christopher L. Parkinson

Department of Biology, University of Central Florida

The Parkinson lab is interested in recruiting multiple Ph.D. students to begin fall 2017. Our goal is to find students interested in carrying out dissertation research that focuses on snake evolution, biogeography, systematics, and/or venom diversification & evolution. The students would be part of an active group conducting research in the above areas and also other systematics/conservation of vertebrate studies. The students would also have the opportunity to be involved in a recently awarded NSF Dimensions of Biodiversity grant on snake venom evolution that involves collaborations with Florida State University and the Ohio State University as well as international collaboration with researchers in Brazil, Costa Rica, and Mexico. The ideal applicant would have prior research experience; including field experience, strong quantitative skills, the ability or potential ability to communicate in either Spanish or Portuguese and an interest in learning bioinformatic and phylogenomic techniques. A Master's degree is preferred but not required.

The student would join a vibrant lab which utilizes phylogenetics, phylogenomics, transcriptomics and other molecular evolutionary techniques to investigate a wide range of evolutionary biology and conservation related questions with snakes & lizards.

Interested students should contact Dr. Christopher L. Parkinson (Parkinson@ucf.edu), Dept. of Biology, 4110 Libra Dr. University of Central Florida, Orlando 32816 with a statement of interest, a CV, their transcripts and their GRE scores. I will start review applicants Nov. 1, 2016. Please see our lab's website http://parkinson.cos.ucf.edu/parkinson-lab/ and the department website https://biology.cos.ucf.edu/graduateprogram/phd-program/ for additional information.

Christopher L. Parkinson, Ph.D.

Professor, and Special Assistant to the Provost on Faculty Cluster Initiatives Dept. of Biology Rm 424. University of Central Florida 4110 Libra Dr. Orlando, FL 32816-2368

office: 407-823-4847 fax: 407-823-5769

http://parkinson.cos.ucf.edu/ Parkinson@ucf.edu

Or

Millican Hall Rm 338Q

Christopher Parkinson <Parkinson@ucf.edu>

#### UColorado EvolutionSpeciation

The Safran Lab in the Department of Ecology and Evolutionary Biology is looking to recruit 1 - 2 PhD students for fall 2017. Our group collects integrative and comparative data sets to address questions about the evolution of reproductive isolation. Please read more about our research interests as well as recent publications here: www.safran-lab.com. If interested, please send an email which describes your experience and interests to Rebecca.Safran@colorado.edu. Applications to the University of Colorado are due on 1 December.

Dr. Rebecca Jo Safran

Associate Professor Department of Ecology & Evolution-

ary Biology N317 Ramaley Hall University of Colorado Boulder Colorado 80309 USA

email: rebecca.safran@colorado.edu

phone: 303.735.1495 Research Lab: www.safran-lab.com Climate Change: www.insidethegreenhouse.org Rebecca J Safran <rebecca.safran@colorado.edu>

# UEasternFinland SawflyEvolutionaryHistory

Early Stage Researcher (PhD student) position in Ecological genomics of rapid radiations in plant-feeding insects

University of Eastern Finland, Department of Environmental and Biological Sciences (Joensuu campus)

#### JOB DESCRIPTION

We are looking for a highly motivated person to perform research on the evolutionary history of young but speciesrich groups of sawflies (order Hymenoptera). The focus will be on ecologically diverse groups containing numerous closely-related species that cannot be separated using standard morphological and population-genetic methods. New population-genomic approaches based on genotyping by next-generation sequencing (NGS) provide a means for studying the species status of closelyrelated lineages feeding on different host plants, and to estimate the level of gene flow across species boundaries.

The work will be performed mainly in the Joensuu Molecular Ecology Group (www.jmeg.fi), which is led by Associate Professor Tommi Nyman, and operates at the Department of Environmental and Biological Sciences of the University of Eastern Finland (www.uef.fi/en/envbio). In addition to Tommi Nyman, the work will be supervised by Senior Curator Marko Mutanen (University of Oulu, Finland; www.researchgate.net/profile/Marko\_Mutanen) and Curator Stefan Schmidt (Zoologische Staatssammlung M??nchen, Germany; www.zsm.mwn.de/hym/e/stefanschmidt.htm). Part of the laboratory work will be done during extended visits to the laboratories of the external co-supervisors. The project, which is funded by the Academy of Finland, also includes extensive collaboration with an international network of experts on sawfly taxonomy, biogeography, and ecology.

#### REQUIREMENTS

The main duties of the PhD student will be to refine

existing protocols for genotyping sawfly specimens using reduced-representation NGS methods (including ddRADseq), and to apply the methods for research on several taxonomically complex but evolutionarily highly interesting sawfly groups. The work will require very diverse skills, including field sampling, laboratory work, use of bioinformatic pipelines, population-genetic analyses, and writing research papers. Many of these skills will be learned during the project, but applicants should have a strong background in population genetics or related fields.

The PhD student positions may be applied for by persons who according to the Universities Act of Finland (558/2009, Chapter 5, Section 37) are eligible for studies leading to a scientific postgraduate degree. Persons graduating in the near future are also encouraged to apply. However, they are expected to hold a relevant MSc degree (or equivalent) by the starting date of the Early Stage Researcher position.

#### BENEFITS

The position will first be filled for 24 months, with a possibility for prolongation for six months. The continuation of the position will be agreed separately. The current funding covers the first 2.5 years of the PhD project, but the chances of obtaining further funding should be good if things proceed as planned. The start date of the position is 1 January 2017 or as agreed. Positions of early stage researchers shall always be filled for a fixed term (UEF Administrative Regulations, Section 30). A probationary period is applied to all new members of the staff.

The salary of the position is determined in accordance with the salary system of Finnish universities and is based on levels 2-4 of the job requirement level chart for teaching and research staff (euro 1,985.85 - 2,475.31/ month). In addition to the job requirement component, the salary includes a personal performance component, which may be a maximum of 46.3% of the job requirement component. In practice, the salary will be circa euro 2,320 /month at the start of the project.

#### THE UNIVERSITY

The University of Eastern Finland, UEF, is one of the largest multidisciplinary universities in Finland. We offer education in nearly one hundred major subjects, and are home to approximately 15,000 students and 2,800 members of staff. We operate on three campuses in Joensuu, Kuopio and Savonlinna. In international rankings, we are ranked among the leading 300 universities in the world.

The Faculty of Science and Forestry operates on the Kuopio and Joensuu campuses of the University of East-
#### October 1, 2016 EvolDir

ern Finland. The mission of the faculty is to carry out internationally recognised scientific research and to offer research-education in the fields of natural sciences and forest sciences. The faculty invests in all of the strategic research areas of the university. The faculty's environments for research and learning are international, modern and multidisciplinary. The faculty has approximately 3,800 Bachelor's and Master's degree students

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## **UIIIinois MicrobePlantEvolution**

The Heath lab at the University of Illinois at Urbana-Champaign is looking for motivated graduate students interested in evolutionary ecology and evolutionary genetics of plant-microbe symbioses. Students can apply through either the Program in Ecology, Evolution and Conservation (http://sib.illinois.edu/peec/) or the Department of Plant Biology grad program (http://www.life.illinois.edu/plantbio/graduateAdmissions.htm). The Heath lab uses a variety of approaches (fieldwork, sequencing, quantitative genetics) in a number of study systems (plants, bacteria, fungi, and their interactions) to answer fundamental questions about how mutualisms evolve in nature, among other questions.

Champaign-Urbana is a great college town midway between three major cities (Chicago, St. Louis, Indianapolis), with great food and drink, abundant culture, and affordable cost of living.

University of Illinois and the Heath lab are committed to a diverse workplace, and prospective students of all races, genders, and sexual orientations are encouraged to apply.

Email Katy Heath (kheath@life.illinois.edu) for more information.

Katy Heath <kheath@life.illinois.edu>

## UIIlinois UC EvolutionaryBiomechanics

The Anderson Evolutionary Biomechanics lab at the University of Illinois, Urbana-Champaign is looking to recruit graduate students (Masters or Doctoral level) starting in the Fall of 2017. The Anderson lab investigates how physical and mechanical principles influence evolutionary patterns and processes through a combination of biomechanical analyses with comparative evolutionary methods. Examples of current themes in the lab include the effects of speed and scale on cutting mechanics, the evolution of biological puncture systems, intra-specific morphological variation, biomechanical disparity through time, and how biomechanical integration influences morphological evolution. Graduate students will have the opportunity to develop their own projects within the overall themes of the lab and are encouraged to explore new areas tangential to current projects.

Funding is available in the form of fellowships, teaching and research assistantships. Graduate students in the lab will be expected to apply for external funding as well.

Who should apply: Candidates with an interest in the biomechanics, evolutionary morphology, paleontology or any combination thereof. Diverse academic backgrounds are welcomed and encouraged including anthropology, biology, engineering, geology, paleontology, physics, etc. Research experience is preferred but not required.

The Department of Animal Biology is housed within the School of Integrative Biology, home to over 35 faculty working in ecology, behavior, conservation and evolution. The University of Illinois is a research institution with a worldwide reputation for excellence in genomics, supercomputing and engineering. The Institute for Genomic Biology, The Beckman Institute for Advanced Science and Technology and National Center for Supercomputing Applications foster a thriving research environment and provide many unique resources that can be woven into a student's projects. Located a few hours outside of Chicago, Urbana-Champaign is home to the Krannert Center for the Performing Arts, Roger Ebert film Festival, Krannert Art and Spurlock Museums, a host of local cooperative theatres and farmer's and art markets.

Application and deadlines: Those interested in applying to work in the lab should send inquiries directly to andersps@illinois.edu. Please include a short statement of interest (no more than one page), a CV describing previous education/research/employment etc. and contact information for references. Positions in the lab require acceptance into either the Department of Animal Biology graduate program (http://www.life.illinois.edu/animalbiology/) or the Program in Ecology, Evolution, and Conservation Biology (http:/-/peec.illinois.edu/). Applications should be made online at http://www.grad.illinois.edu/admissions/apply/ (program deadline is Jan. 1st, 2017). Please visit the lab website at www.philipslanderson.com for more information.

Phil Anderson <andersps@illinois.edu>

Dr. Philip S. L. Anderson Assistant Professor Department of Animal Biology School of Integrative Biology University of Illinois, Urbana-Champaign andersps@illinois.edu

"Anderson, Philip S L" <andersps@illinois.edu>

## UIllinois UC EvolutionaryImmunology

Doctoral student positions in evolutionary immunology of human and nonhuman primates

Doctoral positions in evolutionary immunology and functional genomics are available in the Brinkworth Evolutionary Immunology and Genomics lab, Department of Anthropology, University of Illinois Urbana-Champaign. The lab investigates how primate genome expression has diverged and diversified, with particular attention paid to the evolution of the human innate immune response. Applicants should have research experience, as well as strong interests in human/non-human primate evolution, immunology, genomics, bioinformatics or infectious disease. Positions are contingent on acceptance into the Department of Anthropology PhD program.

Projects: Students will be involved in the conceptual development, execution and publication of research concerned with evolutionary genomics, including but not limited to, primate comparative immunity, and the diversification of the human immune response. Students will use a broad range of immunological and cell biology techniques, in combination with bioinformatic methods to investigate questions of how immune function has evolved in humans and other primates.

Funding: Students are guaranteed full funding for 5.5

years. Support is provided via a combination of RAships, TAships and writing fellowships.

Who should apply: Candidates with an interest in the evolution of immune function/evolutionary genomics. Diverse educational backgrounds are welcome including anthropology, biology, bioinformatics, computer science, epidemiology etc. Experience with genetics/genomics, immunological bench and analytical methods and clean technique are strongly preferred.

UIUC: The positions offer an exceptional opportunity for highly collaborative research in a new facility, using state of the art immunological, genomic and computational techniques to answer questions relevant to both human evolutionary biology and disease. The UIUC is a competitive very high research/R1 institution, with a selective and very well respected Department of Anthropology and a worldwide reputation for excellence in genomics, supercomputing and engineering. The Institute for Genomic Biology, The Beckman Institute for Advanced Science and Technology, National Center for Supercomputing Applications foster a thriving research environment and provide many unique resources that can be woven into a student's projects. Located a few hours outside of Chicago, Urbana-Champaign is home to the Krannert Center for the Performing Arts, Roger Ebert film Festival, Krannert Art and Spurlock Museums, a host of local cooperative theatres and farmer's and art markets. Chicago is readily accessible via Amtrak, bus or car.

Application and Deadline: Queries should be sent to jfbrinkw AT illinois DOT edu. Please include  $\mathbf{a}$ statement of interest (1)page), CVdescribing your and  $\mathbf{a}$ previous education/internships/projects/employment/scholarships and publications, along with contact information for three references. Positions in this lab require acceptance into the UIUC Department of Anthropology PhD program. Applications for acceptance into the graduate program should be made online http://www.anthro.illinois.edu/programs/graduate/ by the \*program deadline December 1, 2016. \*Please visit the lab's website at www.jfbrinkworth.com for lab information.

Jessica Brinkworth <jfbrinkworth@gmail.com>

#### **ULausanne Evolution**

PhD fellowships at the University of Lausanne (Switzerland)

Each year the University of Lausanne offers competitive PhD fellowships in broadly defined biological sciences, including evolution and ecology. The winners can choose a supervisor among those participating in the program, including many group leaders at the Department of Ecology of Evolution (www.unil.ch/dee). The Department of Ecology and Evolution is one of the strongest centers in evolutionary biology in Europe. It consists of over 20 research groups including about 50 postocs and 70 PhD students; several of those PhD students are winners of the fellowship in previous years. The fellowships are for three years plus a fourth year funded by grants of the supervisor. A Master or an equivalent degree is a prerequisite of being admitted into a PhD program in Switzerland (but the candidates do not yet have to hold a master at the time of application).

Information about the fellowships, requirements and the application procedure can be found under www.unil.ch/-fbm-phd . The next application deadline is 24 October 2016; the successful applicants will be able to start their PhD between May 2016 and May 2017.

Lausanne is a medium-sized city on the shores of Lake Geneva, surrounded by a wine growing region (recognized as one of UNESCO Heritage sites) and within one hour of the Alps. It offers a great variety of cultural, recreational and outdoor opportunities.

"tadeusz.kawecki@unil.ch" <tadeusz.kawecki@unil.ch>

### ULincolnUK ChemosensoryEvolution

MSc by Research project on canine olfactory perception abilities

Position Description: An exciting opportunity has arisen for a funded MSc by Research studentship in canine olfaction for a UK/EU student.

We are looking for a qualified and motivated student

to work on a project on canine olfactory perception abilities. The project will run at the University of Lincoln (UK) under supervision of Dr Malgorzata Pilot and Prof. Daniel Mills. This project will address a fundamental question in chemosensory system evolution concerning the trade-off between olfaction (sense of smell) and vomeronasal sensing (detection of emotionally salient chemosignals), and at the same time potentially contribute to improving efficiency of selection of dogs for detection work (e.g. explosives, drugs). Olfactory receptors (OR) and vomeronasal receptors (V1R) provide systems to detect molecules of odorants and chemicals that mediate pheromone perception, respectively. There is growing evidence of functional and evolutionary interactions between these two systems. The aim of this MSc project is to compare olfactory and pheromonal perception abilities in different groups of dogs, including breeds currently used for scent detection and breeds considered poor sniffers, free-ranging dogs and dogs' wild ancestors, grey wolves. This will be achieved via behavioural experiments to test olfactory perception performance. The student must be able to travel abroad to undertake experimental work as part of the programme. The successful candidate will enrol on our MSc by Research programme in the School of Life Sciences, starting as soon as possible and lasting one year. The student will be responsible for carrying out behavioural experiments, data analysis, and writing up their MSc thesis. The student will have the opportunity to join a multi-cultural and inter-disciplinary researchoriented environment at the School of Life Sciences, including Animal Behaviour, Cognition & Welfare, and Evolution & Ecology research groups. This position is an excellent opportunity to gain research experience before enrolling on a PhD programme.

Qualifications/Experience: We welcome applications from candidates with background in Animal Behaviour, Veterinary Science, Zoology, or related fields. Priority will be given to applicants who have experience in studying animal behaviour and experience with handling dogs. Good spoken and written English is an essential requirement for this position. Knowledge of other languages may be considered as an advantage.

Funding: Tuition fees will be met by the University in the case of UK or EU candidates. Non-EU candidates will receive a partial fee waiver equivalent to home/EU student fees (£4500). In addition, the student will receive a stipend of £10,000 per year (paid monthly) to cover their living expenses. The costs of project consumables are fully covered by the funder.

Term of Appointment: Starting date should be November 2016 or as soon as possible after. The project has to be completed with the thesis submission within one year. The student is expected to be based in Lincoln or queries, feel free to contact me. but able to travel for periods abroad.

Application Deadline: 21st October 2016. Successful candidates will be invited for interview by w/c 23th October and interviews are anticipated to take place on 2nd November.

How to apply: In order to apply please email a short cover letter (1 A4 page maximum) explaining previous experience, interest and suitability for the position along with a CV and the contact details of two referees to Dr Malgorzata Pilot (mpilot@lincoln.ac.uk). Referees should be former supervisors/ tutors and should be able to provide a reference when contacted. For informal enquiries please contact Dr Malgorzata Pilot.

Applicants who are invited to interview will subsequently need to complete online application form to enrol for MSc by Research.

The University of Lincoln, located in the heart of the city of Lincoln, has established an international reputation based on high student satisfaction, excellent graduate employment and world-class research.

The information in this e-mail and any attachments may be confidential. If you have received this email in error please notify the sender immediately and remove it from your system. Do not disclose the contents to another person or take copies.

Email is not secure and may contain viruses. The University of Lincoln makes every effort to ensure email is sent without viruses, but cannot guarantee this and recommends recipients take appropriate precautions.

The University may monitor email traffic data and content in accordance with its policies and English law. Further information can be found at: http://lincoln.ac.uk/legal . Malgorzata Pilot <MPilot@lincoln.ac.uk>

## **UMarche Italy MarineMicrobialEvolution**

The Polytechnic University of Marche (Ancona, Italy) is recruiting PhD students for the Academic years 2016/2017 - 2017/2018 - 2018/2019.

submitted online (http://-Applications are www.univpm.it/Entra/Engine/RAServePG.php/-P/353810010424/L/1) with deadline October 10th at 14:00 local time. Instructions on how to apply are available in English and Italian. If you have problems

Among the two themes "LIFE AND ENVIRONMEN-TAL SCIENCES curriculum: MARINE BIOLOGY AND ECOLOGY", there is the project "evolution of marine microbial assemblages associated with benthic invertebrates of deep-sea marine ecosystems" coordinated by Prof Antonio dell'Anno (Polytechnic University of Marche, Ancona) and Dr Sergio Stefanni (Stazione Zoologica A. Dohrn, Naples).

Sergio Stefanni, PhD Research FellowDept. of Biology and Evolution of Marine Organisms (BEOM)Stazione Zoologica "Anton Dohrn" Villa Comunale 80121 - NaplesItaly

email: sergio.stefanni@szn.it office: +39 081 5833228 mobile: +39 328 9078617

sstefanni@gmail.com

### UMiami EvolutionDivingPhysiology

PhD Student Position to Study Evolution of Diving Physiology in Sea Ducks

A PhD student position is available beginning August 2017 to work on comparative evolution of diving physiology in sea ducks at the University of Miami in Coral Gables, Florida, with Kevin McCracken and collaborating investigators at McMaster University (Graham Scott & Neal Dawson) and the Alaska Science Center (Sarah Sonsthagen, Robert Wilson, & Andy Ramey).

We seek a PhD student with interests in integrated physiology and evolutionary biology, and willingness to pursue fieldwork in Alaska. Studies are not limited to but will include cardiovascular physiology, enzyme function, and histology. Students with an interest in using RNAseq methodology to study gene expression also are encouraged to contact us. Travel to Anchorage and Kodiak, Alaska, and to the collaborating labs in Canada will be required.

Typical duration of funding for a PhD student at the University of Miami is at least five years with stipends of approximately \$24,000/year, including a full tuition waiver and health benefits. Both university fellowships and departmental teaching assistantships are available.

Applications to the PhD program at UM are due 1 December 2016 for fall 2017 admission (http://www.as.miami.edu/biology/graduate/).

Individuals who want to apply should first send a statement including background and research interests and curriculum vitae to:

Dr. Kevin McCracken Kushlan Chair in Waterbird Biology & Conservation Department of Biology & Rosenstiel School of Marine and Atmospheric Sciences University of Miami Coral Gables, FL 33146, U.S.A. kmccrack@bio.miami.edu

#### http://www.bio.miami.edu/mccracken/ -

Kevin G. McCracken Department of Biology, College of Arts & Sciences Department of Marine Biology & Ecology, Rosenstiel School of Marine and Atmospheric Sciences University of Miami Coral Gables, FL 33146, U.S.A.

Offices: 188 Cox (Biology)/136 Marine Technology & Life Sciences Seawater Research Building (RSMAS) Lab: 188 Cox (Biology)

http://www.bio.miami.edu/mccracken/ email: kmccrack@bio.miami.edu

kevin.g.mccracken@gmail.com

a proven record of molecular biology skills.

Additional experience in bioinformatics is a plus.

If you are interested you need to apply to the University of North Dakota Biology Graduate Program using the regular procedure that can be found in the UND Graduate School website: http://graduateschool.und.edu/programs/degrees.cfm The additional information can be also found in the Biology Department website: http://arts-sciences.und.edu/biology/graduate/programs.cfm The position starts in January 2017. To receive full consideration, applications and required materials should be received by the Biology Graduate Program by September 15, 2016.

Potential graduate students are strongly encouraged to make contact with Dr. Igor Ovchinnikov. Contact information:

Dr. Igor Ovchinnikov Associate Professor Lab. Of Human and Forensic Genetics Department of Biology University of North Dakota Email: igor.ovtchinnikov@email.und.edu

"Ovtchinnikov, Igor" <igor.ovtchinnikov@email.und.edu>

### UNorthDakota AncientModernBisonGenetics

The Laboratory of Human and Forensic Genetics at the University of North Dakota (www.und.edu) is inviting applications from potential graduate students who pursue the MS degree. PhD candidates will be also considered.

A student will be engaged to a project on the historic, current and future status of bison herds from biological, archaeological, and cultural perspectives. It is a collaborative effort with Theodore Roosevelt National Park (THRO). This cross-disciplinary project represents an opportunity to get intensive training in the methods of ancient and modern DNA analyses including DNA isolation from a variety of tissues, next-generation and traditional sequencing, quality control of DNA templates, and bioinformatics. Genetic, phylogenetic, and demographic studies of extirpated and extant bison specimens will be used to generate important insights for management of bison at THRO and other locations throughout the Midwest.

Candidates should demonstrate motivation for hard laboratory work and strong interest in molecular genetics and evolution. Preference will be given to students with UOregon EvolutionaryBiol

Applications are now being accepted for integrative graduate education in Ecology and Evolution at the University of Oregon (UO).

The Department of Biology and the Institute of Ecology and Evolution (IE2) at the University of Oregon seek outstanding applicants for the PhD program. We are looking for highly motivated students who wish to develop high-caliber research programs in any area of ecology and evolutionary biology.

IE2 consists of a dynamic, energetic, and highly interactive group of faculty members, graduate students, and postdocs whose research interests are world-renowned and span traditional disciplines. Particular strengths of the group include evolutionary genetics and genomics, evolution of development, and microbial, population, community, and ecosystems ecology. IE2 consists of faculty from multiple departments on campus, including Biology, Anthropology, Math, and Geography. In addition, IE2 maintains close ties with other research institutes and departments on campus, including the Institutes of Molecular Biology and Neuroscience, the Oregon Institute of Marine Biology, and the Departments of Chemistry, Computer Science, Geology, and Landscape Architecture. Our integrative approach to research and graduate education is supported by numerous grants, training grants, and fellowships from both federal and privately-funded sources.

The University of Oregon is located in the heart of Eugene, a progressive and very livable city of approximately 200,000 people. Eugene provides many opportunities for intellectual and cultural stimulation, and its location is ideal for the naturalist at heart being within an easy 1-2 hour drive of both the Cascade Mountains and the Oregon Coast. It is consistently voted one of the top ten greenest cities in the U.S.

For more information about IE2 and individual faculty research interests, please see the IE2 website (http://ie2.uoregon.edu) as well as individual lab websites. For information about graduate studies in the Department of Biology, or to submit an online application, please see: http://biology.uoregon.edu/graduate-studies/apply/. The deadline for online applications is December 1, 2016. For specific inquiries about IE2, contact Matt Streis-feld (mstreis@uoregon.edu). For inquiries about the graduate application process, please contact the Biology Department Graduate Program Manager, Jessica Wilson (wilson21@uoregon.edu).

Matt Streisfeld <mstreis@uoregon.edu>

#### **UOtago ParasiteEvolutionGenetics**

#### PHD FELLOWSHIP OPPORTUNITY

"Genetic diversity of multi-drug resistant Teladorsagia circumcincta" Walsh Fellowship Ref Number 2016110

Background Grazing sheep are naturally exposed to gastrointestinal nematodes which can result in ill-thrift, decreased production of meat and wool and in some severe cases may result in death. Nematode control is highly dependent on the availability of efficacious anthelmintics, however the intensive use of these drugs has quickly led to the development of anthelmintic resistant nematodes. In temperate regions of the world resistance has occurred almost exclusively in one species, Teladorsagia circumcincta. In addition, simultaneous resistance to multiple drugs has been described for this species in Ireland, New Zealand and other countries. Recently there have been reports of the rapid development of resistance to a new anthelmintic class, and this has always occurred in multi-drug resistant worm populations. This project tests the hypothesis that multi-drug resistant T. circumcincta are more genetically adaptable in their responses to stress than susceptible nematodes i.e. they are more genetically diverse with higher mutation/recombination rates and that selection for drug resistance leaves a genomic signature. Anthelmintic resistant populations of T. circumcincta from Ireland and New Zealand will be identified, isolated and subjected to genome sequencing in order to compare with susceptible isolates.

Requirements Applicants should have a primary degree (First Class or Second Class First Division Honours) or M.Sc. in an appropriate discipline (Biology, Agricultural Science, Zoology, Molecular Biology or a related subject). The successful candidate should be highly self-motivated and be prepared for field work, laboratory work and bioinformatics/analysis. A full driving licence is also required.

Award The PhD Fellowship is a joint research project between AgResearch, the University of Otago and Teagasc, the Irish Food and Agriculture Development Authority. The student will spend periods of time in both New Zealand and Ireland and will be registered at the University of Otago, under the supervision of Prof. Robert Poulin (see http://www.otago.ac.nz/parasitegroup/home.html). The Fellowship will start when a suitable candidate is appointed.

The fellowship provides an annual stipend of NZ\$25,000 for 4 years, as well as covering University fees.

Further Information For further information please contact one of the project supervisors: Dr John McEwan (john.mcewan@agresearch.co.nz), Dr Orla Keane (orla.keane@teagasc.ie), Prof Robert Poulin (robert.poulin@otago.ac.nz) or Dr Dave Leathwick (dave.leathwick@agresearch.co.nz).

Application Procedure Submit an electronic copy of Curriculum Vitae and a letter of interest (including names and email addresses of two referees), as a single PDF file, by 31st October 2016 to: Prof Robert Poulin (robert.poulin@otago.ac.nz)

"robert.poulin@otago.ac.nz" <robert.poulin@otago.ac.nz>

**URhodeIsland Phylogenomics** 

PhD or Masters Student positions in Bioinformatics / Phylogenomics

Graduate student positions (PhD or Masters) are available in the new Schwartz lab (http://rachelss.github.io) in the Department of Biological Sciences at the University of Rhode Island.

The lab is focused on understanding evolutionary history using genomic datasets. We also develop methods and software for researchers interested in empirical questions. The student will have some flexibility to develop a project related to their interest, and opportunities for collaboration at URI and elsewhere.

Students in the lab will benefit from a new interdiciplinary Big Data Initiative. Many additional faculty at URI do research in bioinformatics and apply genomic datasets to evolutionary questions. See http:/-/rachelss.github.io/uri/ Prospective students should have demonstrated interest in phylogenetics and/or genomics and/or computational methods. Basic coding skills (bash or python or R) are strongly recommended for students with a biology background. Evidence of interest in biology is required for students with a computer science background. Interested students should read about how to join the lab at http://rachelss.github.io/-Students/ Rachel Schwartz, PhD Assistant Professor Department of Biological Sciences College of the Environment and Life Sciences The University of Rhode Island Kingston, RI 02881

rsschwartz@uri.edu Phone: 401-874-5404

"rsschwartz@uri.edu" <rsschwartz@uri.edu>

### **USP Brazil DevoDiversity**

Dear Colleagues,

The Brown Lab at the Instituto de Biociências in Brazil (USP) is recruiting a doctoral student to join the international project, DEVODIVERSITY, funded by the  $S\bar{a}o$  Paulo Research Foundation (FAPESP) in collaboration with the Tiozzo Lab funded by the French Agence Nationale de la Recherché (ANR). DEVODIVERSITY examines the evolution of regeneration, asexual reproduction, and clonality in several species of ascidians (Urochordata), and examine how ecological factors affect distribution ranges, evolution of life cycles, and developmental strategies.

The main objectives of the doctoral project include: (1) To resolve phylogenetic relationships within the Styelidae by using alternative molecular and phylogenomic methods. (2) To reconstruct possible scenarios of colonial evolution by theoretical and experimental approaches. (3) To study within theoretical and experimental frameworks the main processes of evolution in colonial ascidians (including natural selection, genetic drift, gene flow, and mutation) to understand the origins and persistence of clonality and asexual reproduction.

The candidate should have strong interests in cell and molecular biology as well as evolutionary developmental biology.

Position available: 1 FAPESP Doctoral position (Doutorado Direito or DD): a 4-year position for a highly motivated candidate. The successful candidate will join the EvoDevo lab in Sāo Paulo (Brazil) and will have the opportunity to do laboratory and/or fieldwork at the Tiozzo lab (France) in Villefranche-sur-Mer. The candidate will need to be approved by the Graduate Program in Zoology at the Instituto de Biociências at the Universidade de Sāo Paulo in order to get the fellowship. Fellowship norms and salaries follow the general guidelines of FAPESP. Portuguese is desirable but not necessary, as the candidate will need to provide a proof or Portuguese proficiency only after the first year.

Please submit your letter of interest, updated CV, and contact information of three references to Federico Brown (IB-USP, Brazil) by September 5th, 2016. The selected candidate is expected to begin his doctorate in February 1st, 2017.

Contacts & Additional Info: Federico Brown (fdbrown@usp.br): http://zoologia.ib.usp.br/evodevo2/ Instituto Biociências USP: http://www.ib.usp.br/en CE-BIMAR: http://cebimar.usp.br/index.php/en/ Graduate Program in Zoology (in Portuguese only): http://www.ib.usp.br/zoologia/poszoologia/ FAPESP DD Fellowship (in Portuguese only): http://www.fapesp.br/-278 Stefano Tiozzo (tiozzo@obs-vlfr.fr): http://biodev.obs-vlfr.fr/~ tiozzo/tiozzo-lab LBDV: http://biodev.obs-vlfr.fr/en/index.html Best regards,

#### Federico

Federico D. Brown Professor Doutor Departamento de Zoologia - Instituto Biociências Universidade de Sāo Paulo Tel: +55 11 3091.0950 Lab website: http://zoologia.ib.usp.br/evodevo2/ CV lattes: http://lattes.cnpq.br/5447668124359385 Submit your articles to the new open access, free of charge, and double blind review journal Neotropical Biodiversity! (http://www.tandfonline.com/action/authorSubmission?journalCode=3Dtneo20&page=instructions#.VNoCwMa8oII)

fdbrown@usp.br

#### **UStockholm CognitionEvolution**

#### PhD position in Ethology

at the Department of Zoology, Stockholm University, Sweden Ref. nr. SU FV-2501-16 Deadline for application: October 1, 2016.

The link between intrinsic cognitive ability, learning behavior and patterns of generalization. The aim of this project is to disentangle the intrinsic and extrinsic factors that can explain variation in how individuals respond to and learn to associate with different stimuli in their environment. This variation in behavioral responses leads to variation in how the individuals interact with their environment, and will ultimately have significant intra- and interspecific evolutionary consequences (e.g. in signal evolution, mate choice and prey defenses). We aim for a mainly experimental approach, studying preferences, learning and discrimination behavior and generalization behavior in subjects that vary in cognitive ability, experience, and/or rearing conditions. The main subject species for the project will be the guppy (Poecilia reticulata). We already have existing selection lines of large- and small-brained guppies, with associated differences in cognitive ability. These lines provide a unique opportunity to study effects of intrinsic cognitive ability on learning behavior. The majority of the project will be undertaken in the brand new tropical freshwater fish labs in the Department of Zoology with room for over 6,000 aquaria and several separate experiment rooms. However, depending on the preferences of the recruited PhD student and the development of the project, there are possibilities to extend the scope of the project. For instance, we have substantial experience in studying learning and cognition in birds (wild-caught blue and great tits and domestic chickens) and comparative analyses across cartilaginous fish is another possible route. Generally, the project will mostly be lab-oriented and involve quite time consuming experimental work. At the same time, the position will provide excellent opportunities for personal initiatives and development towards a successful academic career.

Qualification requirements To be qualified for research studies in the program, the applicant must have completed a Master degree (or equivalent) or have passed at least 120 hp (2 years) of biological studies, including an approved independent project of at least 30 hp at advanced level within Ethology, Zoology, Behavioral Ecology, Evolutionary Biology or a related subject. Applicants who have in principle acquired the corresponding competence in Sweden or in another country are also qualified.

We are looking in particular for candidates with a strong interest in animal learning and cognition, with excellent analytical ability and experience from studying behavior and other traits of interest. Experience in working with aquatic animals in the lab is also meriting.

For more information and to apply follow this link:

http://www.su.se/english/about/vacancies/vacanciesnew-list?rmpage=job&rmjob=1850&rmlang=UK

Contact For more information, please contact Dr Gabriella Gamberale Stille, telephone: +46 8 16 40 46, gabriella.gamberale@zoologi.su.se and Pro-fessor Niclas Kolm, telephone: +46 8 16 40 50, niclas.kolm@zoologi.su.se.

Gabriella Gamberale Stille <gabriella.stille@gmail.com>

## USydneyAustralia EvolutionOfVertebratePregnancy

#### USydneyAustralia.EvolutionOfVertebratePregnancy

Opportunity for postgraduate students in genomics and evolutionary biology at the University of Sydney

Project: In this project we will use genetic, morphological, and physiological techniques to characterise the fundamental biology of pregnancy in tractable model vertebrates and to trace the evolution of live birth.

Opportunity: The Evolutionary and Integrative Zoology Lab in the Faculty of Science at the University of Sydney offer a unique opportunity for outstanding and highly motivated students to enrol in a PhD research project focusing on the fundamental biology and evolution of pregnancy in vertebrates including mammals, reptiles and sharks. The project will be supervised by lab heads Dr Camilla Whittington and Prof Mike Thompson, and will be co-supervised with Dr James Van Dyke (Western Sydney University).

Project Description: Viviparity (live birth) is an important biological innovation that has evolved convergently from oviparity (egg-laying) many times in mammals, reptiles, amphibians, fish, and invertebrates. In some cases, complex placentae that transport large quantities of nutrients to the fetus have also evolved convergently to support pregnancy in viviparous lineages. We will use several live-bearing animals, including mammals, reptiles, and sharks, as models for the evolution of pregnancy and the placenta. The project will encompass genomics, morphology (including state-of-the-art microscopy), and/or physiology, depending on the interests of the student. Our data will provide new knowledge of the fundamental reproductive biology of wildlife and the evolution of vertebrate reproductive strategies.

About the candidate: The ideal candidate will have a strong academic record and graduate degree(s) in Biology, Physiology, Genetics/Genomics, or a related field. A keen interest in evolutionary biology and experience in genetics or genomics, including the handling of large genomic datasets, is ideal. As the project will likely involve some field work, the candidate will be expected to have a valid driver's licence, or to obtain one within 6 months of starting the project.

About the lab: Our lab, within the School of Life and Environmental Sciences, focuses on understanding the evolution of viviparity and reproductive complexity, using a variety of model systems. We have broad expertise across physiology, morphology, genomics, and evolutionary biology. Our innovative combined approach means we work closely with researchers in other disciplines, including Medical Science. We are a friendly, supportive, and hardworking lab. We encourage students to get involved in our collaborative research projects with scientists from across Australia, Europe, South America, and the USA. We also encourage active student involvement in lab and departmental activities, and attendance at national and international conferences. Please visit our web site (http://www.camillawhittington.com/-#!evolutionary-integrative-zoology/josta) for information about our group and our research interests.

About the campus: The University of Sydney is one of Australia's leading universities, situated in the heart of Sydney. This project will be based at the Camperdown/Darlington campus, which boasts 72 hectares of state-of-the-art teaching and learning technology, including six libraries, art galleries, historical museums, perfectly manicured lawns, and a diverse and vibrant body of students and staff. For more information about the university, please visit http://sydney.edu.au/ . To apply:

Please email Dr Camilla Whittington (camilla.whittington@sydney.edu.au) for more information, or apply directly by emailing a single PDF containing (1) a brief summary statement of research interests, (2) a CV, (3) academic transcript and (4) contact information for two referees, as soon as possible. Please indicate "Evolution of Pregnancy PhD" in your subject line.

Applications will be assessed as they are received. Students (domestic or international) with a high level of relevant qualifications, research experience and enthusiasm will be invited to apply for a competitive Australian Postgraduate Award scholarship or University of Sydney Postgraduate Award Scholarship (Domestic students: http://sydney.edu.au/scholarships/research/postgraduate\_awards.shtml#APAUPA applications are open from now until 5pm AEST, 30 September 2016) or international postgraduate research scholarship (International students: http://sydney.edu.au/scholarships/prospective/international\_postgraduate\_scholarships.shtml#usi and

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### UtahStateU 2 EvolutionaryModelling

Hello,

I'm looking for two PhD students to start in my lab at Utah State University in the 2017 academic year: one with experience in ecological and/or evolutionary modelling, and another with experience in plant ecology and fieldwork. These positions are fully funded, and include money to travel to conferences and working groups.

More details and application instructions are available online (http://pearselab.com/join-the-lab/). The deadline for applications is the 15th of November.

Thanks,

Will Pearse

will.pearse@gmail.com

### UTasmania EucalyptusDifferentiation

PhD Opportunity: The genetics of species differentiation and hybridisation in Eucalyptus (University of Tasmania, Hobart)

An exciting opportunity is available for a highly motivated student to join the Eucalypt Genetics Group at UTAS (www.eucalyptgenetics.com) in a new project that uses state-of-the-art genomic technologies to characterise genomic regions important for speciation and adaptation in Australia's iconic eucalypts. The project will investigate the importance of hybridisation between species, especially during range expansion and contraction. Up to \$30,000 in running costs will be funded by a recently awarded Australian Research Council Discovery Grant.

A major international effort has recently seen a eucalypt become the second forest tree genome sequenced. The PhD project links the expanding international knowledge on the eucalypt genome to the evolutionary dynamics of wild populations in Australia to provide insights into the nature of species and processes which have shaped their evolution. These insights can inform their breeding as well as their conservation and management in Australia.

The project will be embedded in the Eucalypt Genetics Group at UTAS (www.eucalyptgenetics.com) (led by Profs Brad Potts and René Vaillancourt) which has a world-class interdisciplinary research programme that investigates the evolutionary and ecological forces that shape diversity in Eucalyptus. The project is based in Hobart which offers an excellent lifestyle with stunning wilderness areas nearby, a vibrant arts and boutique food culture and affordable living expenses compared with other Australian capital cities.

To apply, please email a brief summary of research interests along with a CV and the contact details for at least two referees. Applications will be assessed on an ongoing basis. Students with an excellent academic background and enthusiasm will be invited to apply to UTAS for a competitive APA Scholarship (open until 16 October 2016). International students will need to apply for a UTAS International Scholarship, or through another program (e.g. Endeavour, or a scheme in the applicant's home country). To rank highly in these scholarship rounds, students will need to have completed a Masters by Research (or international equivalent) or first class Honours (domestic students), and have at least one publication.

For more information contact Dr Rebecca Jones (Rebecca.Jones@utas.edu.au) http://www.utas.edu.au/-profiles/staff/plant-science/Rebecca-Jones Prof Brad Potts (B.M.Potts@utas.edu.au) http://-www.utas.edu.au/profiles/staff/plant-science/Brad-

Potts University of Tasmania Electronic Communications Policy (December, 2014). This email is confidential, and is for the intended recipient only. Access, disclosure, copying, distribution, or reliance on any of it by anyone outside the intended recipient organisation is prohibited and may be a criminal offence. Please delete if obtained in error and email confirmation to the sender. The views expressed in this email are not necessarily the views of the University of Tasmania, unless clearly intended otherwise.

Rebecca Jones <rebecca.jones@utas.edu.au>

#### UValencia RotiferAdaptation

Adaptation of rotifers to impredictable habitats

PhD fellowship position (ICBiBE, University of Valencia, Spain)

The Evolutionary Ecology laboratory at the Cavanilles Institute of Biodiversity and Evolutionary Biology (ICBiBE; (ecoloevol@ICBiBE) investigates on zooplankters in fluctuating environments. The Spanish Ministry of Economy and Competitiveness (MINECO) has open a call to grant a fellowship associated to the ongoing project 'Environmental unpredictability and counteracting effects on sex response in rotifers (CGL2015-65422-P)', leaded by MarÃa Jose Carmona (carmona@uv.es) and Manuel Serra (serram@uv.es ).

Bet hedging (i.e. risk-spreading strategies) is one of the expected adaptive responses when fluctuations are unpredictable. However, by hedging their bets, organisms incurs in important costs. The project uses a set of rotifer (Brachionus plicatilis) populations whose habitats embraces a range of environmental unpredictability. The project aims to test whether populations adapt locally to the level of environmental unpredictability by evolving diverging strategies for sexual reproduction. A negative relationship between sexual reproduction ratio and environmental unpredictability is hypothesized and will be tested. Additionally, successful sex in facultative sexuals needs population synchronization, which can be improved by quorum sensing. We will test hypotheses on the mechanisms of quorum sensing. As sex synchronization opposes to bet hedging, we will test whether a negative relationship between quorum sensing and environmental unpredictability exists. It is known that some facultative sexual rotifers do not respond to sex induction during a few generations after leaving diapause. This feature is regarded as adaptive for a clone proliferation. We will investigate if such sex-blocking effect occurs in B. plicatilis. However, sex-blocking effect may cause fail to produce diapausing stages if the growing season ends shortly after leaving diapause, a likely event if the growing season length varies much and cannot be predicted. Accordingly, we will test the expectation that sex-blocking effect decreases with environmental unpredictability. Additionally, we hypothesize that an increase in the responsiveness to sex induction after leaving diapause is correlated with the expression of genes associated to meiosis and meiosis regulation, and we will investigate this correlation using transcriptomics.

The fellowship covers up to four years. Candidates on performing a Ph. D. thesis associated to the ongoing project must have a strong background in population ecology and evolutionary biology. Skills in statistics, population genetics, molecular biology and computer programming are welcome.

Eligible applicants must have been admitted in the Doctoral Program in Biodiversity and Evolutionary Biology at the University of Valencia for 2016-17 academic year (doctorado-biodiver-biol-evol).

Application for the fellowship available on MINECO website from September 13 to September 27, 2016. For more information visit this link: call)

MÂ José Carmona <maria.j.carmona@uv.es>

## UWisconsin Milwaukee KelpPopGenetics

The Alberto lab at UW-Milwaukee is seeking for a graduate student for Fall 2017 with an interest in molecular ecology of kelp (brown macroalgae) forests or seagrass species. Our interest is broad in all areas of population genetics and genomics from fine scale spatial genetic structure and demographic inference, local adaptation, oceanscape genetics and range wide biogeographical analysis of model organisms. Our focus is both on empirical research through the acquisition of population genetics data, using molecular marker techniques, simulation based hypothesis testing and species distribution modeling. Our closer collaborators include the Santa Barbara Coastal LTER (http://sbc.lternet.edu/) based at UCSB, California, The Moss Landing Marine Laboratory in Central California, and the Center for Marine Sciences at University of the Algarve, Portugal (http:/-/www.ccmar.ualg.pt/maree/). Students interested in developing projects in topics related to seagrass population genetics or the balance between clonal and sexual strategies, focusing marine or freshwater plant model species, are also welcomed to contact me. Please see my website for more information on our team (http://alberto-lab.blogspot.com/).

Much of our work involves some form of programming in R, students are expected to be motivated to learn programming. While programming skills are a benefit, they are not required to successful applicants.

UWM has an active group of researchers studying evolutionary genetics and behavior: https://uwm.edu/biology/research/ecology-evolution-and-behavior/. Students would enroll in thehttp://uwm.edu/graduateschool graduate program in the department of biological sciences at UWM (https://uwm.edu/biology/graduate/prospective-students/), the deadline for applications is December 1. The minimum requirements for admission to the Biology Department include an undergraduate GPA of at least 3.0 and GRE scores (both verbal and quantitative) in the 50 percentile or better. You can find more information from the Graduate School website http://uwm.edu/graduateschool/ Ecology, Evolution, and Behavior (EEB) | Biological Sciences < https://uwm.edu/biology/research/ecologyevolution-and-behavior / > uwm.edu The EEB Research Group strives to understand the natural world through the lens of broad conceptual theory supported by empirical evidence. Research areas offered by ...

All graduate students at UWM can be supported financially by teaching assistantships (TA) and receive a stipend, full tuition waiver, and health insurance. TA appointments are usually made at the 50% level, which involves a teaching commitment of 20 hours per week. MS students can expect TA support for up to 3 years and PhD students up to 5 years. You must apply by December 1 to be considered for a TA position. There are also other opportunities for funding, such as University wide fellowships that are generally based on GRE and GPA, which are given to students after they have been enrolled at UWM for one year. More information at https://uwm.edu/biology/graduate/funding/ To apply please send me an email (albertof@uwm.edu) including 1) a statement of research interests, 2) a summary of your previous academic and research experiences, and 3) a summary on how your research interests might fit our lab. Finally, please include a CV (with GPA and GRE scores).

Filipe Alberto

Associate Professor

Department of Biological Sciences

University of Wisconsin-Milwaukee

"albertof@uwm.edu" <abertof@uwm.edu>

### **UZurich PrimulaGenomics**

Open PhD Position in PlantHUB "Boosting technology transfer and responsible research and innovation in plant sciences" H2020-MSCA-ITN-2016

#### ESR5: "EFFICIENT CAPTURING AND THIRD-GENERATION SEQUENCING OF COMPLEX GE-NOMIC REGIONS".

PhD position for 36 month

Summary: Sequencing of complex genomic regions can be achieved by direct sequencing of long single molecules via third-generation sequencing. Targeted sequencing of long DNA stretches of interest is challenging. Current capturing methods are inefficient and too expensive to be used in every-day research. Nevertheless, multiple biological traits of both fundamental and commercial interest are determined by complex genomic regions (supergenes), whose functional analysis is hindered because their genomic sequence remains unknown. We aim to establish a protocol allowing us to specifically capture very long DNA stretches that could be directly funneled into commercially available third-generation sequencers (Pacific Biosciences and Oxford Nanopore). We will use this methodology to reveal the full sequence of the S-locus in Primula veris and to study its evolution and molecular genetics in a wide range of primrose species.

Job Description: The goal of this project is to develop a new methodology for capturing and sequencing complex genomic regions in a targeted way. Therefore, this position involves molecular laboratory work to develop and optimize capturing and sequencing protocols; bioinformatics work to analyse and interpret next-generation sequencing data; and evolutionary and functional genetic analyses of the S-locus (heterostyly supergene) in primroses. Building on published work by Elena Conti and Michael Lenhard, the project uses state-ofthe-art third generation sequencing technology to generate long sequencing reads, coupled with custom made bioinformatics pipelines to assemble and annotate these sequences. Recent development by Oxford Nanopore technology in combination with the methodology we will develop in this project may be used for future in-field screening applications. This project is aimed at addressing one of the fundamental questions of evolutionary biology, namely, the genetic makeup of the S-locus in primorses, via developing a new cutting-edge method for third-generation sequencing. This PhD position offers a unique opportunity to combine the experience of working for a market-leading private company that provides solutions for life sciences (BaseClear VB) with an academic research environment at the University of Zurich, offering world leading expertise in evolutionary biology research and cutting-edge improvements of technological advances in genomic sequencing.

The successful candidate will pursue the doctoral degree at the University of Zurich (Switzerland) and work 18 months at said University, and the other 18 months at BaseClear BV, in the Netherlands. Prof. Elena Conti (University of Zurich), Prof. Michael Lenhard (University of Potsdam), Dr. Peter Szovenyi (University of Zurich); Dr. Walter Pirovano and Dr. Daniël Duijsings (BaseClear BV, the Netherlands) will jointly supervise the successful candidate. The fellowship period includes frequent periods of trans-national mobility. The complete 36 months will be under a full-time working contract at BaseClear BV. Secondment periods are planned with University of Potsdam, Germany, for 6 months

Application deadline: November 15, 2016 Application documents: 1) Curriculum Vitae with list of publications; 2) motivation letter explaining why you are suitable for this position and indicating when you would be ready to start; maximum length: one page; 3) two letters of recommendation sent DIRECTLY to ContiElena@access.uzh.ch by each referee. Send your application (1 & 2) as ONE PDF DOCUMENT to ContiElena@access.uzh.ch using PlantHUB in the subject line. Qualifications: The successful candidate will have a M.Sc. degree in plant molecular systematics, plant evolution, plant molecular biology/genetics as well as strong analytical skills and excellent skills in plant molecular biology and bioinformatics. Experience in generating, handling, and analysing next-generation sequencing data including programming skills in R/Python/Perl is highly recommended. Language requirement: Proficient oral and written English skills Expected starting date: May 1, 2017 at the latest

Benefits: This program offers a three-year, full-time

position at BaseClear BV with varying workplaces as researcher with a salary and allowances according to EU regulations for Marie SkÅ<sup>3</sup>odowska-Curie Early Stage Researchers.

PlantHUB is funded by the H2020 PROGRAMME Marie Curie Actions - People, Initial Training Networks (ITN). PlantHUB offers challenging and exciting research positions in an international, multidisciplinary research network. The employers are leading European universities and

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## Vienna CichlidMating

We are searching for highly motivated students who would like to join our current project on mating systems and parental care behavior of two closely related cichlid species Neolamprologus caudopunctatus and Neolamprologus pulcher.

Master theses could address several different questions:

- Female preference for male partners that invest more in nest defense

- Parental care, egg cannibalism and hormones
- Intra- and interspecific competition for breeding sites
- Social assays with both species

We are looking forward to hosting master students with a keen interest in scientific questions and behavioral fish biology and are able to work independently as well as within a team. A Bachelor's degree preferably in Behavioral Ecology/Ethology or a related discipline is needed. Experience with fish is beneficial but not required. The project should be started ASAP (ideally October/November 2016). No funding is available, but we will provide support and assist the candidate if he or she wishes to apply for a grant.

Our daily communication is mainly in English. The Konrad Lorenz Institute of Ethology (https://www.vetmeduni.ac.at/klivv/) is part of the University of Veterinary Medicine Vienna/Austria. Vienna is the capital city of Austria and a continuous front-runner in life quality rankings. To apply (in English or German), please send a letter of motivation, providing a short overview of your interests and experience, and your CV to: Franziska.schaedelin@vetmeduni.ac.at

or filipa.cunha-saraiva@vetmeduni.ac.at If you are interested or have any further questions please don't hesitate to contact us.

Lemmel-Schädelin Franziska <Franziska.Schaedelin@vetmeduni.ac.at>

### VirginiaCommonwealthU Genomics

The Eckert laboratory (http://eckertlab.blogspot.com/) at Virginia Commonwealth University (VCU), Department of Biology (http://biology.vcu.edu/), is recruiting graduate students to start in the Fall semester of 2017. My preference is for students interested in developing a doctoral thesis as part of the VCU Integrative Life Sciences Ph.D. program, but the Department of Biology also has a strong M.S. program that is well funded. Students will have the opportunity to work on a variety of projects funded by the National Science Foundation and the United States Department of Agriculture, as well as be encouraged to develop their own projects nested within the larger research goals of the laboratory. Almost all projects in the laboratory utilize highthroughput DNA sequencing in combination with computational and statistical tools to test hypotheses about the genetic architecture of local adaptation. Typically, we work with populations of trees, including projects involving multiple species, but have expanded into the world of invasive insect species. The Department of Biology also has a vibrant group of evolutionary researchers working on molecular evolution, phylogeography, microbiome evolution, and the evolutionary consequences of gene flow.

If you have an interest in graduate school and a passion for evolutionary biology, please take a moment to check out my research interests (on my laboratory webpage), mentoring philosophy (http://mentoringphilosophyaje.blogspot.com/) and the graduate programs at VCU (Ph.D.: http:// /lifesciences.vcu.edu/academic-programs/phd-in-

integrative-life-sciences/; M.S.: http://biology.vcu.edu/graduate-program/ms-program-in-biology/). Deadlines to apply are January 10th for the Ph.D. program and January 15th for the M.S. program. Funding in both programs is in the form of competitive teaching and/or research assistantships. For the Ph.D. program, students in good standing with coursework and research, which are evaluated annually, receive support through stipends and tuition/fee waivers provided in the form of either graduate research assistantships (GRAs) or graduate teaching assistantships (GTAs). The M.S. program works similarly, but funding is only in the form of GTAs. For students in the Ph.D. program, funding is guaranteed for five years. For students in the M.S. program, funding is guaranteed for two years. If these programs seem to be a good fit to your plans for graduate school, please do not hesitate to contact me via e-mail (aeckert2@vcu.edu) or phone (+1-804-828-0800). If you contact me via e-mail, please include information about your research interests and career goals, previous schooling (e.g. unofficial transcripts), GRE scores, and, if possible, a sample of writing (e.g. a college term paper or publication).

As far as locality, VCU is located in downtown Richmond, Virginia. Richmond is a dynamic city with strong art and food scenes. The James River runs through downtown and provides opportunities for hiking, rafting, and kayaking. For example, my daily commute to work includes a three mile walk or bike ride mostly through the riparian forests of the James River where ospreys and bald eagles nest.

Andrew Eckert Assistant Professor Department of Biology Virginia Commonwealth Univeraeckert2@vcu.edu personal sity e-mail: website: http://ajeckert.blogspot.com/ laboratory website: http://eckertlab.blogspot.com/ "aeckert2@vcu.edu" <aeckert2@vcu.edu>

### WashingtonStateU EvolutionPlantMicrobes

The Porter lab at Washington State University, Vancouver, is recruiting graduate students for fall 2017. Our lab explores the evolutionary and ecological dynamics of plants and their microbial symbionts to test fundamen-

tal theory about cooperative interactions. We focus on environmentally acquired symbioses between plants and microbial mutualists such as nitrogen-fixing rhizobium bacteria. Our research projects range from the field, to the lab to the greenhouse and integrate approaches from quantitative genetics, ecological genetics and genomics.

Graduate students will have the opportunity to participate in a collaborative multi-year NSF-funded project with the Friesen lab at Michigan State University to investigate evolutionary and ecological shifts in plantsymbiont mutualism during plant invasions from Europe into North America. Students are also welcome to develop a research program aligned with their own interests and expertise on related topics in plant or microbial evolutionary ecology. The lab currently supports diverse projects ranging from examining how plant-soilmicrobial feedbacks impact succession post-eruption on Mount Saint Helens, to testing the importance of microbes to plant adaptation to heavy metals, to quantifying natural selection on cheating strategies in mutualism. Visit our research page to read more about the lab: https://labs.wsu.edu/stephanie-porter/ Graduate students will be supported through a combination of research assistantship in the Porter lab and TAship (5 years for PhD, 2 for MS) with the opportunity for summer funding. The PI will work with students to develop competitive applications for independent graduate funding. WSUV is a vibrant, rapidly growing institution located within the greater Portland/Vancouver metropolitan area, near the Columbia River, Cascade Mountains and coastal ocean, and as such offers an exceptional quality of life.

Interested students should send a copy of their CV, description of research interests, and unofficial copy of transcripts to stephanie.porter@wsu.edu.

#### Stephanie

Stephanie S. Porter Assistant Professor, School of Biological Sciences Washington State University, Vancouver Mailing address: 14204 NE Salmon Creek Ave, Vancouver WA 98686 stephanie.porter@wsu.edu || (818) 522-9662 || https://labs.wsu.edu/stephanie-porter/ "stephanie.porter@wsu.edu" <stephanie.porter@wsu.edu>

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### Alabama PlantSystematist

The University of Alabama Plant Systematist Position

The Department of Biological Sciences at The University of Alabama invites applications for a full-time (9month) tenure-track faculty position at the rank of As-

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sistant Professor in Plant Systematics to begin August 16, 2017. All taxonomic groups of vascular plants will be considered. Applicants whose research integrates field and museum-based studies with modern genomic approaches to address fundamental questions in taxonomy, systematics, biogeography, and evolution of vascular plants are encouraged to apply. The successful applicant will be expected to establish an active independent research program, attract extramural funding, and must be committed to excellence in teaching and mentoring undergraduate and graduate students. Ability to teach upper level courses in plant plant systematics, dendrology or field botany is desired and one ore more graduate courses in the candidate's area of expertise. The successful applicant is expected to curate the UNA Herbarium maintained by the Department of Biological Sciences and must provide evidence of curatorial experience and/or other relevant abilities. The Herbarium at the University of Alabama contains significant holdings of vascular plants from the USA and the neotropics, and particularly from SE USA freshwater habitats. Individuals interested in diversifying this actively growing collection are encouraged to apply. The successful candidate also would serve as the Department's liaison with the University of Alabama Arboretum. Candidates must have a Ph.D. in the Biological Sciences or a related field and postdoctoral (or equivalent job) experience.

A complete application includes (1) an application letter; (2) CV; (3) statement of research interests and goals; (4) statement of teaching interests and philosophy; and (5) a list of at least four references (including contact information).

Letters of reference will be requested by the search committee as appropriate. To apply, complete the online application at https://facultyjobs.ua.edu/postings/-39634 and upload all requested documents. Questions about the Plant Systematics position may be addressed to Dr. Juan Lopez-Bautista (jlopez@ua.edu; 205-348-1791). Consideration of applications will begin immediately and will continue until the positions are filled. Prior to hiring, the final candidates will be required to pass a pre-employment background investigation. The anticipated start date is August 16, 2017. Additional information about the Department of Biological Sciences and this available position can be found on our website at http://bsc.ua.edu. Applications from women and members of traditionally under-represented groups in Biology are especially encouraged. The University of Alabama is an Equal Opportunity/Equal Access Employer and actively seeks diversity among its employees. Minority and Women candidates are especially encouraged to apply.

Juan M. Lopez-Bautista, Ph.D. Professor and College of Arts and Sciences Leadership Board Fellow Department of Biological Sciences, The University of Alabama Tuscaloosa, AL 35487 205-348-1791 www.phycolab.ua.edu "Lopez-Bautista, Juan" <jlopez@ua.edu>

### Alaska EvolutionInstructor

#### INSTRUCTOR FOR EVOLUTION COURSE AT UNI-VERSITY OF ALASKA

Adjunct instructor sought to teach undergraduate, senior-level evolution course at University of Alaska Southeast in Juneau. Evolution is the capstone course for Biology and Marine Biology students and includes lecture (3 credits) and lab/discussion (2 credits). Course runs ~January 13-May 5, 2017. All course materials from previous instructor are available. Teaching experience and PhD in biological science are preferred, but not required. Please send cover letter and CV to Carolyn Bergstrom (cabergstrom@alaska.edu) or David Tallmon (datallmon@alaska.edu) by Oct 1, 2016.

"datallmon@alaska.edu" <datallmon@alaska.edu>

## **BaylorU EvolutionaryMedicine**

The Department of Biology is searching for an evolutionary biologist with research expertise related to the phenotype-genotype relationship. Preference given to those individuals researching this relationship within the context of animal development, metabolism, virulence, disease, behavior, or comparative genomics. The appointee will have a strong research background in an area of evolutionary biology with relevance to medicine or human biology, and will complement our faculty's strengths in organismal and evolutionary biology, molecular and population genetics, ecology, developmental biology, animal physiology and biomedical science. In addition to the Biology Department, the appointee will have opportunities for vigorous collaboration with faculty at Baylor College of Medicine, the Baylor Research and Innovation Collaborative, and Baylor Scott & White Health. Minimum qualifications include a Ph.D, M.D., or equivalent degree in human/evolutionary biology, molecular genetics, bioinformatics, or a related field and a demonstrated capacity to excel in a collaborative, transdisciplinary research environment. Applicants must show evidence of, or potential for, outstanding teaching and are expected to develop and maintain an internationally recognized, extramurally funded research

program. Desired qualifications for all candidates include mentoring and supporting students, and a strong record of field, laboratory, and/or model-based research.

Applications will be reviewed upon receipt and will be accepted until the position is filled. To ensure full consideration, complete applications must be submitted by 10/30/2016. Appointment is effective for the fall semester of 2017 (August 2017). APPLICA-TION PROCEDURE: Interested applicants should submit a cover letter, curriculum vitae, statement of current and planned research (4 pages max.), three recent publications, teaching philosophy, transcripts (official transcript for doctoral degree), and contact information for three professional referees to: Myeongwoo Lee, PhD., Search Committee Chair Department of Biology Baylor University One Bear Place 97388 Waco, Texas 76798-7388 TEL: 254-710-2911 Electronic submission is preferred and should be submitted to: EvolMedicine\_Search@Baylor.edu

patrick.danley@gmail.com

### CaliforniaStateU ComputationalBiology

The faculty of the Biology Department in the College of Natural and Behavioral Sciences at California State University Dominguez Hills invites applications from individuals for a Tenure Track position in the Biology Department. Applications will be reviewed starting October 1, 2016.

The Position We are seeking either a marine biologist or computational biologist who has passion for teaching biology and conducting research with undergraduates and Master's students. Teaching responsibilities may include general education, introductory biology, nonmajors courses, as well as upper-division and graduate courses in the candidate's specialty.

Biology Department, College of Natural and Behavioral Sciences The Department of Biology offers four baccalaureate programs, an M.S. program, and two Minor programs. Recognizing the crucial role of research in science education, the Biology Department is committed to offering research opportunities to all interested and qualified students. The Department also offers courses that satisfy General Education requirements, and service courses for majors in Clinical Sciences, Health Sciences, Liberal Studies, Physical Education, and Human Services.

Mission The fundamental mission of the Biology Department is to provide an intensive, progressive, and balanced learning experience in cell and molecular biology, organismal biology, microbiology, and environmental biology to serve a student population that is highly diverse, both in educational and ethnic background, and in academic and career goals.

For more information see: http://www4.csudh.edu/biology/index The Ideal Candidate The ideal candidate will be committed to teaching, mentoring, and advising a highly diverse student population. The position requires the establishment of an active research program, as well as service to the university. The candidate may have the opportunity to work with the Center for Innovation in STEM Education (CISE) to innovate K-16 education.

Qualifications Background Checks The successful candidate is required to complete a thorough background check and the employment offer can be rescinded if the background check reveals disqualifying or falsified information.

Minimum Qualifications - A Ph.D. in biology or a related field is required. - Experience in teaching undergraduates from diverse age, socioeconomic, cultural, and academic backgrounds.

Preferred Qualifications - The applicant must have demonstrated potential for effective teaching of lower and upper division undergraduate and graduate courses in biology and related fields, with high academic standards using a variety of methodologies. The applicant must possess scholarly and professional competence as demonstrated by a record of research publications. The applicant must be interested in mentoring and working closely with undergraduate and Master's students both in the classroom and in research. The applicant must be willing to participate actively in curriculum development and to work cooperatively within a multidisciplinary department and college. The applicant must have demonstrated ability and/or interest in working in a multiethnic, multicultural environment.

For more information please visit https:/-/my.csudh.edu/psp/paaprd/EMPLOYEE/-HDHPRD/c/HRS\_HRAM.HRS\_CE.GBL? Page=HRS\_CE\_JOB\_DTL&Action=A&JobOpeningId)43&SiteId=1&F

aeranthes@gmail.com

### ClemsonU 2 EvolutionaryBiol

Two Assistant Professor Positions in Ecology and/or Evolution Clemson University

The Department of Biological Sciences at Clemson University invites applications for two tenure-track Assistant Professor positions with an expected start date of August 2017. We seek creative, interactive individuals who address cutting-edge research questions in Ecology and/or Evolution using animal, plant, or microbial systems. The Department awards undergraduate and graduate degrees in Biological Sciences and Microbiology, as well as graduate degrees in Environmental Toxicology. We invite applicants who will complement and enhance the department's existing research strengths (http://www.clemson.edu/science/departments/biosci/). We anticipate hiring a total of six faculty in the areas of Ecology, Evolution, and Organismal Biology over the next three years.

Clemson University, located on the shores of Lake Hartwell in the foothills of the Blue Ridge Mountains, is South Carolinas public land-grant university. The University's research resources include the Palmetto high performance computing cluster, the Clemson University Genomics and Computational Biology Laboratory, the Clemson University Light Imaging Facility, the Campbell Museum of Natural History, and the 17,500 acre Clemson Experimental Forest.

The University and Department are committed to building a diverse body of faculty scholars who are dedicated to working and teaching in a multicultural environment (http://www.clemson.edu/inclusion/). We are also supportive of the needs of dual career couples.

Successful candidates will hold a Ph.D. by the time of appointment and are expected to establish a nationally recognized and externally funded research program, demonstrate teaching excellence, and participate in relevant graduate programs.

Applicants should submit the following items via Interfolio at https://apply.interfolio.com/37156: (1) letter of application; (2) CV; (3) statement of research interests, accomplishments, and plans; (4) statement of teaching interests and experience; (5) statement describing past experience in activities that promote diversity and inclusion and/or plans to make future contributions; and (6) up to three reprints in one PDF. Applicants should also arrange, through Interfolio, for three confidential letters of recommendation to be submitted. Review of applications will begin on October 15, 2016 and will continue until the positions are filled. Specific inquiries may be directed to Dr. Saara DeWalt, saarad@clemson.edu<mailto:saarad@clemson.edu>, chair of the search committee.

Clemson University is an AA/EEO employer and does not discriminate against any person or group on the basis of age, color, disability, gender, pregnancy, national origin, race, religion, sexual orientation, veteran status or genetic information. Clemson University is building a culturally diverse faculty and staff committed to working in a multicultural environment and encourages applications from minorities and women.

Margaret Ptacek <mptacek@clemson.edu>

#### **ColbyC Maine Genomics**

Colby College in Waterville Maine is seeking a biologist with expertise in Genomics to fill a tenure-track position as Assistant Professor of Biology to begin September 1, 2017. A strong background in analysis of genomic or transcriptomic data, a PhD before the starting date, and a commitment to undergraduate education are expected; postdoctoral experience is desirable. Teaching involves the equivalent of five courses per year (four in the first year), with laboratories constituting a portion of that load. The successful candidate will teach a 200-level course with laboratory in genomics; other courses will include an upper level course in the candidate's area of specialty and a course at the 100-level in some years. An active research program, including supervision of undergraduate research, will be expected. An attractive startup package is available. This position is part of a new interdisciplinary program in Computational Biology, with coordinated searches in the departments of Computer Science and Mathematics and Statistics, and the launch of a new major in Computational Biology. Additional local possibilities for collaboration and co-mentoring of students include scientists at The Jackson Laboratory or the Bigelow Laboratory for Ocean Sciences.

To apply, submit a letter of application, statement of teaching and research interests, curriculum vitae, undergraduate and graduate transcripts, and three letters of recommendation to apply.interfolio.com/36931

Application review will begin October 13, 2016 and will

continue until the position is filled.

Questions about this position should be directed to: biologysearch@colby.edu <mlburns@colby.edu>

Colby is a private, coeducational liberal arts college that admits students and makes employment decisions on the basis of the individual's qualifications to contribute to Colby's educational objectives and institutional needs. Colby College does not discriminate on the basis of race, color, gender, sexual orientation, gender identity or expression, disability, religion, ancestry or national origin, age, marital status, genetic information, or veteran's status in employment or in our educational programs. Colby is an Equal Opportunity employer, committed to excellence through diversity, and encourages applications from qualified persons of color, women, persons with disabilities, military veterans and members of other under-represented groups. For more information about the College, please visit our website: www.colby.edu "jstone@colby.edu" <jstone@colby.edu>

### ColoradoC EvolutionaryBotany

The Department of Organismal Biology and Ecology at Colorado College announces a tenure-track, Assistant Professor position in Plant Systematics & Botany to begin in August 2017. Application deadline is September 16, 2016.

Responsibilities include teaching the following six courses: an independent study research class, introductory Biology of Plants, Field Botany, and upper-level courses such as evolution or conservation biology. Field skills are essential, and familiarity with Rocky Mountain or Southwestern ecosystems is highly desirable. The ability to sustain and develop the high-quality 12,000specimen herbarium collection is also highly desirable. We seek applicants with a demonstrated ability to mentor student research projects and maintain an active research program in botanical sciences, such as phylogenetics, systematics, and evolution. Resources include a modern research greenhouse and SEM/TEM facilities.

Apply at: https://employment.coloradocollege.edu/postings/2534 Colorado College is a private, undergraduate, highly selective, liberal arts institution enrolling approximately 2000 students. The college uses the Block Plan calendar in which students take one class at a time, allowing for significant field and research experiences. The College is committed to increasing the diversity of the college community. Further, Colorado College is dedicated to the development of faculty and staff who are committed to inclusive practices in teaching, learning, and working. Candidates who can contribute to that goal are particularly encouraged to apply.

PhD and teaching experience required, post-doctoral experience preferred. Applications should include: (1) description of relevant professional background, (2) statements of teaching philosophy and research interests, (3) curriculum vitae, (4) unofficial copies of undergraduate and graduate transcripts, and (5) three letters of recommendation. Information about Colorado College and OBE can be found at our web site: https://www.coloradocollege.edu/academics/dept/obe/. Colorado College is an equal opportunity employer committed to increasing the diversity of its community. We do not discriminate on the basis of race, color, age, disability, national origin, religion, gender, sexual orientation, gender identity or expression in our educational programs and activities or our employment practices.

Questions about this position may be emailed to Shane Heschel (Shane.Heschel@coloradocollege.edu) with subject "BOTANY SEARCH".

Shane Heschel <Shane.Heschel@ColoradoCollege.edu>

### DukeU EvolutionaryAnthropology

Duke University: Evolutionary Anthropology Faculty Position

The Department of Evolutionary Anthropology at Duke University invites applications for a tenure-track faculty position at the Assistant Professor level to begin in July or August, 2017. Candidates with specialties in any area of evolutionary anthropology are invited to apply. Consideration will be given to applicants in areas of our current strength (e.g., primate behavioral ecology and/or cognition, evolutionary endocrinology and physiology, paleontology, and functional anatomy) but also to those studying any aspect of human biological variation, genetics and genomics, growth and development, demography, and human adaptation to climate or disease. The successful candidate must hold a Ph.D. and demonstrate the potential to build an outstanding, externally funded research program. In addition, they must contribute to teaching at both the undergraduate and graduate levels. and fortify the department's interdisciplinary links to other units in the University.

To apply, please submit a cover letter, curriculum vi-

tae, statements of research and teaching interests, three representative reprints and the contact information for three potential referees to our job posting at Academic Jobs Online: https://academicjobsonline.org/ajo/jobs/-7666. Applications received by November 1, 2016 will be guaranteed consideration. Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual's age, color, disability, genetic information, gender, gender identity, national origin, race, religion, sexual orientation, or veteran status.

Susan Alberts Chair, Department of Evolutionary Anthropology The Robert F. Durden Professor, Departments of of Evolutionary Anthropology and Biology Duke University Box 90338, Durham NC, 27708, Ph 919-660-7272, Fax 919-660-7293 http://sites.duke.edu/albertslab/ https://amboselibaboons.nd.edu "Susan Alberts, Ph.D." <a href="mailto:</a> (Susan

## DukeU ResTech EvolutionaryGenetics

Dear Colleagues,

I'd appreciate it very much if you would bring this position to the attention of any qualified candidates. Thanks very much!

\*\*\*\*

Research Technician, Biology Department, Duke University:

A Research Technician is wanted to participate in research in evolutionary ecology and genetics of plants. Research in this lab combines work in the field, laboratory, and greenhouse to study genotype-environment interactions and ecological epigenetics. This position requires at least a bachelor's degree in Biology or related field, experience in plant care, impeccable organizational skills, and familiarity with molecular biology procedures such as DNA and RNA extraction, PCR, and RNA quantification. Duties include plant care, molecular and biochemical work; maintenance of field/greenhouse experiments, data management, general lab and clerical tasks. Motivated individuals will have the opportunity to participate in data analysis, presentation, and manuscript writing. Available November 2016. Currently for one year, potentially renewable for two or more. Competitive salary and full Duke benefits. Duke University is an Equal Opportunity/Affirmative Action

employer.

Please send CV and names of references to Kathleen Donohue: k.donohue@duke.edu

REVIEW OF APPLICATIONS WILL BEGIN 1 OC-TOBER 2016

Kathleen Donohue Department of Biology Duke University Box 90338 Durham, NC 27708

k.donohue@duke.edu

### **DukeU SpeciesInteractions**

Duke University's Department of Biology is seeking to fill a tenure-track Assistant Professor faculty position in Ecology to begin in August 2018. We are searching for candidates who use empirical or theoretical approaches to study species interactions of any kind and how they are shaped by or modulate ecological responses to environmental changes, broadly defined. We welcome candidates with research interests in any taxon and at any level of organization. Application materials include a curriculum vitae, a research statement, a statement of teaching interests and philosophy, and names of three references. Applications should be submitted through Academic Jobs Online: https:/-/academicjobsonline.org/ajo/jobs/8134. Applications received by November 1, 2016 will be guaranteed full consideration. Duke University, located in Durham, North Carolina, is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual's age, color, disability, genetic information, gender, gender identity, national origin, race, religion, sexual orientation, or veteran status.

For more information, contact:

Dr. Katia Koelle Associate Professor Department of Biology Duke University Durham, NC 27708

katia.koelle@duke.edu

919-660-9457

"katia.koelle@duke.edu" <katia.koelle@duke.edu>

### **EmoryU EvolutionaryBiol**

Emory College of Arts and Sciences at Emory University in Atlanta, GA, announces a special initiative to recruit excellent tenure- and lecture-track faculty with a strong, established commitment and history of mentoring students from underrepresented and underserved populations. These faculty appointments will contribute to Emory's commitment to excellence and diversity in the sciences.

We encourage applications from evolutionary biologists to complement the research and teaching in the College, such as is done in the Departments of Biology and Physics. Link for the Tenure Track search https://apply.interfolio.com/37231 Link for the Lecture Track search: https://apply.interfolio.com/37312 Please let me know if you have any questions.

Thanks, Jaap de Roode

Jacobus (Jaap) de Roode Associate Professor of Biology Director of Graduate Studies, Population Biology, Ecology and Evolution Emory University Biology Department 1510 Clifton Road Atlanta GA 30322, USA office phone: +1 404 727 2340 email: jderood@emory.edu website: http://www.biology.emory.edu/research/deRoode/ "De Roode, Jacobus" <jderood@emory.edu>

### **ETHZurich ForestEvolution**

ETH Zurich seeks applications for a generously funded assistant professorship in any area of ecology or evolutionary biology with explicit relevance to forest ecosystems. Internal funding sufficient for approximately two postdoctoral salaries and additional research costs is expected to be associated with the position.

Zurich is home to a vibrant community of ecologists and evolutionary biologists at ETH Zurich, the University of Zurich and other institutions (see www.ibz.ethz.ch/research/eco-evo-zurich.html). Zurich is consistently ranked as one of the most liveable cities in the world and the area offers many cultural and outdoor attractions. Questions about the position can be directed to Greg Velicer (gregory.velicer@env.ethz.ch) or James Kirchner (kirchner@env.ethz.ch).

The official job ad follows:

Assistant Professor (Tenure Track) of Ecology and Evolution in Forest Ecosystems

The Department of Environmental Systems Science (www.usys.ethz.ch) at ETH Zurich invites applications for the above-mentioned position.

The assistant professor develops and leads an internationally recognized research programme in Ecology and Evolution in Forest Ecosystems and is expected to integrate into research activities in related fields at ETH Zurich. He or she will use any relevant experimental, comparative and/or theoretical approaches to explore ecological and/or evolutionary processes that affect the composition, diversity, structure, dynamics and function of forest communities. The search is not limited to plant-based research, hence scientists working with non-plant forest components are encouraged to apply.

The new professor will teach in the Master of Environmental Sciences programme, offering subjects in Forest and Landscape Management that are also relevant to Ecology and Evolution. Undergraduate level courses are taught in German or English and graduate level courses in English.

Assistant professorships have been established to promote the careers of younger scientists. ETH Zurich implements a tenure track system equivalent to other top international universities.

To apply: https://www.ethz.ch/en/the-eth-zurich/working-teaching-and-research/faculty-affairs/ausgeschriebene-professuren/systemorientiertenaturwissenschaften/Assistenzprofessur-Ecology-

and-Evolution-in-Forest-Ecosystems.html Applications should include a curriculum vitae, a list of publications, a statement of future research and teaching interests, the names and contact details of three referees, and three of your most important achievements. The letter of application should be addressed to the President of ETH Zurich, Prof. Dr. Lino Guzzella. The closing date for applications is 31 October 2016. ETH Zurich is an equal opportunity and family friendly employer and is further responsive to the needs of dual career couples. We specifically encourage women to apply.

gregory.velicer@env.ethz.ch

## GeorgiaSouthernU EvolutionaryGenomics

Georgia Southern University's Department of Biology invites applications for two Assistant Professor positions in Cell Biology and Functional or Evolutionary Genomics. The full text advertisement, including information about the department, faculty, and the complete position announcement with all qualifications and application instructions, is available at http://www.bio.georgiasouthern.edu .Deadline for receipt of applications is October 31, 2016. Georgia is an open records state. Georgia Southern is an AA/EO institution. Individuals who need reasonable accommodations under the ADA to participate in the search process should contact the Associate Provost. However, we are open to diverse research areas for the cell biology search, including but not limited to: pharmacology, neurobiology, and cancer biology. In each of these cases, an evolutionary approach is possible, for example evolution of drug resistance and epigenetic mechanisms influencing morphology and function of nerve cells.

Emily A. Kane Assistant Professor of Biology Georgia Southern University emilyakane.blogspot.com Twitter: @Nautichthys

Emily Kane <ekane@georgiasouthern.edu>

### IthacaCollege Teaching EvolutionEcology

The Biology Department at Ithaca College seeks applicants with expertise in evolutionary biology and ecology for a full-time, non-tenure-eligible appointment as an Assistant Professor on a renewable three-year contract. The primary responsibility is to coordinate and teach a large-enrollment introductory Ecology and Evolution course for allied health students, including lectures and laboratory sessions. Additional biology courses (for majors or non-majors) will be included for a total teaching responsibility of 12 contact hours in each of fall and spring semesters. We are particularly eager to receive applications from members of communities historically underrepresented in higher education. Candidates must apply online at https://ithaca.peopleadmin.com/postings/8616; review of applications will begin immediately and full consideration will be given to all applications received by October 7, 2016.

Full position description available at https:/-/ithaca.peopleadmin.com/postings/8616 "bminer@ithaca.edu" <bminer@ithaca.edu>

> LakeForestC Illinois EcolBehaviorEvolution

TheLake Forest College Biology Department invites applications for a tenure-track faculty position at the Assistant Professor level, starting August 2017. We are seeking a highly qualified candidate to teach in the area of ecology, behavior, and evolution and to conduct research with undergraduates. Candidates will be expected to teach at all levels of the undergraduate curriculum, including the ecology and evolution core course and an upper-level course in the candidate's area of expertise. Candidates must have postdoctoral experience and will be expected to develop an active research program leading to publication with undergraduates. Start-up funds and excellent research facilities are available.

Ahighly selective liberal arts college located on Chicago's North Shore, Lake Forest College enrolls approximately 1,600 students from more than 40 states and from more than 70 countries. Lake Forest is one of the most diverse small colleges in the Midwest with nearly 40% of our student body comprised of domestic minority and international students. The majority of our STEM pool is female, with a significant number of first generation college students and traditionally underrepresented students in STEM.

AtLake Forest College, the quality of a faculty member's teaching is the most important criterion for evaluation. The College also expects peer-reviewed publications and active participation in the College community. Lake Forest College embraces diversity and encourages applications from women, members of historically underrepresented groups, veterans, and individuals with disabilities.

Pleasesend your curriculum vitae, statement of specific teaching interests and philosophy, research plan with undergraduates, and please request letters from three recommenders. All documents should be sent electronically to Dr. Karen Kirk, biosearch@lakeforest.edu. Review of applications will begin September 12, 2016.

AlexanderW. Shingleton AssociateProfessor

Departmentof Biology LakeForest College 555North Sheridan Road LakeForest, IL 60045

Ph:847-735-6049 web:shingletonlab.org

shingleton@mx.lakeforest.edu

#### **MichiganStateU Bioinformatics**

The Department of Computational Mathematics, Science and Engineering (CMSE) is looking for a specialist in computational biology, genomics and bioinformatics with an enthusiasm for teaching to lead and direct a training program for biological scientists. The Bioinformatics Specialist will coordinate the development of a suite of short courses that will constitute a Bioinformatics training program for undergraduate, graduate and postgraduate researchers in the biosciences.

We envision that topics in this program will include bioinformatics and programming for biologists, gene expression, protein'DNA interaction analysis, genetic mapping, variant analysis, genome assembly and annotation, comparative genomics, and metagenomics. The candidate will be responsible for long term curation of the teaching materials, class scheduling, coordinating with associated instructors, and instruction with the assistance of undergraduate, graduate and postgraduate teaching assistants.

Position Responsibilities: The Bioinformatics specialist will work in collaboration with an advisory committee from the biology faculty at MSU to design and initiate a new program aimed at developing the basic analytical and computational bioinformatics and genomics competencies needed to carry out biological research in the 21st century. The successful applicant will be expected to: 1) coordinate the newly formed graduate bioinformatics program; 2) and contribute to the teaching missions of this new program

Basic qualifications: A PhD in Biology, Bioinformatics, Biostatistics, Genomics, Genetics, or related areas. Strong and demonstrated experience in sequence analysis, genomics, genome assembly, gene expression analyses and associated statistics is required. Strong organizational, communication, and time management skills are also required to collaborate with faculty members from different disciplines. Strong interpersonal skills when relating to researchers.

Desired qualifications: Previous experience in teaching, designing and leading bioinformatics workshops and curriculum development is highly valued. Experience with programming languages used in biological sciences (e.g. Perl/Python/BioPython, MATLAB, R/BioConductor).

Salary and Benefits: Salary is competitive and commensurate with education and experience. Michigan State University provides its faculty and academic staff with a variety of benefits, which are among the best in academia including a retirement program, and health, prescription drug, dental, and life insurance coverage http://www.hr.msu.edu/benefits/ Application Process: Please submit the following: 1) a 1-page letter of interest; 2)a 1-page statement of teaching philosophy; 3) a detailed curriculum vitae including a summary of teaching experience and 4) the names and full contact information for three references. These items should be sent to: MSU Applicant Page "https://jobs.msu.edu/-(Use position ID 4018). Questions can be directed to Dr. Dirk Colbry, Chair of Search Committee, (colbrydi@msu.edu). Review of applications will begin on September 15, 2016, and will continue until the position is filled.

MSU is an affirmative-action, equal-opportunity employer and is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. The University actively encourages applications and/or nominations of women, persons of color, veterans and persons with disabilities. MSU is committed to providing a work environment that supports employees' work and personal life, and offers employment assistance to the spouse or partner of candidates for faculty and academic staff positions.

dirkcolbry@gmail.com

#### **NHM London Curators**

Dear All,

Positions are now open for Principal Curator in Charge (PCiC) in each the following Life Sciences Divisions: Insects / Invertebrates / Vertebrates

Please distribute to colleagues and collaborators who may be interested in applying for the posts, or who may be able to distribute to those interested. Further details and guidance for application can be found through the NHM website: http://www.nhm.ac.uk/about-us/careers.html [click on Search now'; link to PCiC posts]

Role description: This is an opportunity to take up a collections leadership role in a world-renowned institution with a unique scientific mission and public profile.

The successful applicants will join a large science group that comprises a group of approximately 300 scientists, that houses some of the largest and most significant scientific collections in the world, that is home to an internationally important natural history library, that includes a suite of advanced analytical and imaging facilities, and that has the opportunity to communicate science to a huge national and international audience.

Applications are open to collections-based scientists across the breadth of the NHM's activities in Life Sciences to take up newly developed roles as Principal Curator in Charge (PCiC), in each of 3 of the following Life Science Divisions: Insects, Invertebrates, and Vertebrates; a PCiC position has been filled already in the Division of Algae, Fungi & Plants. We are especially interested in applicants who combine disciplinary expertise with a demonstrated ability to use that expertise to lead access to and development of collections.

Salary: £43,350 per annum plus benefits Contract: Permanent role as Band 3 Principal Curator; 5 year rolling appointments as PCiC Closing date: 9am, Monday 17 October 2016

Suzanne Williams <s.williams@nhm.ac.uk>

### NHMU UUtah ConservationBiology

The University of Utah seeks to fill a tenure-track position at the Assistant Professor level focused on biodiversity science in the area of paleoecology or conservation biology, broadly defined. This is a joint hire between the Natural History Museum of Utah (NHMU) and either the Department of Geology & Geophysics or the Department of Biology at the University of Utah. This position is part of a newly-established, interdisciplinary cluster that brings together domain scientists, visualization researchers, and learning scientists to engage in novel research and outreach related to scientific issues and concepts in biodiversity. For more information, see https://nhmu.utah.edu/sustaining-biodiversity Candidates should have an excellent and sustained record of research using museum collections, ideally with both field and laboratory components. Candidates should have a demonstrated ability to generate extramural funding, and prior experience in a museum environment and with university teaching.

Areas of research emphasis could include fundamental questions of process and response in ecosystems to past and present global change; applying quantitative tools to understand geospheric and biospheric interactions over ecological and geological timescales; evolutionary, ecological, and/or biogeographic responses to perturbations such as landscape change, climate change, extinction, invasive species, etc.; and/or citizen science.

Responsibilities include: (1) meaningful collaboration with faculty in the Sustaining Biodiversity cluster as well as faculty at NHMU and in the relevant academic department; (2) development and maintenance of an ongoing program of scholarly research; some of the research is expected to be based in the Intermountain West (3) design, teaching, and coordination of core undergraduate courses in the relevant academic department; (4) teaching of graduate level courses in area of specialization; (5) advisement and supervision of graduate students; (6) development of research funding proposals to appropriate national agencies and foundations; (7) participation in Museum public programming; (8) engagement with the public and with Museum collections; and (9) participation in faculty governance at the department, college, and university levels.

Review of applications will begin October 15, 2016, and continue until filled. Submit an application on-line, including a CV, research samples, names and email addresses of three references, and three statements: research, teaching, and programmatic interests (i.e., describe how you see your research and academic work potentially impacting and contributing to exhibits and public programs at the Museum, particularly in collaboration with visualization and learning scientists). Candidates must have a completed Ph.D. by time of appointment. Questions may be directed to the Museum's Executive Director, Sarah George (sgeorge@nhmu.utah.edu).

https://utah.peopleadmin.com/postings/56783 Bryn Dentinger Curator of Mycology Natural History Museum of Utah Associate Professor of Biology University of Utah

Bryn Dentinger <br/> <bryn.dentinger@gmail.com>

### **NorthCarolinaStateU InsectBiodiversity**

Assistant Professor: Insect Biodiversity

The Department of Entomology & Plant Pathology at North Carolina State University invites applications for a 9-month tenure- track position at the Assistant Professor level. This faculty position is located on the main campus in Raleigh, North Carolina, and has a 70% research and 30% academic appointment. The selected individual is expected to develop an innovative research and teaching program in insect biodiversity, with an emphasis on using modern approaches in taxonomic and phylogenetic systematics. The incumbent will serve as Director of the NC State University Insect Museum, a regionally significant research collection comprising more than 2 million specimens. Collections development, specimen-based research, and graduate student mentorship in systematic entomology, and scholarly achievement in integrative insect biodiversity science, is expected. Significant opportunities exist for collaborations within the department and university, as well as with environmental, regulatory, and evolutionary biology organizations in Research Triangle Park (RTP), regional universities, and the North Carolina Museum of Natural Sciences.

The successful candidate will teach a core graduate level course in insect biodiversity in the Entomology Graduate Program. The incumbent will be expected to develop additional educational opportunities and contribute to the department's academic programs with guest lectures, seminars and/or specialized courses.

Minimum qualifications include a PhD in Entomology or a field of study directly related to the position description- interests in, and experience with, arthropod systematics are preferred. Preference will be given to candidates who have a collection-based research program and have experience with, and a commitment to, developing biological collections. In addition to excellence in undergraduate or graduate teaching, the incumbent is expected to have demonstrable skills in verbal and written communication, interpersonal relations, and procurement of extramural funding. The position includes a competitive and comprehensive compensation and start-up package.

2016, until the position is filled. For further information, contact the Entomology & Plant Pathology Department Head, Dr. Eric Davis (eric\_davis@ncsu.edu). For a complete job description and details for submission of

please reference

applications.

http://jobs.ncsu.edu/postings/74305 .

NC State is an equal opportunity and affirmative action employer. Women and members of other underrepresented groups are encouraged to apply. In addition, NC State University welcomes all persons without regard to sexual orientation or genetic information. We welcome the opportunity to work with candidates to identify suitable employment opportunities for spouses or partners. Inclusiveness and diversity are integral to NC State's commitment to excellence in research, engagement and education. The successful candidate will be expected to foster an environment that is welcoming of all groups.

Brian M. Wiegmann William Neal Reynolds Distinguished Professor Department of Entomology & Plant Pathology North Carolina State University Raleigh NC 27695-7613 ph: (919) 515-1653 fax: (919) 515-7746 brian\_wiegmann@ncsu.edu

Brian Wiegmann <br/>
bwiegman@ncsu.edu>

### **NTNU Norway** ComparativeAnimalPhysiology

Faculty of Natural Sciences and Technology Department of Biology

Associate Professor in Comparative Animal Physiology 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 comparative animal physiology.

Information about the department The strategy of the Department of Biology is to understand biological processes of life for sustainable use and conservation of the environment. The Department has an interdisciplinary approach to education and research that is deeply rooted in environmental and evolutionary biology as important links between the different sub-disciplines (cell- and molecular biology, systems biology, physiology, ethology, ecology, population genetics, marine biology, aquaculture, biodiversity and environmental toxicology).

Review of applications will proceed after December 2, The Department of Biology is the host of the Centre

for Biodiversity Dynamics (CBD), which is a National Centre of Excellence funded by the Research Council of Norway and NTNU.

The Department has at present 23 professors, 11 associate professors, 5 adjunct professors, 20 researchers and approximately 50 research fellows and postdocs.

For more information about the department and our activities, reference is made to the web page http://www.ntnu.edu/biology . Job description The announced position should strengthen our academic and research activities in animal organismal physiology and should have a research profile with a clear comparative focus. Scandinavia has a strong tradition of comparative physiological research where physiological systems and adaptations have been investigated, often following Krogh's principle and using non-model organisms. The Department has excellent animal housing facilities, suitable for performing experiments on terrestrial and limnic animals.

The Department focuses on developing integrated research groups where researchers within related fields can establish strong research and teaching units both within the physiology research group, but also with other research and academic groups within the department and NTNU. It is required that the new faculty member has a research profile that is complementary to that of the current staffs, particularly within animal physiology, and the Department of Biology as a whole. The Associate Professor will contribute to the continued development and strengthening of research and teaching in animal physiology, together with other scientific staffs in the department.

The new faculty member will have teaching responsibilities in animal physiology and will contribute to the further development of teaching programs within the framework of the educational curriculum and strategic vision of the Department. The teaching will be at graduate, post-graduate and PhD levels, including supervision of MSc and PhD fellows. The Associate Professor will also be required to participate in administrative assignments in the Department.

The position will have an approximately equal split between teaching and paid research time. The Associate Professors will also be required to participate in administrative work.

Qualifications The applicants should hold a PhD in zoophysiology or equivalent, and document a strong research and academic competence in comparative animal (excluding humans and aquaculture-related organisms) physiology. Abilities for interdisciplinary collaboration will be considered an advantage. Emphasis will be placed on the ability of the candidates to conduct internationally competitive research, and to build a successful research group. The candidate's ability to initiate projects related to the research area is also important. The position is open for all research topics and study organisms within the fields of animal physiology, evolutionary physiology or ecophysiology. The potential of the candidate to co-operate within the existing Physiology group is emphasized.

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

Applicants short-listed for the position will normally be invited for an interview. A demonstration of teaching ability, usually in the form of a trial lecture, is also required. Prominence will be given for personal traits which are deemed relevant for the execution of the role.

Academic staffs that is unable to document formal pedagogical qualifications at university- level teaching will be required to successfully complete a recognized course that gives a pedagogical qualification at university-level teaching within two years of taking

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### **OhioStateU VertebrateAdaptation**

Department: Evolution, Ecology and Organismal Biology Position: Integrative Vertebrate Biologist Rank: Assistant Professor

Description: The Department of Evolution, Ecology and Organismal Biology (EEOB, eeob.osu.edu) at The Ohio State University (www.osu.edu) seeks applications for a tenure-track Assistant Professor with a research focus in integrative vertebrate biology. The successful candidate will have demonstrated the potential to develop a leading research program in vertebrate organismal biology, with a possible focal area in, but not limited to, behavioral ecology (investigating the evolution and ecology of organismal behavior), organismal adaptation (investigating adaptation to changing environments using genomic or other techniques), or ecophysiology (investigating interactions between the physiological function of an organism and its environment in an evolutionary context).

The successful applicant will be expected to develop a strong externally funded research program, train graduate students, and be committed to developing into an excellent teacher at the undergraduate and graduate level. In addition, the successful applicant will be committed to the potential broader impacts of an academic position, e.g., broadening participation from underrepresented groups or increasing societal awareness about challenges and potential solutions to local and global problems.

Qualifications: Applicants should have a Ph. D. or equivalent, preferably with postdoctoral research experience, and a strong record of research funding and publication. Appointment is contingent on the university???s verification of credentials and other information required by law and/or university policies, including but not limited to a criminal background check.

About Columbus: The Ohio State University campus is located in Columbus, the capital city of Ohio. Columbus is the center of a rapidly growing and diverse metropolitan area with a population of over 1.5 million. The area offers a wide range of affordable housing, many cultural and recreational opportunities, excellent schools, and a strong economy based on government as well as service, transportation and technology industries (see http://liveworkplaycolumbus.com/). Columbus has consistently been rated as one of the Top U.S. cities for quality of life, and was selected as one of the Top 10 cities for African Americans to live, work, and play by Black Enterprise magazine. Additional information about the Columbus area is available at http://www.columbus.org Application Instructions: Apply to Academic Jobs Online at: https://academicjobsonline.org/ajo/jobs/-7955. A complete application consists of a cover letter, curriculum vitae, research and teaching statements, and three letters of reference. Evidence of professional service and leadership activities, including those that build diversity in the discipline, also will be considered in the evaluation of applications. Applications received prior to October 31, 2016 will receive priority consideration. Inquiries may be directed to Dr. Bryan Carstens at carstens.12@osu.edu.

The Ohio State University is committed to establishing a culturally and intellectually diverse environment, encouraging all members of our learning community to reach their full potential. We are responsive to dualcareer families and strongly promote work-life balance to support our community members through a suite of institutionalized policies. We are an NSF Advance Institution and a member of the Ohio/Western Pennsylvania/West Virginia Higher Education Recruitment Consortium (HERC).

The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation or identity, national origin, disability status, or protected veteran status.

Bryan C. Carstens Department of Evolution, Ecology, & Organismal Biology The Ohio State University 318 W. 12th Avenue Columbus, OH 43210-1293 web: https://carstenslab.osu.edu/ blog: http://u.osu.edu/carstens.12/ Google Scholar twitter: @bryanccarstens skype: bryan\_carstens office: 614.292.6587 cell: 734.474.8527 fax: 614.292.2030

Bryan Carstens <br/> <br/>bryan.c.carstens@gmail.com>

## **OIST** Okinawa TheoreticalEvolBiol

#### OIST.OkinawaJapan\_LifeSciences

The Okinawa Institute of Science and Technology Graduate University (www.oist.jp) invites applications for new faculty positions in Life Sciences: Cell Biology, Theoretical Biology, and Behavioral Learning Theory.

We are seeking applicants with excellent scholarship and creativity. Successful candidates are expected to establish an active program of research, supervise student research and teach in the graduate program. Generous research resources are provided which may be supplemented with external grants. Appointments will be Tenure-Track or Tenured. Starting date is flexible.

Applications should include: a letter of intent, CV, summary of previous research, research proposal, and a teaching statement. Information and instructions for submitting applications can be accessed at https:/-/groups.oist.jp/facultypositions \*Applications from strong candidates in other fields may be considered.

Application Deadline: Noon on Monday, October 24, 2016 (any time zone)

The OIST Graduate University offers a world-class research environment with an international research community and opportunities for interdisciplinary research. Research and teaching is conducted in English. The campus is located in a beautiful subtropical setting in Okinawa, Japan.

The OIST Graduate University is an equal opportunity educator and employer committed to increasing the diversity of its faculty, students and staff through proactive policies. We provide a family-friendly working environment, including a bilingual child development center on campus. Applications from women and other underrepresented groups are strongly encouraged. See https://groups.oist.jp/ged Inquiries should be directed to Professor Gordon Arbuthnott, Dean of Faculty Affairs,

faculty-recruiting@oist.jp

Sincerely yours,

Misato Matsuda

OIST Faculty Affairs Office Administrative Staff MAT-SUDA Misato (Ms.) 904-0495\$B2-Fl(B1919-1 1919-1 Tancha, Onna-son, Okinawa, 904-0495 Japan Phone: (098)966-8364 Email: misato.matsuda@oist.jp

Misato Matsuda <misato.matsuda@oist.jp>

### PasteurInst EvolutionaryBioinformatics

Postdocs in Evolutionary Bioinformatics and Molecular Epidemiology, Pasteur Institute, Paris, France.

Postdoc positions are available in the new Evolutionary Bioinformatics research unit (Head Olivier Gascuel) of the Pasteur Institute, Paris, France. The huge amount of molecular data available nowadays can help addressing new and essential questions in evolution. However, reconstructing evolution requires models, algorithms, and statistical and computational methods of ever increasing complexity. Out unit aims at developing new approaches that are able to tackle efficiently the ever increasing amount of sequence data, in the field of evolution and molecular phylogeny. The preferred applications relate to the evolution of viruses (notably HIV) and other pathogens, with the aim of correlating their evolutionary history to epidemiological data. Designing algorithms able to help in the surveillance of epidemics is one of our main goals. We recently published papers on these topics in Systematic Biology, Molecular Biology and Evolution, PNAS and AIDS. We also investigated theoretical questions, with publications in Algorithmica, Journal of Theoretical Biology and Mathematical Biosciences.

We are looking for postdocs to tackle large scale problems, related to ancestral reconstructions, phylogeography, dating, selection pressure measurements, and molecular epidemiology in general. One of the projects is to conceive a fast, probabilistic version of PhyloType (Chevenet et al, Bioinformatics 2013), within the H2020 European Project VIROGENESIS, and compare the results with those of Bayesian approaches. Other subjects will be discussed with the applicants.

Successful applicants will have high motivations for phylogenetics and/or molecular epidemiology, and good publication records. We'll also consider candidates having a solid experience in mathematical modeling of different biological data and questions. Strong skills in programming are required, along with a taste for collaborations and the ability to discuss with a variety of researchers, ranging from mathematics to experimental biology.

To apply please send to me in a single pdf document: a CV (~2 pages, with publication list), a cover letter explaining your research interests and your motivations to join us (~1 page), and three references who we'll contact to obtain advices on your application.

Olivier Gascuel

Directeur de Recherche au CNRS Head of the Evolutionary Bioinformatics unit, Pasteur Institute, Paris Head of the Center for Bioinformatics, Biostatistics and Integrative Biology, Pasteur Institute, Paris

URL: https://research.pasteur.fr/en/member/oliviergascuel/ Email: myfirstname dot myname at pasteur dot fr

Olivier GASCUEL <olivier.gascuel@pasteur.fr>

PennsylvaniaStateU EvolutionaryBiol

Assistant Professor of Biology

Penn State Beaver invites applications for an Assistant Professor of Biology (Tenure-Track, 36 weeks) to begin August 2017, or as negotiated.

Responsibilities: Teach three courses (9 credits) each semester that fulfill the requirements for the Biology degree as well as general education natural science requirements using traditional, hybrid and as pedagogically appropriate, online delivery methods. Courses include introductory level biology courses, as well as upper-level courses in plant biology, plant anatomy, plant physiology,

#### and/or ecology.

Experience in/ability to also teach courses in mycology (fungi) is preferred. Teaching assignments may require teaching day, evening and/or Saturday classes as needed. Publish in high quality refereed journals. Participate in professional organizations and in course, curriculum, and program development. Advise students and provide career guidance. Participate in campus, university, and community service activities.

Qualifications: Ph.D. in Biology (or related field) with specialization in botany/plant biology/plant ecology (willing to consider ABD).

Evidence of potential in research and publication is expected.

Commitment to high-quality instruction in a studentcentered environment is expected. Interest in active and collaborative learning, the instructional use of technology, and hybrid and online teaching is an advantage. Prior college-level and online teaching experience preferred. Enthusiasm for working in a multidisciplinary environment is important.

Campus Information: Penn State is a multi-campus public land-grant university that improves the lives of the people of Pennsylvania, the nation, and the world. Our instructional mission includes undergraduate, graduate, and continuing and distance education informed by scholarship and research. Our research, scholarship, and creative activities promote human and economic development through the expansion of knowledge and its applications in the natural and applied sciences, social sciences, arts, humanities, and the professions.

Penn State Beaver, one of more than 20 Penn State campuses state-wide, is a 100 acre suburban campus located 30 miles north of Pittsburgh and 20 miles north of the Pittsburgh International Airport with easy access to the excitement of the city and relaxation of the country. It is a mixed residential and commuter campus comprised of approximately 700 students. The student-centered faculty and staff are dedicated to excellence in teaching and learning. Students and faculty at Penn State Beaver have all of the resources of a major research university at their disposal including the opportunity to conduct undergraduate research supervised by faculty members, but in a small college atmosphere. Class sizes are small and the student/faculty ratio is low, so students can receive much individual attention. The campus offers baccalaureate degrees in Administration of Justice, Business, Communications, Information Sciences and Technology, Project and Supply Chain Management, and Psychology. The Business Department offers three options within the major: Marketing and Management, Accounting, Individualized. In addition students at the Beaver campus are offered the first two years of study for most of Penn State's approximately 160 academic majors. The student body is largely comprised of traditional aged students, although the campus makes a concerted effort to expand programs for non-traditional students. For more information about Penn State Beaver's Business Program visit http://beaver.psu.edu/academics. For more information about the campus, visit http://beaver.psu.edu/. Inquiries about the position should be addressed to Professor Carey McDougall, Director of Academic Affairs, cem33@psu.edu.

Applicants are required to apply online and upload a cover letter and curriculum vitae; other information pertinent to the position may also be included. Finalists will be asked to submit a list of references.

Closing Date: Application review begins October 15, 2016 and will continue until a suitable candidate is found.

Apply online at http://apptrkr.com/868474 CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to http://www.police.psu.edu/clery/, which will also provide you with detail on how to request a hard copy of the Annual Security Report.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.



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

### QueensU MathematicalBiology

The Department of Mathematics and Statistics, Faculty of Arts and Science at Queen's University, Kingston, Canada, invites applications for a Tenure-track faculty position in Applied Mathematics and Mathematics and Engineering at the rank of Assistant Professor with a starting date of July 1, 2017. Mathematical Biology is one of the targeted areas of the search.

Research in Mathematical Biology in our department is currently centred around evolutionary biology, ecology, and infectious disease epidemiology, with particular emphasis on the use of deterministic and stochastic dynamical systems, game theory, and optimization. For more information about the Mathematical Biology program, please see http://www.mast.queensu.ca/graduate/bio.php. The successful candidate in Mathematical Biology will be expected to work in any of these or complementary areas of research, and to contribute to both the graduate and undergraduate programs.

For the full position announcement and information on how to apply, please, visit: http:/-/www.mast.queensu.ca/positions/ . Troy Day <troy.day@icloud.com>

#### **Rutgers Genetics**

Faculty Position in Genetics

The Department of Genetics in the School of Arts and Sciences at Rutgers, The State University of New Jersey seeks an outstanding scientist to fill one of several new faculty positions in genetics. Appointment will be made at the Assistant Professor level. We are interested in individuals with research interests that will complement and expand our existing strengths, which include, but are not limited to: human genetics, developmental genetics, reproductive genetics, cellular genetics, population genetics, bioinformatics, statistical genetics, computational genetics, microbial genetics, epigenetics, cancer genetics, neurogenetics, and psychiatric genetics. Appropriate candidates will also be considered for appointment to the Human Genetics Institute of New Jersey. Core resources, startup funds, and laboratory space in the newly constructed Life Sciences Building will be provided.

The Department of Genetics is home to over 30 faculty members who use a broad range of approaches and experimental systems in numerous well-funded research programs. The department is part of a vibrant and interactive life sciences community that includes the School of Arts and Sciences Division of Life Sciences, the Waksman Institute, the Center for Advanced Biotechnology and Medicine, the Cancer Institute of New Jersey, the Institute for Quantitative Biomedicine, and the Robert Wood Johnson Medical School. A leading research university, Rutgers is a member of the AAU and the CIC and attracted over \$638M in research grant and contract funding in FY2016. The New Brunswick/Piscataway campus is located in suburban central New Jersey, close to New York City, Philadelphia, beaches, and countryside. For more information on the Department, our other ongoing searches, and Rutgers University see: http://genetics.rutgers.edu/faculty/faculty-recruitment. Candidates must have a Ph.D. and/or M.D., demonstrated record of significant research, the potential to make substantial contributions as an independent investigator, and have a commitment to teaching undergraduate and graduate students. Applicants should submit a CV, a detailed statement of research interests, a teaching statement, and full contact information for three individuals willing to provide letters of reference. Applications should be submitted electronically at https:/-/apply.interfolio.com/37129 and inquiries made to Ms. Mary Carmona, carmona@dls.rutgers.edu. Review of applications will begin October 15, 2016 and continue until the position is ï.

Rutgers, the State University of New Jersey, is an Equal Opportunity/Affirmative Action Employer. Qualified applicants will be considered for employment without regard to race, creed, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, genetic information, protected veteran status, military service or any other category protected by law. As an institution, we value diversity of background and opinion, and prohibit discrimination or harassment on the basis of any legally protected class in the areas of hiring, recruitment, promotion, transfer, demotion, training, compensation, pay, fringe benefits, layoff, termination or any other terms and conditions of employment.

Premal Shah Assistant Professor Department of Genetics Rutgers University http://theshahlab.org Premal Shah <premal.shah@rutgers.edu>

### **RutgersU LabTech EvolGenomics**

The Ellison Lab in the Human Genetics Institute of New Jersey at Rutgers University is seeking a research technician to assist in several projects involving evolutionary genomics in Drosophila. The technician will perform functional genomic experiments, including ChIP-seq, Hi-C, and RNA-seq, in an effort to understand the genetic and epigenetic basis of divergence in gene expression and genome architecture among various species of Drosophila. Basic molecular cloning techniques will also be performed to generate transgenic Drosophila stocks.

The candidate must be highly proficient at molecular biology techniques including nucleic acid extraction, molecular cloning, and PCR. Attention to detail, including strong organizational and record-keeping abilities, is essential.

Experience preparing Illumina sequencing libraries and performing ChIP-seq and/or Hi-C assays is strongly preferred. Candidates with higher degrees (M.S. and/or Ph.D.) are encouraged to apply.

Rutgers, The State University of New Jersey, is a leading national research university and the state of New Jersey's preeminent, comprehensive public institution of higher education. Rutgers University-New Brunswick took root nearly 250 years ago and is the flagship campus of the state's university system. We are the region's most high-profile public research institution and a leading national research center with a global impact.

Please apply using the following link: http://jobs.rutgers.edu/postings/32984 CHRISTOPHER EL-LISON <cee53@scarletmail.rutgers.edu> postdoctoral training. Teaching experience is desirable. Candidates must be committed to teaching, mentoring undergraduate and graduate (MS) students, and developing a competitive, externally-funded research program. Applications should include a curriculum vitae, separate statements of research and teaching interests, and copies of significant publications. Applicants should submit application materials and arrange to have three reference letters submitted to the Plant Evolutionary Biologist Search Committee, Dept. of Biology, San Francisco State University, using the link: https://academicjobsonline.org/ajo/jobs/7985. Review of applications begins 24 October 2016 and continues until a suitable candidate is chosen. For additional information, visit our web site at http://biology.sfsu.edu. SFSU and the Department of Biology are committed to a diverse professoriate that includes women and individuals from underrepresented minority groups. The University is an Equal Opportunity employer with a strong commitment to diversity and encourages applications from women, members of all ethnic groups, veterans, and people with disabilities.

Thank you, Tom Parker V. Thomas Parker Professor of Biology San Francisco State University 1600 Holloway Avenue San Francisco, CA 94132 1-415-338-2375 parker@sfsu.edu

Tom Parker cparker@sfsu.edu>

## SanFranciscoStateU PlantEvolution

Assistant or Associate Professor Position Tenure-Trackin Biology San Francisco State University

Plant Evolutionary Biologist. We seek outstanding candidates who are addressing fundamental problems in plant evolution, especially individuals whose interests complement existing departmental strengths in plant molecular genetics, ecology, and bioinformatics. We are searching for individuals who focus on phylogeny or speciation, aspects of ecological adaptation, population genetics, or phylogeography in an evolutionary context.

Responsibilities include teaching an upper-division fieldoriented plant taxonomy course with laboratory each year, and other courses in the undergraduate and graduate programs. The successful candidate should have strong communication skills and the ability to work effectively with faculty, staff and students from diverse ethnic, cultural, and socioeconomic backgrounds.

Qualifications for this position are a Ph.D. degree and

## Smithsonian EvolutionTropicalForests

#### TWO RESEARCH POSITIONS IN TROPICAL BIOL-OGY: MICROBIAL ECOLOGY and QUANTITATIVE FOREST ECOLOGY AND EVOLUTION

The Smithsonian Tropical Research Institute (STRI; www.stri.si.edu) is pleased to invite applicants to fill two permanent research positions. The first position is part of a new initiative, made possible by generous support from the Simons Foundation, to conduct research on functional roles played by microbes in tropical forests. The second position is for a quantitative biologist conducting research on the ecology and evolution of tropical forests. Successful candidates will develop outstanding, independent research programs, supervise students and post-doctoral fellows, collaborate with Smithsonian staff, and provide service to STRI.

STRI is headquartered in the Republic of Panama, with

modern research facilities, a library with extensive holdings in the natural and anthropological sciences, and field stations throughout the Republic of Panamá. Staff scientists maintain research programs within a worldwide network of collaborators at diverse academic institutions. Opportunities for mentoring young scientists are available through an internal fellowship program. Formal teaching is possible through educational programs with affiliated universities, but not required.

Incumbents will complement existing strengths at STRI, and within STRI's Center for Tropical Forest Science/Smithsonian Forest Global Earth Observatory, including, but not limited to, community and population ecology, ecosystem biology, evolutionary ecology, soilplant interactions, microbial ecology of forests, plant physiology, animal behavior and human impacts on tropical forests. Both positions are based in the Republic of Panama. Early- to mid-career candidates are especially encouraged, but applicants at all postdoctoral stages will be considered.

Minimum Qualifications: A Ph.D. and post-doctoral research experience in a relevant field, outstanding publication record, demonstrated success in obtaining grants, and a commitment to communicating science to the public. Demonstrated experience with bioinformatics (microbial biologist) and database management (quantitative biologist) will be an advantage.

To Apply: Interested candidates should submit a cover letter, a summary of research accomplishments and interests, curriculum vitae, three to five significant publications as separate PDFs, and the names and contact information of three references.

Send applications electronically to strisearch@si.edu. Address inquiries to Dr. Allen Herre, Chair, Microbial Ecology Search Committee at HerreA@si.edu or Dr. Helene Muller-Landau, Chair, Quantitative Forest Ecology Search Committee, at MullerH@si.edu.

Positions are open until filled; review of applications will begin on 2 December 2016.

STRI is an equal opportunity employer and is committed to diversity in its workforce. Appointments are made regardless of nationality.

Job announcement: http://www.forestgeo.si.edu/article/248/ "MullerH@si.edu" <MullerH@si.edu>

## SpelmanC Atlanta TeachingEvolution

Spelman College seeks teacher/scholars dedicated to excellence in teaching and to the continued enhancement of the academic environment for students and colleagues. Founded in 1881, Spelman College is a private four-year liberal arts college located in Atlanta, GA. The oldest historically Black college for women in the United States, Spelman is a member of the Atlanta University Center Consortium and Atlanta Regional Consortium for Higher Education. With one of the largest majors at Spelman, the Biology Department is nationally recognized for its role in preparing women of color for graduate and professional studies in the sciences.

The College invites applications to fill a tenure-track appointment in the Biology Department beginning August 2017, at the rank of Assistant Professor. All tenure-track candidates are expected to have a demonstrated interest in liberal arts and science education, be able to contribute effectively to undergraduate teaching, aid in curriculum development, provide service to the Department and College, as well as establish a vigorous research program appropriate to a liberal arts environment.

#### JOB REQUIREMENTS:

Qualifications: Ph.D. or equivalent in the biological sciences and post-doctoral research experience. The ideal candidate will have a track record of teaching experience and mentoring undergraduates in research.

Responsibilities include: Teaching an introductory biology course either at the molecular or organismal level. The candidate will also develop advanced elective courses related to their research interests. Experience in systems or quantitative biology or use of an animal model is a plus.

Competitive salary and an excellent benefits program are available. To apply for the position, please upload: a letter of interest; curriculum vitae (with contact information); a one-page statement of teaching philosophy; a statement of research interests, and a list of three potential recommenders. Copies of unofficial undergraduate and graduate transcripts are also required with the application. Excellence in both teaching and research productivity are expectations of the position. After initial review, three letters of recommendation will be requested directly from the list supplied by the candidate. Questions may be addressed to Ms. Michelle Meadors (mmeadors@spelman.edu) in the Faculty Support Office.

Review of applications will begin November 1st and continue until the position is filled.

To APPLY, copy and paste on the link address below to submit an electronic application with required attachments. Do not click APPLY ONLINE.

Tinyurl.com/spelmanbio2016

Spelman College is an EOE/Minority/Female/Disabled/Veteran/Title IX Employer and

participates in E-Verify.

Jennifer Kovacs, Ph.D. Assistant Professor of Biology Spelman College Atlanta, GA 30030 jkovacs@spelman.edu

Jennifer Kovacs <alfred.r.wallace@gmail.com>

#### **TexasAMU EvolutionaryGenomics**

The Biology Department at Texas A&M (the main campus in College Station) has openings for TWO tenuretrack positions in evolutionary genomics, very broadly defined. The following advertisement appeared in last week's issue of Science:

The Department of Biology at Texas A&M University invites applications for two tenure-track Assistant Professor positions in evolutionary genomics, starting in the fall of 2017.

We will consider candidates pursuing innovative research in any area of evolutionary genomics, including empirical, theoretical or computational approaches applied to any taxonomic group. The criteria for selection will be uniqueness, creativity and excellence in research and scholarship. We require all candidates to have a Ph.D., and we strongly encourage applications from candidates who will increase the exposure of our students to a diverse culture.

Successful candidates will be expected to develop externally funded research programs and to teach undergraduate and graduate courses. The Department of Biology (www.biology.tamu.edu) is part of an interactive and collegial research environment, offering a modern infrastructure and competitive startup packages. The broader Texas A&M research community includes a number of exciting interdepartmental programs, such as the new Ecology and Evolutionary Biology Doctoral Program (eeb.tamu.edu), the Texas A&M Institute for Genome Sciences and Society (genomics.tamu.edu), and the Genetics Interdisciplinary Graduate Program (genetics.tamu.edu). Applicants should email a letter of intent, curriculum vitae, statements of research and teaching interests, and should arrange to have three letters of recommendation sent to evosearch@bio.tamu.edu. Review of applications will begin November 1, 2016.

Questions regarding this search should be directed to Dr. Adam G. Jones, chair of the search committee, at evosearch@bio.tamu.edu.

Texas A & M University is an Equal Opportunity/Affirmative Action employer that is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff who are committed to teaching and working in a multicultural environment. We strongly encourage applications from women, minorities, veterans, individuals with disabilities, and the LGBTQ community. In addition, the University is responsive to the needs of dual career couples.

Adam Jones <ajones@bio.tamu.edu>

## TexasTechU LandscapePopulationGenomics

ASSISTANT PROFESSOR IN LANDSCAPE GE-NOMICS: DEPARTMENT OF BIOLOGICAL SCI-ENCES, TEXAS TECH UNIVERSITY, LUBBOCK, TEXAS 79409

The Department of Biological Sciences at Texas Tech University is recruiting a 9-month tenure-track Assistant Professor in the field of Landscape Genomics. We seek a dynamic, motivated scientist to lead an innovative research laboratory that uses genomic approaches to examine effects of environmental heterogeneity on demographic and adaptive variation. The department welcomes all applicants who will study how genomic variation is influenced by the environment, but will favor those whose research is within the context of emergent zoonotic diseases, using genomic tools applied to hosts, pathogens, and reservoirs. The applicant's research program should seek to identify factors that determine patterns of spatial variation across populations and genomes. The successful candidate will demonstrate an ability to integrate approaches that may include, but are

not limited to, comparative genomics, bioinformatics, landscape ecology, or other complementary analyses to study the biology of adaptation within the context of genomic variation. The successful candidate will also be expected to supervise an independent research program that will attract extramural funding, provide research training for graduate and undergraduate students, teach at the undergraduate and graduate levels, and engage in service to the department, college, and university. A PhD in Biology or a related field is required and postdoctoral experience is preferred. Candidates with strong records of scholarship supported by extramural funding and the proven capacity or clear potential to bring externally sponsored research to Texas Tech University are encouraged to apply.

Local resources include the Natural Sciences Research Laboratory (www.nsrl.ttu.edu) at the Museum of Texas Tech University (including the Genetic Resources Collection), Texas Tech University Health Sciences Center (www.ttuhsc.edu), the TTU High Performance Computing Cluster (www.depts.ttu.edu/hpcc), the Center for Biotechnology and Genomics (www.depts.ttu.edu/biotechnologyandgenomics), corporate Genomics facilities in Lubbock, and a core group of faculty with research focused on organismal genomics. Application materials should consist of 1) a curriculum vita, 2) three representative publications, 3) statements of research and teaching interests, and 4) three letters of recommendation. To apply, please go to: http://www.texastech.edu/careers and search position 8566BR.

Application review will begin on September 15, 2016 and continue until the position is filled. Questions can be addressed to the search committee chair Dr. David Ray (david.a.ray@ttu.edu). For further information on the department and graduate and undergraduate programs, see http://www.biol.ttu.edu . As an Equal Employment Opportunity/Affirmative Action employer, Texas Tech University is dedicated to the goal of building a culturally diverse faculty committed to teaching and working in a multicultural environment. We actively encourage applications from all those who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community at Texas Tech University. The university welcomes applications from minorities, women, veterans, persons with disabilities, and dual-career couples.

Texas Tech University is an affirmative action/equal opportunity employer

#### David A. Ray

Associate Professor Department of Biological Sciences Texas Tech University Phone: (806) 834-1677 www.davidraylab.com < http://davidraylab.com >

www.crocgenomes.org/ david.4.ray@gmail.com

Even the best of us have bad days. "I am very poorly today and very stupid and hate everyone and everything." - Charles Darwin - Oct. 1, 1861

David Ray <david.4.ray@gmail.com>

### **TexasTechU PlantPhylogenomics**

#### ASSISTANT PROFESSOR IN PLANT PHYLOGE-NOMICS

The Department of Biological Sciences at Texas Tech University (TTU) is recruiting a 9-month tenure-track Assistant Professor in Plant Phylogenomics. We seek a dynamic, motivated scientist to lead an innovative research program that uses genomic approaches to address important questions in plant biodiversity and to expand and strengthen the collections at the E. L. Reed Herbarium at Texas Tech University. The successful candidate will be reviewed primarily on demonstrated strengths in phylogenomics and plant systematics to address questions such as, but not limited to, relationships among plant taxa at any evolutionary scale, patterns and processes influencing the generation and erosion of plant biodiversity, or how evolutionary innovations influence taxonomic diversification. Secondarily, preference will be given to candidates with interest in leading the curatorial activities in the E.L. Reed herbarium at TTU, which is the second largest in west Texas and the only collection in west Texas with a digital catalog.

The successful candidate will be expected to supervise an independent research program that will attract extramural funding, provide research training for graduate and undergraduate students, and teach undergraduate and graduate courses in the fields of Plant Systematics and Phylogenetic Analysis. Service duties include programbuilding, as well as commitment to extra-curricular activities. Service to the department, college, and university is expected. A PhD in Biology or a related field is required.

Application materials should consist of: 1) a curriculum vita 2) three representative publications 3) a statement of research and curatorial interests 4) a statement of teaching philosophy 5) three letters of recommendation (Please have your recommenders submit letters of recommendation to hrs.recruiting@ttu.edu with the subject heading "Plant Phylogenomics Recommendation Letter". The Biological Sciences Department at TTU has a strong history and commitment to scholarship and innovation in the field of evolutionary biology. It's location in the southern edge of the Great Plains, near the Trans-Pecos and Big Bend areas of Texas, and at the doorstep of the Chihuahuan desert provide unique opportunities for both collaboration and locally accessible investigations of the evolutionary process. The department is in a strong growth phase, with 3-4 new faculty recruited in each of the last 2 years, providing the opportunity to contribute to the dynamic growth of a young faculty. We have a strong core of faculty with a broad spectrum of interests who provide ample opportunities for collaboration and team building. Finally, the opportunity to lead the E.L. Reed Herbarium as center of plant biodiversity studies in the southwestern U.S. provides a unique resource for research and career growth.

Applications received on or before October 21, 2016 will be given full consideration. Questions can be addressed to Matt Olson (matt.olson@ttu.edu). For further information on the department and graduate and undergraduate programs, see http://www.biol.ttu.edu . As an Equal Employment Opportunity/Affirmative Action employer, Texas Tech University is dedicated to the goal of building a culturally diverse faculty committed to teaching and working in a multicultural environment. We actively encourage applications from all those who can contribute, through their research, teaching, and/or service, to the diversity and excellence of the academic community at Texas Tech University. The university does not discriminate on the basis of an applicant's race, ethnicity, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, genetic information or status as a protected veteran. Texas Tech welcomes consideration of dual career and professional couple accommodations.

"Olson, Matt" <matt.olson@ttu.edu>

**TexasTechU PlantPhylogenomics 2** 

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To apply go to https://www.texastech.edu/careers/-faculty-positions.php and search for position# or requisition ID# 8672.

Application materials should consist of: 1) a curriculum vita 2) three representative publications 3) a statement of research and curatorial interests 4) a statement of teaching philosophy 5) three letters of recommendation (Please have your recommenders submit letters of recommendation to hrs.recruiting@ttu.edu with the subject heading "Plant Phylogenomics Recommendation Letter".

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"Olson, Matt" <matt.olson@ttu.edu>

ing experience and proficiency, with specific examples of successful active learning strategies implemented in the classroom, a description of how you will leverage your research experience to enrich undergraduate teaching and mentoring (evaluations and/or sample course materials are optional), and a list of potential course offerings, and (3) the names and addresses of three professional references who can address teaching experience. Review of applications will begin October 21st 2016, and the search will remain open until the position is filled. Tulane University is an Affirmative Action/Equal Employment Opportunity Employer.

- Elizabeth Derryberry, Ph.D. Assistant Professor Ken and Ruth Arnold Early Career Professor in Earth & Ecological Science Department of Ecology & Evolutionary Biology Tulane University New Orleans, LA 70118 504-862-8285 (office) 504-862-8706 (fax) elizabethderryberry.tulane.edu

ederrybe@tulane.edu

### **TulaneU TeachingEvolution**

Full Time Non-Tenure Track Faculty in Ecology and Evolution

The Department of Ecology and Evolutionary Biology at Tulane University invites applications for a full-time teaching faculty position (Professor of the Practice) in ecology and evolutionary biology. Professors of the Practice are appointed through renewable three- to five-year contracts, which include benefits but do not lead to tenure. Candidates must hold a Ph.D. at the time of application and have faculty teaching experience at the university level. We seek an individual with a commitment to excellence in majors and non-majors undergraduate instruction and the scholarship of teaching; experience in active learning classrooms is of particular interest. The incumbent will (1) support Introductory Biology as well as teach intermediate and advanced level courses that complement and expand expertise in our department, (2) have opportunities to engage undergraduates in research through lab courses, independent projects, and Honors Theses, and (3) be expected to participate in academic advising and departmental and university service. The teaching load is 3 courses per semester. The appointment will begin August 1st, 2017.

Submit the following tohttps://dossier.interfolio.com/apply/37449: 1) a curriculum vitae, (2) a statement of teaching philosophy that includes a description of teach-

### **UBergenMuseum InsectSystematics**

#### https://www.jobbnorge.no/en/available-jobs/job/-129541/associate-professor-in-systematic-entomology Associate professor in systematic entomology

There is a vacancy for a permanent position as associate professor in systematic entomology at the University Museum of Bergen, Department of Natural History.

The museum staff execute research, collection management and public outreach in natural and cultural history. The department of Natural History has the scientific and curatorial responsibility for botany, geology and zoology at the museum. There are currently employed 13 scientific and 30 technical and administrative staff in this unit, in addition to temporary project staff.

Work tasks/research field:

We are recruiting a productive and innovative researcher in systematic entomology, with emphasis on taxonomy and phylogeny. Research topics are limited to evolutionary relationships, taxonomy and diversity in arthropods (except crustaceans), including evolutionary processes that leads to biological diversity.

Applicants need to document excellent research skills in one or more of these areas. We emphasize competence in both molecular and morphological methods in phylogenetics and taxonomy. The research profile must
have a global perspective, but nevertheless targeting organismal groups that are common also in the Nordic region. Research on lesser known and highly diverse groups is preferred, such as parasitoid wasps, mites, and flies.

The position involves the curatorial responsibility for the entomological collections which currently includes 1.2 million objects. We will recruit an entomologist with a sincere dedication to collection development. The selected candidate will also take part in the production of new exhibitions on biodiversity, entomology and related activities at the museum. A genuine interest for public outreach is therefore mandatory. It is also expected that the employee will teach in his or her area of expertise and contribute towards a successful development of the research school in biosystematics (ForBio).

The new employee will be an active partner in the systematics research group and submit extramural grant applications. There is currently a strong focus on lesser known species in Norway and the department continue to provide data for the Norwegian Biodiversity information Centre (Artsdatabanken), BoLD and GBiF.

Qualifications and personal qualities:

\* Doctoral degree in systematic entomology or equivalent qualifications

\* Experience from research beyond the PhD level: projects and publications during the last five years are given particular attention

\* Extensive research and collection networks

\* Work independently and in a structured manner, and have the ability to cooperate with others.

\* Basic pedagogical training is a requirement for the position. The successful applicant will be offered training if this requirement is not met prior to employment.

We can offer:

\* A good and professionally challenging working environment \* Salary at pay grade 57 (code 1011/ Pay range 24, alternative 1) in the state salary scale. This currently amounts to an annual salary of NOK 486.100 before taxes. Further increase in salary will depend on seniority. A higher salary may be considered for a particularly well qualified applicant. \* Enrolment in the Norwegian Public Service Pension Fund \* A position in an inclusive workplace (IA enterprise) \* Good welfare benefits

Your application must include:

\* A brief cover letter expressing your research interest and priorities

- \* Diplomas
- \* References
- \* Complete list of publications

\* List of academic work that the applicant believes should be taken into consideration in the assessment, maximum 10.

\* List with appendices that document your pedagogical qualifications

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at JobbNorge.

General information:

Detailed information about the position can be obtained by contacting: Head of department, Bjarte Jordal, tlf. (+47) 55582233 / e-post bjarte.jordal@uib.no.

Bjarte Henry Jordal <Bjarte.Jordal@uib.no>

### UCalifornia LosAngeles EvolutionaryAnthropology

The Department of Anthropology at the University of California, Los Angeles seeks a biological anthropologist for a tenure track position at any level within the assistant professor rank, starting July 2017. Candidates must have Ph.D. degree in Anthropology or closely related field in hand at time of appointment. The successful candidate's research interests will complement existing strengths of the UCLA biological anthropology program, which emphasizes an evolutionary (adaptationist) perspective. Specialists in all research areas are invited to apply. Please visit the following websites for more information about the current focus of the biological anthropology program (http://uclabioanthro.weebly.com/) and the affiliated Center for Behavior, Evolution and Culture (http://bec.ucla.edu). Please submit your application through UCLA Academic Recruit at: https:/-/recruit.apo.ucla.edu/ Recruitment number JPF02429.

Applications should include electronic versions of: a cover letter, curriculum vitae, research and teaching statements, up to three representative publications, and names and email addresses of three referees.

For further information please contact Dr. Manson, Dept. of Anthropology, UCLA atjmanson@anthro.ucla.edu. Review of applications will begin on October 15, 2016 and the final deadline for application submission is November 3, 2016.

Appointment begins July 1, 2017. Salary is commensurate with education and experience and based on University of California pay scales.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy see: UC Nondiscrimination & Affirmative Action Policy.

The Department of Anthropology particularly encourages applications from candidates whose experience has prepared them to support and contribute to our ongoing commitment to diversity. The University also has practices that address dual academic and non-academic career issues.

Susan Perry <Sperry@anthro.ucla.edu>

### UCalifornia LosAngeles EvolutionaryBiol

Tenure Track Faculty Position: Assistant, Associate, and Full Professor Institute for Society and Genetics

To Apply: https://recruit.apo.ucla.edu/apply/-JPF02545 The UCLA Institute for Society and Genetics (ISG) invites applications for a biological OR social scientist with an innovative research program which complements one of our existing areas of strength. We are seeking to fill a tenure-track or tenured faculty position at the Assistant, Associate, or Full Professor rank to begin in Fall of 2017.

The Institute for Society and Genetics is a department within the schoolof Life Sciences at UCLA, with a faculty consisting of social scientists, biological scientists and humanities scholars focused on innovative, critical research questions that intersect biology and society. Institute faculty members are generally crossappointed with another department on campus, and develop research programs that transcend traditional disciplinary lines. Current domains of expertise withinISG include: evolutionary biology, gene-environment interaction, metabolism, big data and biology, history and social impact of the biomedical sciences, genetics, phylogenetics, bioethics and the history, philosophy and sociology of science. Faculty teach in the Institute's interdisciplinary undergraduate major (Human Biology and Society B.S. and B.A.) and supervise post-doctoral scholars or other student researchers, write grant proposals, and contribute to outreach and public symposia, workshops and other events.

ISG seeks to expand its research profile with this hire, in either the biological OR the social sciences (including relevant humanities fields); candidates should demonstrate strong research expertise in an area complementary to the current expertise of ISG faculty (http:/-/socgen.ucla.edu/people/). Such research areas could include, but are not limited to: microbiomics and health, food and metabolism, gene-environment interaction, algorithms, data-intensive science or big data in the biosciences or health sciences, evolutionary medicine, biological and cultural/technological evolution, history and conceptual foundations of computational or quantitative biology, the social and cultural impact of data-intensive biomedicine. ISG also welcomes applications from other research areas that address complex contemporary problems at the intersection of biology and society.

The preferred candidate will also demonstrate a commitment to mentoring students from underrepresented and underserved populations, or demonstrate an interest in campus-wide or departmental programs that provide research and professional development opportunities for a diverse student body. Please include such statements within your Statement of Contributions to Diversity.

Candidates must hold a Ph.D. in the biological or social sciences by thetime of appointment. Applicants should submit a cover letter, CV with publication list, and names and addresses of four potential letter writers. In addition, please include statements describing research and teaching programs, and contributions to diversity.Review of Applications will begin on October 15, 2016 and continue until the position is filled. All applications and application materials must be submitted online via UCLAs Academic Recruitment Online at the following URL: https://recruit.apo.ucla.edu/apply/-JPF02545. Inquiries may be addressed to the Search Committee Chair at ckelty@ucla.edu.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy, see: UC Nondiscrimination & Affirmative Action Policy (http://policy.ucop.edu/doc/4000376/-NondiscrimAffirmAct). Danielle L. Shenise

Administrative Assistant UCLA Institute for Society and Genetics 621 Charles E. Young Dr. South, 3360B LSB Los Angeles, CA 90095-7221 MC: 722105

Ph: 310-267-4990 Fax: 310-206-1880

Email: dshenise@socgen.ucla.edu Website: www.socgen.ucla.edu "Shenise, Danielle" <dshenise@socgen.ucla.edu>

# UCalifornia SantaBarbara EvolutionaryAntrhopology

\*\*Now accepting applications through October 15, 2016\*\*

#### BIOMEDICAL ANTHROPOLO-GIST/DEMOGRAPHER

The University of California, Santa Barbara, Department of Anthropology, Integrative Anthropological Sciences (IAS), invites applications for a tenure-track position at the Assistant Professor level, beginning July 1, 2017. We seek a scientist specializing in any area of biomedical anthropology or biomedical demography. Subfield expertise includes human biology, health and infectious disease, epidemiological transitions, human development and plasticity, aging, demography, human/animal disease transmission, host-parasite coevolution, stress, nutrition, reproductive biology, life history, life course epidemiology, global health, evolutionary medicine, genetics/epigenetics or related fields. Research program should be theoretically rigorous, and candidates with an active field program integrating biomedical and/or demographic data gathered in contemporary human populations will be preferred. Candidates will be preferred who can ground their research with respect to the unifying themes of evolutionary and ecological theory. It should effectively complement and augment existing strengths to help bolster the mission of the IAS Unit (see Department website: http://www.anth.ucsb.edu/graduate/specializations/ias). Research program should also contribute expertise to the Broom Center for Demography. Geographical area of specialization is open. The successful candidate will demonstrate ability to teach lower-division introductory courses in quantitative methods, and upper-division courses in evolutionary medicine, public health or other areas related to the anthropologist's areas of specialization. The ability to direct graduate students and to obtain extramural funding are critical requirements.

Applicants must have completed the Ph.D. at the time of appointment. Please apply and submit via https://recruit.ap.ucsb.edu/apply/JPF00719 (1) a statement detailing past and current research experience, (2) a five-year research plan, (3) a statement on teaching experience, (4) a curriculum vitae, (5) names and email addresses for three reference letter writers, (6) three representative publications, and (7) a brief cover letter. Please direct any questions to Professor Michael Gurven, Chair, IAS Search Committee, at searchias@anth.ucsb.edu. For primary consideration, submit application and materials on or before August 15, 2016. Interviews are expected to be conducted by mid-October.

The department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching, and service. The University of California is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Michael Gurven Professor Department of Anthropology University of California Santa Barbara, CA 93106 email: gurven@anth.ucsb.edu phone: (805)893-2202 web: http://www.anth.ucsb.edu/faculty/gurven gurven@anth.ucsb.edu

# UCalifornia SantaBarbara Herbarium

Herbarium Research Botanist & Collections Manager

The Cheadle Center for Biodiversity and Ecological Restoration (CCBER) Herbarium Research Botanist & Collections Manager is responsible (1) collection curation and management of all CCBER/UCSB Natural History Collections and (2) conducting original research focused on botanical and ecosystem exploration in California and elsewhere. Preference is on research interests that utilize existing collections, result in the acquisition of additional collections to be deposited in the UCSB herbarium, plant systematics and taxonomy, regional California flora, and collaborations with the vibrant CCBER Ecological Restoration group. The Herbarium Research Botanist & Collections Manager is responsible for all aspects of the collections including cataloging, curation, and database management. In addition to original research, they take a lead role in grant writing to support the security, curation and scientific use of the collections. The incumbent works closely with the faculty curators and responds to loan and use requests by UCSB faculty, staff, and students and by the local and international scientific community. He/she trains and supervises student interns, volunteers, and assists faculty with teaching the curatorial internships and other courses. The incumbent provides tours of the collections for school groups, community members, and educational outreach programs.

The position involves academic interpretation of objects in a collection and on loan. Recommends acquisitions, de\$B!>(Baccessions, and conservation. Conducts original research and presents/ publishes results. Has administrative responsibilities and oversees the care of the collections and their documentation. Uses advanced subject area knowledge and curatorial expertise to resolve complex issues and fulfill responsibilities. Assignments are defined by overall objectives and incumbent exercises judgment in selecting methods for obtaining results. Work is performed independently; requires formulating strategies and administering policies, processes, and resources; functions with a high degree of autonomy.

The CCBER/UCSB Natural History Collection is a diverse research and teaching collection located at the University of California Santa Barbara, Cheadle Center for Biodiversity and Ecological Restoration (ccber.ucsb.edu). The Herbarium Research Botanist & Collections Manager must manage a wide variety of specimen collection practices, as the UCSB Natural History Collection includes lichens, algal, higher plants, vertebrate, etc. Our museum is approximately 150,000 specimens, of which 100,000 are herbarium specimens. We have a strong emphasis on collection\$B!>(Bbased research, collection digitization, and maintain close partnerships with the Santa Barbara Botanical Garden and Santa Barbara Museum of Natural History.

Minimum Requirements: Candidate must have experience working in herbaria and a record of successful grant writing, project management, and scientific publishing. An advanced degree in Botany or a closely related discipline is required, or an equivalent combination of education and experience. Strong interests in building own research program at UCSB, and a background demonstrating ability to analyze biological data. A PhD in Botany or a closely related discipline is desirable. This is a career position at UCSB, which is funded for 18 months from the date of hire. Salary range is \$4,759\$B!>(B\$5,051/mo. Questions can be emailed to Katja Seltmann, Katherine Esau Director, Cheadle Center for Biodiversity and Ecological Restoration, seltmann@ccber.ucsb.edu

Applications are made through UCSB: jobs.ucsb.edu/applicants/Central?quickFind0578

Mireia Beas-Moix Tucker Collections Manager Cheadle Center for Biodiversity and Ecological Restoration University of California Santa Barbara Harder South, Building 578, Rm 1009 Santa Barbara, CA 93106-9615 beas-moix@ccber.ucsb.edu Office 805 893 2401

Mireia Beas-Moix <beas-moix@ccber.ucsb.edu>

### **UChicago PopulationGenetics**

#### POPULATION GENETICS FACULTY SEARCH UNI-VERSITY OF CHICAGO DEPARTMENT OF ECOL-OGY & EVOLUTION

The University of Chicago's Department of Ecology & Evolution is seeking to fill a tenure-track or tenured faculty position with an individual applying theoretical and/or empirical approaches to understand POPULA-TION GENETIC processes, or related problems. The appointee will be part of an effort to strengthen and diversify a collegial group that is interested in major questions in ecology and evolution, and interacts regularly with other units in the Biological Sciences and broader University of Chicago campus. Rank is open, with a preference for appointment at the rank of AS-SISTANT PROFESSOR or with tenure at the rank of ASSOCIATE PROFESSOR. A PhD or equivalent terminal degree is required. Applicants must apply online at the University of Chicago's Academic Career Opportunities site at http://tinyurl.com/ja7548m by uploading a curriculum vitae, 3 selected reprints and/or preprints, and separate statements of research and teaching. Applicants for Assistant Professorships must also have three letters of reference emailed to choman@uchicago.edu; Assistant Professor applications will not be considered complete until these letters are received. Review of applications will begin October 15, 2016 and continue until the position is filled. Questions should be addressed to Joy Bergelson at jbergels@uchicago.edu.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination at http://www.uchicago.edu/about/non\_discrimination\_statement/. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-5671 or email ACOppAdministrator@uchicago.edu with their request.

John Novembre <jnovembre@uchicago.edu>

#### **UCopenhagen PopulationGenetics**

Tenure-track Assistant Professor of Population Genetics (211-0437) Tenure-track Assistant Professor of Population Genetics Centre for GeoGenetics Natural History Museum of Denmark Faculty of Science University of Copenhagen The Centre for GeoGenetics at the Natural History Museum of Denmark seeks an excellent scientist for a tenure-track assistant professorship within the field of Population Genetics from February 1st 2016 or as soon as possible thereafter.

The Centre for GeoGenetics is a Centre of Excellence financed by the National Research Foundation. The Centre is hosted by the Natural History Museum of Denmark in Central Copenhagen. More information about the Centre for GeoGenetics at http://geogenetics.ku.dk/. The Natural History Museum of Denmark is both a Museum and a Department under the Faculty of Science, University of Copenhagen. Through world-class natural history research, collections, teaching and public engagement, the Museum contributes to solving and explaining some of the major challenges in the field. More information about the Natural History Museum of Denmark at http://snm.ku.dk/english/ . Subject Area The position is within the field of Population Genetics. The successful candidate is expected to develop a competitive research program within population genetics, and ideally have experience and interest in medical genetics, statistical genetics, computer science and next generation sequencing (NGS). The applicant is expected to be involved in both the practical and theoretical aspects of performing large scale genetics studies of both disease association and population genetics.

The successful applicant will have:

\* A PhD degree in a relevant field \* Experience in working with high throughput sequencing data for large scale projects \* Track record of developing and implementing state of the art methods for processing and analyzing NGS data \* Strong background in population genetics and preferably also within medical genetics and their application to sequencing data, as well as statistical genetics, association studies and computer science, \* The ability to establish a thriving research program, as documented by publications in leading journals and obvious plans for future research \* Evidence of the ability to obtain competitive research grants Duties include: The tenure track assistant professor must have an academic standing showing internationally competitive research, and/or have internationally recognized high potential to make a future impact.

All scientific staff members at the Museum are expected to use half of his/her time on research and the other half on curation, teaching, public engagement, and other Museum activities as agreed with the Museum leadership.

The tenure track assistant professor's duties will primarily include research, including obligations with regard to publication/scientific communication and researchbased teaching with associated examination obligations within Population Genetics. To a limited extent the position may also include other duties including curation of bioinformatics data infrastructure.

Assessment of applicants will primarily consider their level of documented, internationally competitive research including contributions to developments in their field. Teaching qualifications are not mandatory but documented teaching qualifications and teaching experience will be considered. Outreach qualifications of applicants and the ability to attract external funding will also be considered as well as evidence of the potential to collaborate within the over-arching research themes of Centre and the Museum.

During your employment as tenure track assistant professor, you must complete the formal pedagogical training program for assistant professors at the Faculty of Science in order to qualify for a permanent position.

Your performance will be evaluated after no more than six years of employment and, if the 'final appraisal' is positive, you will be employed as associate professor.

The position is open from February 1 2016 or as soon as possible thereafter.

Further information on the Department can be found at http://snm.ku.dk/english. Inquiries about the position can be made to professor Eske Willerslev, Director of Centre for GeoGenetics, Øster Voldgade 5-7, DK-2100 Copenhagen, Denmark. E-mail: ewillerslev@snm.ku.dk.

The University wishes our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of personal background. Terms of employment The position is covered by the Memorandum on Job Structure for Academic Staff.

Terms of appointment and payment accord to the agreement between the Ministry of Finance and The Danish Confederation of Professional Associations on Academics in the State.

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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 students to pursue wisdom, truth, and virtue as the primary ends of education (http://www.udallas.edu/about/mission.php). All faculty members are expected to understand and support the mission. The University is an Equal Opportunity/Affirmative Action employer and does not discriminate against individuals on the basis of race, color, religion, sex, national origin, genetic information, protected veteran status, age, or disability in the administration of its employment practices.

– Deanna Soper, PhD Assistant Professor of Biology University of Dallas

Deanna Soper <dsoper@udallas.edu>

# **UDallas Bioinformatics**

The Biology Department at the University of Dallas seeks applicants for a tenure-track position to begin Fall 2017. A background in bioinformatics and/or computational biology is desired, and candidates must have a Ph.D. with a strong commitment to undergraduate research and a record of past work in the area of computational biology/bioinformatics, human genetics, biophysics, biomedical sciences or equivalent. Postdoctoral experience is preferred. The successful candidate will regularly teach upper-division courses that cover fundamental biological principles, an upper-division course in the candidate's area of specialization (computational biology/bioinformatics/biophysics/biomedical/biostatistics), and a lower level science course for non-majors. There is also the potential to occasionally teach interdisciplinary courses in collaboration with other university programs. The successful candidate will aid in advising majors, including students interested in graduate careers.

Candidates should submit a letter of application explaining their suitability for the position, C.V., undergraduate and graduate transcripts, the names and contact information for three references, a research plan, a statement on teaching philosophy, and evidence of teaching effectiveness to https://udallas.wufoo.com/forms/faculty-application-for-employment/. Any questions about the position should be directed to Dr. Stephen Slaughter, Chair, Department of Biology, University of Dallas, 1845 E. Northgate Dr., Irving, TX 75062; stephens@udallas.edu. Review of applications will begin October 30 and continue until the position is filled.

The University of Dallas is a Catholic university which seeks to educate the whole person, encouraging its

# **UDelaware PlantAdaptation**

We are searching somewhat broadly including population and evolutionary genetics communities. We are seeking exceptional candidates and will assess fit based on the applications we get.

As stated in the ad: "Examples of areas of interest include adaptation and evolutionary mechanisms, soilplant-microbe/insect interactions, biotic and abiotic stress responses, genomic responses to the environment and genetics of complex traits."

The University of Delaware Department of Plant and Soil Sciences seeks outstanding candidates for a 9-month tenure track Assistant/Associate Professor of Plant Biology for Agriculture. Successful candidates will be emerging leaders at the cutting edge of plant science employing unique and integrative approaches to solve problems in agriculture. Examples of areas of interest include adaptation and evolutionary mechanisms, soil-plant-microbe/insect interactions, biotic and abiotic stress responses, genomic responses to the environment and genetics of complex traits. Candidates must demonstrate innovative thinking, possess an ability to bridge disciplines and be strongly committed to the tripartite mission of teaching, research and outreach. This position will add to the department's cadre of plant science scholars conducting research spanning molecular and cellular biology to ecosystem science. The successful candidate will be expected to develop an internationally recognized, extramurally funded collaborative research program (70% workload effort), teach two courses per year supporting majors in genome science (undergraduate) and plant science (graduate) (25%) and engage in service on behalf of the department, college and university (5%).

This position will be situated at the Delaware Biotechnology Institute (DBI; http://www.dbi.udel.edu/), a multidisciplinary research facility that supports entrepreneurship and economic development. DBI currently hosts 17 resident faculty and unites a biotechnology network of >100 affiliates. World class core facilities at DBI support DNA sequencing and genotyping, bioinformatics, bioimaging, proteomics and protein production.

For further details about the position and to apply visit: https://apply.interfolio.com/37029 Randy Wisser

Randall Wisser <rjw@udel.edu>

#### **UDenver EvolutionaryBiologist**

The Department of Biological Sciences, University of Denver, invites applications for a tenure-track position at the Assistant Professor level to begin September 1, 2017. Candidates with expertise in any area of Evolutionary Biology are sought. The successful candidate will have a Ph.D. and post-doctoral experience in appropriate fields, will develop a vibrant externally funded research program, will supervise undergraduate research projects and M.S. and Ph.D. students, and will teach undergraduate and graduate courses in area of expertise. We are especially interested in applicants who have demonstrated commitment to or experience working with diverse populations. All candidates must submit their application through https://dujobs.silkroad.com Information on Departmental programs can be found at http://www.du.edu/nsm/departments/biologicalsciences/. The online application should include a cover letter, curriculum vitae, and separate statements of research interests and teaching philosophy and two recent publications. Part of the cover letter should address how your research could be synergistic with other faculty members, and/or how your research could bridge or enhance related sub-disciplines in the department. In addition, at least three recommenders should email letters of reference to: Evolutionary Biology Faculty Search Committee, University of Denver, Department of Biological Sciences at biology.rec@du.edu. The review of applications will begin November 1, 2016 and continue until the position is filled. Contact Dr. Tom Quinn at tom.quinn@du.edu if you have questions regarding the search. The University of Denver is committed to enhancing the diversity of its faculty and staff and encourages applications from women, minorities, members of the LGBT community,

people with disabilities and veterans. The University is an equal opportunity/affirmative action employer.

``tom.quinn@du.edu" < tom.quinn@du.edu >

### UFlorida LecturerEvolutionaryBiol

The University of Florida is searching for an open-rank lecturer in Biology. This person will help direct the cross-college Biology major (the largest undergraduate major at UF), conduct scholarship on pedagogy, teach, innovate, etc. We seek someone interested in taking our major to the next level of excellence, and who is interested in making a difference for a lot of students. For more details, including how to apply, please click on the link below. Review of applications will begin 11 October, but the position will remain open until filled.

http://explore.jobs.ufl.edu/cw/en-us/job/498729/lecturersr-lecturer Thanks! Marta

Marta L. Wayne, Ph. D. Professor and Chair P.O. Box 118525 Department of Biology University of Florida Gainesville, FL 32611-8525 (courier: 876 Newell Drive) vox: 352-392-9925 fax: 352-392-3704 http://people.biology.ufl.edu/mlwayne/< http://people.biology.ufl.edu/mlwayne/site/ >

"chair@biology.ufl.edu" <chair@biology.ufl.edu>

### UIIlinois UC LabTech EvolutionaryImmunology

Lab technician position in evolutionary immunology of human and non-human primates

The Brinkworth Evolutionary Immunology and Genomics lab at the University of Illinois Urbana-Champaign is seeking a laboratory technician. The position is responsible for the completion of cell experiments, including bacterial and parasitic infections of mammalian cells, maintenance of parasite and cel populations, complete of molecular library construction and cell-based assays, as well as maintenance of the lab and its inventory.

This is a year long position, with the possibility of renewal, pending funding.

#### Essential Qualifications

The successful candidate will have experience with

clean, immunological technique

raising and maintaining intracellular parasite/microorganism populations

infecting eukaryotic cells

the following molecular techniques to collect data on biological function and genetics: ELISA, PCR, nucleic acid extraction

Preferred Qualifications

The successful candidate will ideally have experience with

culturing a broad range of micro-organisms

training in next generation sequencing analysis

FACS analysis

using R and linux command line programs to analyze genomic data

working in research teams

Position Requirements and Qualifications

Required: Bachelor degree in Biology or a related field

Preferred: Bachelor degree in Microbiology, Parasitology or Immunology

The ideal candidate for this job is interested in infectious disease or human evolution, and may be in between undergraduate and graduate education. We are interested in an individuals who can raise intracellular parasite/bacterial populations and infect eukaryotic cells in BSL2 conditions using clean technique. Candidates should have experience reading scientific literature in immunology, genomics, evolution and disease, and an interest in infectious disease. Please visit the lab's website for more information www.jfbrinkworth.com Individuals interested in this position should send a CV and cover letter along with the names and contact information of two references to Dr. Brinkworth at jfbrinkw@illinois.edu, by \*September 12, 2016.\*

Jessica Brinkworth <jfbrinkworth@gmail.com>

### **UIowa PredictiveGenomics**

# FACULTY POSITION IN PREDICTIVE GENOMICS AND EPIGENOMICS

The Department of Biology at the University of Iowa invites applications for a tenure-track faculty member at the rank of Assistant Professor. This position is part of a campus-wide Informatics Initiative and is targeted towards researchers who can bring together multiple genome-scale datasets (transcriptomes, chromatin states, population genomics) to generate predictive descriptions of phenotypes using statistical and machine learning approaches. We are particularly interested in computational biologists with wet lab experience or a track record of collaboration with experimentalists to investigate the effects of stressors (genetic, molecular, cellular or environmental) on behavior, population dynamics, aging, or susceptibility to diseases and cancer using model systems.

The Department of Biology (https://biology.uiowa.edu/-) represents a unique and rich combination of basic and applied research. Biology faculty use all the standard experimental model systems (Drosophila, Zebrafish, C. elegans, Xenopus, yeast, mice and rats), study diverse levels of organization (from genes and genomes to cells, organisms, and populations) and are engaged in complementary areas of research including overarching disciplines such as molecular genetics, cell and developmental biology, neurobiology and evolution. Subspecialties include genomics, transcriptomics and epigenetics, population biology and speciation, and the genetic basis of behavior, aging, human disease and stress responses, amongst others. The University's Iowa Informatics Initiative UI3 (http://informatics.uiowa.edu/) is a multidisciplinary initiative designed to establish the University of Iowa as a center of excellence in the rapidly evolving field of informatics. Together with a number of Colleges, Departments and Programs, the Department of Biology and UI3 offer opportunities for a wide range of research collaborations, leadership roles, and teaching and mentoring of graduate students and postdoctoral fellows.

Applicants must have a PhD or terminal degree in either computer science or statistics, genetics, biology, or a related discipline, a recognized record of accomplishment as reflected in publications in leading journals, and demonstrate the potential to develop and maintain an internationally-recognized, externally-funded research program. Candidates will also contribute to the teaching mission of the Department of Biology and should be committed to excellence through teaching Genomics or Biology-related courses at graduate and undergraduate levels, including the development of an upper level course in "Big Data Analysis" with a focus on genomic approaches. Postdoctoral experience and published record of expertise in high-dimensional data analysis applied to next-generation sequencing (NGS) data is highly desired. Competitive salary, start-up package, laboratory, and computational facilities will be provided.

Applications must be submitted online at http://jobs.uiowa.edu/ (Requisition #69710). Applicants should submit a cover letter, curriculum vitae, and separate statements of research objectives and teaching interests. A statement within the cover letter indicating how the candidate's research may fit in and contribute to Biology and the UI3 initiative is desirable. Applicants should also include the names and contact information of three references to be fully considered. Review of applications will begin on November 15th and will continue until the position is filled. The target starting date for this position is August 2017.

The Department of Biology and the College of Liberal Arts & Sciences are strongly committed to diversity; the strategic plans of the University and College reflect this commitment. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran. The University of Iowa is an equal opportunity/affirmative action employer.

Josep M. Comeron (josep-comeron@uiowa.edu) John Manak (john-manak@uiowa.edu) Search Committee Co-Chairs Department of Biology. The University of Iowa. Iowa City, IA 52242-1324

"josep-comeron@uiowa.edu" comeron@uiowa.edu> <josep-

# UIowa TeachingBiol

Lecturer - Non Majors Biology The Department of Biology at The University of Iowa is searching to fill a

100% non-tenure track Lecturer position teaching two non-majors Biology courses each semester: Human Biology (BIOL: 1140) and Introductory Animal Biology (BIOL: 1141). This position is a three-year appointment beginning in either January 2017 or August 2017. We are seeking candidates who are strongly committed to teaching in a liberal arts college environment and have a demonstrated record of teaching excellence. Both courses are 4-credit courses including lecture and laboratory and are not intended for biology or other science majors. Each course surveys fundamental biological principles ranging from the cellular and molecular basis of life to the evolutionary and ecological processes that sustain life on the planet. The person appointed to this position will also work with department faculty to revise and restructure these two non-majors courses to better serve the needs of students and other degree programs on campus.

The courses consist of both lecture and lab components. The person appointed to this position will have responsibility for the lecture sections of both courses and will serve in a supervisory role for teaching assistants in the laboratories.

Please apply at https://jobs.uiowa.edu, referring to Requisition #69591. Review of applications will begin September 30, 2016 and continue until the position is filled.

The Department Biology, and the College of Liberal Arts and Sciences are strongly committed to diversity; the strategic plans of the University, College, reflect this commitment. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran. The University of Iowa is an equal opportunity/affirmative action employer.

"McAllister, Bryant F" <br/> <br/>bryant-mcallister@uiowa.edu>

# UMontreal EvolutionaryPlantCellBiol

Though the job add does not state it explicitly, evolutionary plant cell biologists are encouraged to apply. Francaisci-dessous Professorin Plant Cellular Biology TheDépartement de sciences biologiques is seeking applications for a full-time tenure-track position at the rank of Assistant Professor in Plant Cellular Biology.

Responsibilities Theappointed candidate will be expected to teach at all three levels of the curriculum, supervise graduate students, engage in ongoing research and publication, and contribute to the academic life and reputation of the University. The appointed candidate will also be responsible for the management and development of the microscopy platform at the Plant Biology Research Institute (IRBV).

Requirements - Ph.D. in cellular biology or in a related field  $\hat{a} \in$  - Postdoctoral experience in a related field  $\hat{a} \in$  - High quality publication record in international journals with very good impact factor  $\hat{a} \in$  - Interest in cross-disciplinary research and capacity to develop collaborations with members of â€the Département de sciences biologiques and other departments of Université de Montréal - Excellent abilities to teach at the undergraduate and graduate levels  $\hat{a} \in$  - Elaboration of a novel research programme that uses leading-edge experimental approaches in â€microscopy and cellular biology to study plant cell function  $\hat{a} \in$  - Large experience in advanced imagery, such as live-cell imaging, is an asset  $\hat{a} \in$  - Proficiency in French within a reasonable period â€Linguistic Policy: Université de Montréal is a Québec university with an international French is the language of instruction. reputation. To renew its teaching faculty, the University is intensively recruiting the world's best specialists. In accordance with the institution's language policy [http://secretariatgeneral.umontreal.ca/fileadmin/user\_upload/secretariat/doc\_officiels/reglements/administration/adm10-34\_politique-linguistique.pdf]. Université de Montréal provides support for newlyrecruited faculty to attain proficiency in French. â€ï

Salary†Universitéde Montréal offers a competitive salary and a complete range of employee benefits. -Salary scale †StartingDate†Onor after June 1st, 2017.

Constitution of application - The application must include the following documents: -a cover letterâ $\in$  -a CVâ $\in$  -copies of three recent publications and research  $\hat{a}\in$  -a description of the teaching philosophy -a description of the research programme  $\hat{a}\in$  -Three letters of recommendation are also to be sent directly to the Chair of the Département de sciences biologiques by the referees.  $\hat{a}\in$ 

Deadline â ${\ensuremath{\in}}$  Application and letters of recommendation must be sent to the Chair of the Département de â€sciences biologiques by November 25th, 2016 at the following address: â€

M.Daniel Boisclair, Chair Département de sciences biologiques Faculté des arts et des sciences Université de Montréalâ $\in$ C. P. 6128, succursale Centre-ville Montréal (QC) H3C 3J7 â $\in$  Or daniel.boisclair@umontreal.ca.â $\in$ 

Formore information about the Department and about the IRBV, please consult their respective Web â€site at http://www.bio.umontreal.ca/ and http://www.irbv.umontreal.ca/ . Français Postede professeur en biologie cellulaire végétale

LeDépartement de sciences biologiques sollicite des candidatures pour un poste de professeure ou de professeur à temps plein au rang d'adjoint en biologie cellulaire végétale.

Fonctions Lapersonne retenue sera appelée à enseigner aux trois cycles, à encadrer des étudiants aux études supérieures, à poursuivre des activités de recherche, de publication et de rayonnement ainsi qu'à contribuer aux activités de l'institution. La personne retenue sera également responsable de la gestion et du développement de la plateforme de microscopie à l'Institut de recherche en biologie végétale (IRBV).

Exigences - Doctorat en biologie cellulaire ou dans un domaine connexe

Expériences postdoctorales pertinentes dans le domaine
Dossier de publications de qualité dans des revues internationales à très bon facteur d'impact - Ouverture à l'interdisciplinarité et capacité à développer des collaborations avec les membres du Département de sciences biologiques et d'autres départements de l'Université -Excellentes aptitudes d'enseignement aux trois cycles

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### **UMontreal ModelingEvolution**

(version francaise ci-dessous) AFF: FAS 09-16 / 9

Departement de mathematiques et de statistique Faculte des arts et des sciences Tenure-track position as Professor in Applied Mathematics

The Departement de mathematiques et de statistique is seeking applications for a full-time tenure-track position at the rank of Assistant Professor in Applied Mathematics.

Starting Date

On or after June 1<sup>st</sup>, 2017.

Interested parties should consult the detailed description of this position, information about the competition and deadlines on the Departement de mathematiques et de statistique Web site at: http://dms.umontreal.ca/en/our-department/job-postings . Universite de Montreal promotes diversity in its workforce and encourages members of visible and ethnic minorities as well as women, Aboriginal people, persons with disabilities and people of all sexual orientations and gender identities to apply.

We invite all qualified candidates to apply at Universite de Montreal. However, in accordance with immigration requirements in Canada, please note that priority will be given to Canadian citizens and permanent residents.

AFF: FAS 09-16 / 9

Departement de mathematiques et de statistique

Faculte des arts et des sciences

Poste de professeure ou de professeur en mathematiques appliquees

Le Departement de mathematiques et de statistique sollicite des candidatures pour un poste de professeure ou de professeur ?? temps plein au rang d'adjoint en mathematiques appliquees.

Entree en fonction

Le ou apres le 1<sup>er</sup> juin 2017.

Les personnes interessees sont priees de consulter la description detaillee du poste, les modalites de presentation de candidature ainsi que la date de cl0ture du concours sur la page Web du Departement de mathematiques et de statistique ?? l'adresse http://dms.umontreal.ca/fr/notre-departement/offres-d-emploi . L'Universite de Montreal pr0ne la

diversite de son personnel et encourage les membres des minorites visibles et ethniques ainsi que les femmes, les autochtones, les personnes handicapees et les personnes de toutes orientations et identites sexuelles ?? poser leur candidature.

Nous invitons tous les candidats qualifies ?? postuler ?? l'UdeM. Conformement aux exigences de l'immigration au Canada, veuillez noter que la priorite sera toutefois accordee aux citoyens canadiens et aux residents permanents.

Sabin Lessard <directio@dms.umontreal.ca>

# UMuenster Germany LabTech EvolBio

The Institute for Evolution and Biodiversity of the Westfaelische Wilhelms-Universitaet Muenster, Germany, invites applications for

Laboratory Technician

in the research group "Evolutionary Cell Biology" of Dr. Francesco Catania.

Description:

The Evolutionary Cell Biology group at the Institute for Evolution and Biodiversity of the Westfaelische Wilhelms-Universitaet Muenster (Germany) is seeking a laboratory technician. The successful candidate will be responsible for the maintenance of the lab, will assist with ongoing and new research projects and with training of new group members/visitors. She/he will be also responsible for the maintenance of paramecium cell cultures, DNA and RNA extraction, sequencing, protein analysis, and cell-based assays all towards developing a better understanding of the mechanistic details of the stress response in the ciliate paramecium.

The position is to be filled as soon as possible and it is for a period of 1 year with the possibility of renewal, pending funding.

The successful candidate will have experience with:

- General molecular biology techniques (e.g., DNA/RNA extraction, PCR, RT-qPCR).

- Culturing micro-organisms (ciliates ideally)
- Protein analysis (e.g., western blotting)
- Working in research teams
- Working independently

Proficiency with the M.S. Office Suite (e.g., Word, Excel, Powerpoint) is required. Language requirements: English, (required), German (ideal).

A competitive salary according to the German scale (up to) TV-L 9 is offered.

Please visit the lab's website https://www.unimuenster.de/Evolution/evolcell/ for more information.

Applications, including a motivation letter, CV, and con-

tact details of two references, should be sent as a single PDF to Dr. Francesco Catania at francesco.catania@unimuenster.de, by September 20, 2016.

Junior Research Group Leader Institute for Evolution and Biodiversity Westfälische Wilhelms-Universität Hüfferstrasse 1, 48149 Münster, Germany Phone: + 49
251 - 83 21222 Fax: + 49 - 251 - 83 24668 E-mail: francesco.catania@uni-muenster.de

Research Group: http://www.wwu.de/Evolution/evolcell/ Münster Graduate School of Evolution: http://ieb.uni-muenster.de/mgsei/ Francesco Catania <fcata\_01@uni-muenster.de>

### UNevadaLasVegas Dean

The University of Nevada, Las Vegas invites applications for Dean, College of Sciences, SN 16377

PROFILE OF THE UNIVERSITY UNLV is a doctoraldegree-granting institution of approximately 29,000 students and more than 3,000 faculty and staff that is classified by the Carnegie Foundation for the Advancement of Teaching as a doctoral university with higher research activity. Tied for second most diverse university in the nation, UNLV offers a broad range of respected academic programs and is on a path to join the top tier of national public research universities. The university is committed to recruiting and retaining top students and faculty, educating the region's diversifying population and workforce, driving economic activity through increased research and community partnerships, and creating an academic health center for Southern Nevada that includes the launch of a new UNLV School of Medicine. UNLV is located on a 332-acre main campus and two satellite campuses in Southern Nevada. For more information, visit us on line at: http://www.unlv.edu THE COLLEGE The College of Sciences is a dynamic academic unit whose faculty are housed in multiple buildings with access to over 485,000 sq. ft. of space (including over 50,000 sq. ft. of dedicated research space in the new Science and Engineering Building), and with internationally competitive research and a dedication to excellence in teaching and community service. The College has over 2,700 undergraduate students and 240 graduate students across its various units: Department of Chemistry and Biochemistry, Department of Geoscience, Department of Mathematical Sciences, Department of Physics and Astronomy, School of Life Sciences, and the Water Resources Management Program, all of which provide instruction, mentoring, and research opportunities. College faculty participate in various interdisciplinary research institutes such as the High Pressure Science and Engineering Center, the Radiochemistry Program, and the Nevada Institute for Personalized Medicine. In addition to national and international collaborations, the College maintains strong relationships with institutions both university and statewide such as the Desert Research Institute, the National Supercomputing Institute, various federal agencies, and the Clark County School District. The College's students are consistently ranked as one of the best student academic groups in the University, and have a high acceptance rate into graduate and professional schools. For more information visit: http://sciences.unlv.edu/. THE OPPORTUNITY The Dean is the chief academic and administrative officer of the College of Sciences, and reports directly to the Executive Vice President and Provost. The Dean is responsible for the general management of the college with significant responsibilities in community relations, community outreach, and fundraising. The person we seek will embody all of the following characteristics, skills, and attributes:

- An engaged academic leader with an established record of research scholarship and a strong commitment to undergraduate and graduate education; - Someone who understands and supports the diverse faculty research in the College; - A proven, data-driven administrator able to handle complex budgets. One who is an excellent communicator; good listener; accessible, collegial, supportive; and an efficient manager with the ability to foster and promote a common vision across the College; - Someone who will actively seek resources and commit enthusiastically to the College's development and fundraising efforts. A high level of communication and interpersonal skills is sought to engage alumni, donors and the diverse Las Vegas community; - A leader who embraces the university's Top Tier initiative and leads the College to success in the five identified goal areas (i.e., Research, Scholarship, and Creative Activity; Student Achievement; Academic Health Center; Community Partnerships; and Infrastructure and Shared Governance); - A promoter of shared governance. Someone who respects, listens to, and appreciates the diversity and range of faculty perspectives and expertise; -A visionary advocate and spokesperson for the College. Someone who builds partnerships, promotes the College's visibility, enhances its reputation and expands cooperative interactions and partnerships with local, regional, national and international government, industry and private organizations; - Someone with an appreciation of the multiple missions of the University and College, who will promote success in research, teaching

and service.

QUALIFICATIONS Candidates must possess a terminal degree from an accredited college or university in a discipline appropriate to the College, along with a strong

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### UNevada Reno ChairNaturalResources

Dear Colleagues- We are conducting a search for Chair of the Department of Natural Resources and Environmental Science at the University of Nevada, Reno. Please help us distribute this announcement to appropriate candidates.

For any further information, please feel free to contact me: Marjorie Matocq at mmatocq@cabnr.unr.edu or 775-784-4621.

The job description is attached but can also be found at:

https://www.unrsearch.com/postings/-21875[unrsearch.com] Thank you for getting the word out! Marjorie

Marjorie Matocq, Ph.D. Professor Department of Natural Resources and Environmental Science Program in Ecology, Evolution, and Conservation Biology University of Nevada Reno Reno, Nevada 89557 775-784-4621 http://naes.unr.edu/matocq/ mmatocq@cabnr.unr.edu

### **UOklahoma EvolutionBehavior**

TheUniversity of Oklahoma Biology Department announces two open-rank tenure/tenure-trackpositions, beginning fall 2017, as part of a clusterhire of five positions in Biology of Behavior (see http://ou.edu/bb.):

- A Molecular Neurobiologist (MN) studying mechanisms of neuronal circuits for behaviors.  $\mathbf{\hat{a}} \pmb{\in}$  - A Behavioral Geneticist (BG) studying the evolution or regulation of organismal behavior.

Applicantsshould: indicate which position they are applying for; send CV,research and teaching statements, and up to five reprints/preprints asPDF files to biologyjobs@ou.edu; have three signed reference letters sentto biologyjobs@ou.edu or Department of Biology, 730 Van Vleet Oval,Norman, OK 73019. Applicants at the rank of Associate Professor orProfessor may submit reference contact information instead of letters.Screening will begin 21 October 2016 and continue until the positionsare filled.  $\hat{a}$ €The University of Oklahoma is an equal opportunityemployer. Women, minorities, protected veterans, and individualswith disabilities are strongly encouraged to apply.  $\hat{a}$ €

#### RosemaryKnapp

Professorand Director of Graduate Studies Departmentof Biology 730Van Vleet Oval Universityof Oklahoma Norman,OK 73019

phone:405-325-4389 fax:405-325-6202

"Knapp,Rosemary" <rknapp@ou.edu>

### **UOklahoma MammalianGenomics**

#### ASSISTANT PROFESSOR/CURATOR - MAM-MALIAN GENETICS/GENOMICS

POSITION AVAILABLE: Tenure-track Assistant Curator of Mammals and Assistant Professor of Biology, Sam Noble Museum and Department of Biology, University of Oklahoma, Norman, Oklahoma.

SALARY: Negotiable (9-month appointment).

BEGINNING DATE: 16 August 2017

DESCRIPTION OF POSITION: We seek a creative, collaborative thinker with a collection-based research program involving molecular approaches to studying mammalian systems. We are especially interested in candidates who use genomic tools and datasets in combination with innovative computational, ecological, behavioral and/or comparative approaches to address important biological questions ranging from the origin and maintenance of organismal diversity, adaptation to changing environments, evolution, conservation, and human health and disease. Areas of research interests include, but are not limited to: comparative genomics, landscape/population genetics, geographical ecology, global change biology, evolutionary genetics, and mechanisms of evolution. Preference will be given to biologists with a documented record of collections-based research in natural history, including field experience and a broad taxonomic understanding of the Mammalia, who also clearly demonstrate cross-disciplinary research programs. A Ph.D., teaching experience, and field and museum research experience in mammalogy are required.

**RESPONSIBILITIES:** The successful candidate will be expected to: (1) develop and maintain an innovative, extramurally-funded research program in mammalian systems; (2) oversee care and obtain support for a collection of about 70,000 specimens by maintaining records, identifying and cataloging specimens, supervising preparators and assistants, expanding and preserving the collections, and developing long-range plans for collection maintenance and development; (3) contribute to museum public exhibit development and support; (4) develop and contribute to museum-related outreach activities; and (5) contribute to undergraduate and graduate teaching, including instruction of one course per year (one-half the regular department teaching load) in mammalogy, animal behavior, biogeography, genetics, evolution, comparative anatomy, ecological modeling, or bioinformatics. A full-time Curatorial Associate is funded in this collection (50% mammalogy collection, 40% genetic resources collection, 10% Supervisor of Integrated Pest Management).

GENERAL INFORMATION: The Sam Noble Museum is an organized research unit of the University of Oklahoma and is one of the finest university museums in the world. The museum has an outstanding curatorial, collections, education, exhibits, and support staff that serves the museum's mission from research to preservation to education at all levels. The Department of Biology is a leading academic department with a tradition of excellence in organismal biology. It is home to 20 of the 44 faculty in the University's graduate program in Ecology and Evolutionary Biology, and it is currently in the process of hiring several new faculty in the next two to three years to expand on its strengths in geographical ecology and the biology of behavior.

APPLICATIONS: Send cover letter, curriculum vitae, summary of experience and goals (including teaching, research, and curation), and representative pdf reprint examples to Dr. Michael A. Mares, Director, mamares@ou.edu. Applicants should also arrange to have three signed letters of reference sent to mamares@ou.edu or to Genetic Mammalogist Search Committee, Sam Noble Museum, 2401 Chautauqua Ave., Norman, Oklahoma, 73072-7029. Visit us at http://snomnh.ou.edu and http://biology.ou.edu . CLOSING DATE: Screening of candidates will begin 22 October 2016 and continue until the position is filled. THE UNIVERSITY OF OKLAHOMA IS AN AF-FIRMATIVE ACTION/EQUAL OPPORTUNITY EM-PLOYER AND ENCOURAGES DIVERSITY IN THE WORKPLACE. PROTECTED VETERANS AND IN-DIVIDUALS WITH DISABILITIES ARE ENCOUR-AGED TO APPLY.

Sam Noble Museum

Salina E. Wall, MHR

Human Resources & Finance

t. 405.325.0573

f. 405.325.7880

Sam Noble Museum

University of Oklahoma

2401 Chautauqua Ave. Norman, OK 73072-7029

"Wall, Salina E." <salinawall@ou.edu>

#### **UOxford ResAssist Celegans**

Job: Research Assistant

Salary: Grade 6 27,328 - 32,600 p.a.

Applications are invited for a highly motivated Research Assistant to work with members of Dr Kayla King's lab in the Department of Zoology, University of Oxford on a Leverhulme-funded project.

The principle aim of the project is to explore the evolutionary processes underlying microbiome-mediated defence against pathogens using a Caenorhabditis elegansmicrobe system. The post requires independence, good communication skills and the ability to present clear, consistent and logical results. You will have a degree in a relevant biological subject including some knowledge of microbiology and evolution. The research involves experimentally evolving C elegans and microbes in the lab, and subsequently conducting assays of nematode and microbe fitness. qPCR will also be conducted on evolved C elegans lineages. The ability to work closely with others as well as independently is essential. You will be well organised, flexible and show a willingness to learn new techniques and skills.

This post is full-time for 18 months to start 9 January 2017.

Only applications made online before 12.00 midday on 17 October 2016 will be considered. See: https://www.recruit.ox.ac.uk/pls/hrisliverecruit/erq\_jobspec\_version\_4.display\_form?p\_company=-10&p\_internal\_external=E&p\_display\_in\_irish=-N&p\_process\_type=&p\_applicant\_no=-&p\_form\_profile\_detail=&p\_display\_apply\_ind=-Y&p\_refresh\_search=Y&p\_recruitment\_id=125480 Please send inquiries to kayla.king@zoo.ox.ac.uk

All the very best, Kayla

Dr. Kayla King Associate Professor, Department of Zoology Tutorial Fellow, Christ Church University of Oxford

Tel: +44 (0)1865 2 81988

http://www.zoo.ox.ac.uk/people/view/king\_kc.htm https://sites.google.com/site/kckingevolution/ Kayla King <kayla.king@zoo.ox.ac.uk> information of at least three referees. Recommenders will be contacted by the University with instructions on how to submit a letter to the website. Review of applicants will begin November 7, 2016 and continue until the position is filled.

The Department of Biology is strongly committed to Penn's Action Plan for Faculty Diversity and Excellence and to creating a more diverse faculty (for more information see: http://www.upenn.edu/almanac/volumes/v58/n02/diversityplan.html). The University of Pennsylvania is an equal opportunity employers. Minorities/Women/Individuals with Disabilities/Protected Veterans are encouraged to apply.

Brenda Casper, Chair Department of Biology University of Pennsylvania 102 Leidy Lab Philadelphia PA 19104-6018 http://www.bio.upenn.edu "Sherwood, Robin M" <sherwood@sas.upenn.edu>

### **UPennsylvania BehaviorEvolution**

University of Pennsylvania: Tenure-Track Position in Animal Behavior

The Department of Biology at University of Pennsylvania invites applicants for a tenure-track position in Animal Behavior at the level of Assistant Professor. We are especially interested in integrative research that explores animal behavior in a natural context. We will consider all types of behaviors and animal models, but we have a particular interest in behaviors that include a social, interactive component. The anticipated start date for this position is July 2018.

Penn's Department of Biology has a long-standing tradition of maintaining an integrated research and educational program across all basic biological sciences, including Molecular and Cellular Biology, Microbiology, Neuroscience, Animal Behavior, Genomics, Ecology and Evolution, and Plant Sciences. The Department values interdisciplinary research, collaboration, and collegiality, with a vision that emphasizes "Life in its Natural Context".

Candidates are expected to have demonstrated excellence and productivity in research and to participate in undergraduate and graduate teaching. Interested candidates should submit materials through http://facultysearches.provost.upenn.edu/postings/957 and include a curriculum vitae, concise statements of research and teaching interests, a short annotated description of up to five publications, and the name and contact

### UPM-INIA Spain EvolutionPlantVirus

Predoctoral Position Available

AContract within the Spanish Programme "Formacion de Doctores 2016" is available for the research grant "THE EVOLUTION OF HOST RANGEAND VIRU-LENCE IN PLANT VIRUS EMERGENCE"

Researchwill be developed at the Plant-Virus Interaction and Co-EvolutionGroup Centro de BiotecnologÃa y Genomica de Plantas UPM-INIA(CBGP) (www.cbgp.upm.es)

Researchtopics: The long-term goal of the group is to understand the evolution plant-virus interactions. Within this broad field of research pre-doctoral scientist to be recruited will participate in aprogramme of research on the Evolutionary Ecology of Virus Emergence, specifically how ecosystem simplification affects infection patterns, host range evolution and virulence of multihost plant viruses.

Conditions:Contract conditions and application procedures are specified at (http://www.idi.mineco.gob.es/stfls/MICINN/Ayudas/PE\_2013\_2016/PE\_Promo

cion\_e\_Incorporacion\_Talento\_y\_su\_Empleabilidad/FICHEROS/SE\_Formyudas\_contratos\_predoctorales\_formacion\_doctores\_2016/Convocatoria\_joctorales\_2016\_firmada.pdf )

Requisites: Applicants should have a Master of Science degree, with interests nevolutionary biology, genetics,

molecular biology and /or ecologyand should send their application and CV to

Prof.FERNANDO GARCÃ $i; \frac{1}{2}$ A-ARENAL fernando.garciaarenal@upm.es

#### **BEFORESEPTEMBER 20 2016**

Forfurther information about the group: http://www.cbgp.upm.es/plant\_virus.php Recentpublications of the group related to the above-specified topics:

PaganI. et al. 2012. Effect of biodiversity changes on disease risk: Exploringdisease emergence in a plant-virus system. PLoS Pathogens 8:e1002796.

Rodelo-UrregoM. et al. 2013. Landscape heterogeneity shapes host-parasite interactions and results in apparent plant-virus co-divergence. Molecular Ecology 22: 2325 -2340.

FraileA. et al 2014. Host resistance selects for traits unrelated to pathogenicitythat affect fitness in a plant virus. Molecular Biology and Evolution 31: 928 - 939.

HilyJ. M. et al. 2014. The relationship between host lifespan and pathogenreservoir potential: An analysis in the system Arabidopsis thaliana-Cucumbermosaic virus. PLoS Pathogens 10: e1004492.

RoossinckMJ, GarcAa-Arenal F. 2015. Ecosystem simplification, biodiversityloss and plant virus emergence. Current Opinion in Virology10: 56-62.

FraileA, GarcÃa-Arenal F. 2016. Environment and evolution modulate plantvirus pathogenesis. Current Opinion in Virology 17: 50-56.

PoulicardN. et al. 2016. Human management of a wild plant modulates the evolutionary dynamics of a gene determining recessive resistance to virus infection. PLoS Genetics 12: e1006214.

FernandoGarcÃa-Arenal RodrÃguez Catedraticode la Universidad Politecnica de Madrid Centrode BiotecnologÃa y Genomica de Plantas UPM-INIA (CBGP) Campusde Montegancedo AutopistaM40, Km38 28223Pozuelo de Alarcon Madrid T:+ 34 91 336 4550/4539 F:+ 34 91 715 77 21 E-mail: fernando.garciaarenal@upm.es

fernandogarcia arenal <fernando.garciaarenal@upm.es>

### **USheffield 2ResTech Speciation**

Two research technician positions in Sheffield (UK) are now advertised to work on the evolution or reproductive barriers in the coastal snail, Littorina saxatilis.

The posts involve a mix of fieldwork, snail measurement (including behavioural) and genetics aimed at understanding the genetic basis of local adaptation and the potential for it to progress towards speciation as well as the genetics of a reproductive mode difference between nominal species. The technicians will work within a large group funded by recently-awarded NERC and ERC grants.

For details, go to www.sheffield.ac.uk/jobs then choose 'Current vacancies', choose 'Technical' and then 'Search'. The two positions are advertised separately, each for two years. In fact, there is the possibility to extend beyond two years and we will make the appointments at the same time. They are advertised as full time, but could be part-time (and then for longer).

Applications must be made online. For informal enquiries, please email me.

Roger

– Roger K Butlin

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

r.k.butlin@shef.ac.uk

### **UTArlington 2 MicrobialEvolution**

The Department of Biology at the University of Texas Arlington (http://www.uta.edu/biology/) invites applications for two tenure-track faculty positions at the level of Assistant or Associate Professor with a research focus in Microbiology. Preferred research areas include but are not limited to; 1) microbial community ecology of soil, marine or fresh water systems, 2) microbial pathogenesis, 3) host-microbe (microbiome) interactions, and 4) microbial evolution and ecology. Research areas that address fundamental problems in commensal or pathogenic microbial communities are particularly attractive. Successful candidates will have a doctoral degree in a relevant field and will be expected to develop a nationally recognized, externally funded research program, as well as teach at the undergraduate and graduate levels. Excellent opportunities exist at UT Arlington and in the Dallas-Fort Worth Metroplex for collaborations with researchers in Ecology and Evolution, Genomic, Physical, and Biomedical Sciences.

The Department and University have numerous resources including state-of-the-art labs, an Animal Care Facility, a Genomics Core Facility, a Center for Human Genomics, and the newly established Shimadzu Institute for Research Technologies - a major partnership between UT Arlington and Shimadzu Scientific Instruments that offers extensive resources for imaging, proteomics and analytical chemistry. The Department also benefits from access to core UT-system genomics and computational resources at UT Southwestern Medical Center and the Texas Advanced Computing Center (TACC) - one of the leading advanced computing centers in the U.S. Excellent opportunities exist at UT Arlington and in the Dallas-Fort Worth Metroplex for collaborations with researchers in ecology, evolution, genomics, biochemistry, and biomedical sciences.

Arlington is a city of approximately 365,000 and is conveniently located in the center of the Dallas-Fort Worth Metroplex. Within a 25-mile radius of the center of Arlington is a workforce of over two million people. The city has 82 public parks, including River Legacy Parks, a 1,300-acre oasis on the Trinity River in the heart of north Arlington. Arlington is the home of the Dallas Cowboys Stadium, the Texas Rangers Ballpark, and Six Flags Over Texas. Cost of living is relatively low for a major metropolitan area. The Dallas-Fort Worth International Airport is the fourth largest airport in the US. More information on the city of Arlington can be found at www.experiencearlington.org. Applicants must apply online at https://uta.service-now.com/jobs/ . Applicants should provide a curriculum vitae, summary of current and proposed research (three pages), teaching interests and names and email addresses of four references. Please submit all requested materials in pdf format. Review of applications will begin immediately and continue until both positions are filled.

As an equal employment opportunity and affirmative action employer, it is the policy of The University of Texas at Arlington to promote and ensure equal employment opportunity for all individuals without regard to race, color, religion, sex, national origin, age, sexual orientation, gender identity, disability, or veteran status.

Matthew R. Walsh, Ph.D. Assistant Professor Depart-

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ment of Biology University of Texas at Arlington Arlington TX 76019 Office: 817-272-1546 Lab: 817-272-9079 Email: matthew.walsh@uta.edu

"Walsh, Matthew" <matthew.walsh@uta.edu>

### UVirginia EvolutionaryEcology

Assistant Professor, Evolutionary Ecology Department of Biology University of Virginia

The Department of Biology at the University of Virginia invites applications for a tenure-track Assistant Professor appointment in Evolutionary Ecology. We are seeking a colleague whose research complements and expands existing strengths within the department and integrates ecology and evolution in natural populations. The successful candidate will be expected to establish a vigorous, independent, and externally funded research program, and to contribute excellence in undergraduate and graduate instruction and training. We are particularly enthusiastic about candidates whose research would use the Department's Mountain Lake Biological Station, one of the premier North American field stations for evolutionary and ecological research.

Candidates must have a Ph.D. or equivalent degree and relevant post-doctoral experience. A competitive startup package and excellent research facilities are available. The anticipated start date for the position is July 25, 2017.

To apply, submit a candidate profile online through Jobs@UVA and search for posting number 0619498. Electronically attach the following: cover letter, curriculum vitae, statements of research interests and teaching philosophy, and contact information for three references. The deadline for receipt of applications is October 14, 2016.

Further information about the Department of Biology and Mountain Lake Biological Station can be found at http://bio.virginia.edu and http://mlbs.virginia.edu . Inquiries about the position should be directed

to the Chair of the search committee, Robert Cox, rmc3u@virginia.edu

Questions regarding the application process and Jobs@UVA should be directed to Richard Haverstrom, rkh6j@virginia.edu

The University performs background checks on all new faculty hires prior to making a final offer of employment.

The University of Virginia is an equal opportunity/affirmative action employer. Women, minorities, veterans and persons with disabilities are encouraged to apply.

"rmc3u@eservices.virginia.edu" <rmc3u@eservices.virginia.edu>

#### **UWisconsinMadison Genetics**

Faculty Position in Genetics

The Department of Medical Genetics in the School of Medicine and Public Health at the University of Wisconsin-Madison seeks candidates for an Assistant or Associate Professor position in the tenure track. The Department of Medical Genetics is part of the UW Laboratory of Genetics (www.genetics.wisc.edu), which includes 22 faculty members with diverse research interests focused on using genetic analyses and model organisms to interrogate biological systems. The department is a hub for genetic research and training on campus and offers opportunities for collaborations with faculty in clinical and basic science departments.

The successful applicant will develop an extramurallyfunded research program in genetics-genomics relevant to human biology and health. Responsibilities include directing an independent research program, participating in undergraduate, graduate, and/or medical student teaching and mentoring. Applicants must have a Ph.D. and/or M.D. degree and have demonstrated excellent qualifications in research and teaching. Modern laboratory space and substantial resources are available.

To ensure full consideration, applicants are strongly encouraged to apply by November 17, 2016. Please send a single PDF containing a cover letter, curriculum vitae, and a single 4-page statement of research and teaching interests, and arrange for 3 confidential letters of recommendation to be sent to:

Medical Genetics Search Committee PVL #87904

c/o Pat Litza

litza@wisc.edu

1438 Genetics

425G Henry Mall

Madison, WI 53706-1580

We seek candidates who embrace diversity in the broadest sense. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.

"bret.payseur@wisc.edu" <bret.payseur@wisc.edu>

### **UZurich EvolutionCancer**

\*PhD Student position in Evolutionary Ecology\*\*\*\* \*

\*On: "URPP Evolution in Action" \*\*\*\* at the University of Zurich, Switzerland\*

\*\*

A PhD student position for the second phase of the URPP Evolution in Action, of 48 months duration, is available at the University of Zurich working with Prof Hanna Kokko and her international team www.kokkonuts.org < http://www.kokkonuts.org >. \_\_\_

The PhD student will work to establish a proper understanding of evolutionary processes that include cancer risk as a factor that can terminate a reproductive career. This involves modelling life histories and growth schedules with cancer risk, examining trade-offs between reproduction and cancer in a wild house mouse population near Zurich (collaboration with Anna Lindholm), and collecting systematic data on long-lived animals protected from predation and parasitism (veterinary data from zoos). The PhD student will also benefit an established collaboration between Prof. Kokko's team and Prof. Carlo Maley's team at Arizona State University, as well as between Prof. Dr. Kokko and Dr. Kathleen Sprouffske. The 'kokkonuts' research group is also part of a Centre of Excellence in Biological Interactions, which will bring the PhD Student in contact with Universities of Helsinki and Jyväskylä in Finland (https://www.jyu.fi/bioenv/en/divisions/coe-interactions).

We are a team that places a lot of emphasis on creating theoretical work that integrates well with empirical findings. The most up to date version of our current interests can be best described by the list of journal club articles that we discuss each week (www.kokkonuts.org < http://www.kokkonuts.org >, click on 'journal club').

The working language in the group is English (German skills are not essential). The position is available from 01. January 2017. The target application date is 10.10.2016,

#### October 1, 2016 EvolDir

but open until a suitable candidate has been found.

Applicants should send a cover letter with a

-Statement of their research interests, especially in relation to the journal club articles as mentioned above

-C.V. (including publication list), and

-Reference letters of at least one referee should be added as a pdf

Applications should form a single pdf file and this should be sent to: hanna.kokko@ieu.uzh.ch

Petra Zehetmaier <petra.zehetmaier@ieu.uzh.ch>

### WashingtonU AnthropologicalGenomics

WASHINGTON UNIVERSITY IN ST. LOUIS, Department of Anthropology - Assistant or Associate Professor. The Department of Anthropology, Washington University in St. Louis, invites applications for a tenuretrack or tenured appointment in Anthropological Genetics/Genomics at the level of Assistant or Associate Professor to begin in the Fall semester of 2017. We seek an exceptional researcher to join a department with a record of excellence in biological anthropology. The successful candidate will be an individual with expertise that involves using genetic/genomic data and associated analytical techniques to address anthropological research questions pertaining to humans and/or nonhuman primates. Candidates must explain how their research program relates directly or indirectly to important research questions in human biology, primatology, paleoanthropology and/or other disciplines in biological anthropology. The successful candidate is expected to work with graduate students in developing research projects and have a strong commitment to undergraduate and graduate teaching. Duties will include teaching assigned courses, conducting research, writing for publication, advising students, participating in department governance, and university service. Applicants seeking an appointment as Associate Professor must have demonstrated excellence in empirical research, as well as success in attracting external research funds. Applications should consist of a curriculum vitae, a cover letter describing ongoing research and teaching interests, and the names and contact information of three references. Applicants must have a Ph.D. in Anthropology or a cognate discipline, and the degree must be in hand by time of appointment. All materials should be sent as PDFs

via e-mail with "Genetics/Genomics Search" in the subject line to: Jen Masterson <jmasterson@wustl.edu>. Applications received before November 1 will receive full consideration. Consideration after that date will be at the discretion of the search committee. Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status.

WASHINGTON UNIVERSITY IN ST. LOUIS, Department of Anthropology - Assistant or Associate Professor. The Department of Anthropology at Washington University in St. Louis invites applications for a tenure-track or tenured faculty appointment in Biological Anthropology with a research specialization in Primatology at the rank of Assistant or Associate Professor to begin in the Fall semester of 2017. We seek an exceptional researcher to join a department with a record of excellence in biological anthropology. The successful candidate will have expertise in studying the behavior and ecology of extant primates with an active research program involving field studies. The candidate is expected to work with graduate students in developing research projects and have a strong commitment to undergraduate and graduate teaching. A Ph.D. in Anthropology or a closely related field is required at the time of appointment. Duties will include teaching assigned courses, conducting research, writing for publication, advising students, participating in department governance, and university service. Applicants seeking an appointment as Associate Professor must have demonstrated excellence in empirical research, as well as success in attracting external research funds. Application materials should include a curriculum vitae, a cover letter describing ongoing research and teaching interests, and the names and email addresses of three references. All materials should be sent as PDF files via e-mail with "Primatology Search" in the subject line to: Jen Masterson <jmasterson@wustl.edu>. Applications received before November 1 will receive full consideration. Consideration after that date will be at the discretion of the search committee. Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status.

#### Thanks,

Jen Masterson | Business Coordinator Washington University in St. Louis | Department of Anthropology One Brookings Drive McMillan Hall 103 Campus Box 1114 St. Louis, MO 63130-4899 P 314.935-5346 | F 314.935-8535 | E-mail: jmasterson@wustl.edu

anthropology.artsci.wustl.edu

facebook instagram twitter

"Masterson, Jen" <jmasterson@wustl.edu>

### WashingtonU ComputBiol EvolGenomics

Washington University in St. Louis Department of Biology

### TENURE TRACK FACULTY MEMBER IN COM-PUTATIONAL BIOLOGY/EVOLUTIONARY GE-NOMICS/EPIGENETICS, OPEN RANK

The Department of Biology at Washington University in St. Louis (http://www.wubio.wustl.edu< http://www.wubio.wustl.edu/ >) invites applications for a tenure-track faculty position, Assistant Professor, Associate Professor or Full Professor, from candidates whose research employs computational and/or genomic-scale approaches to answer important biological questions. We seek an innovative and accomplished scientist whose research program will complement and diversify existing departmental research areas including epigenetics, developmental biology, and evolution in plant/animal/microbial systems.

The successful candidate will have an appointment at an appropriate rank in the Department of Biology depending on qualifications and is expected to establish an externally funded research program. Contributions to both undergraduate and graduate teaching and research mentoring are essential. Duties will also include serving as a formal advisor to select undergraduate students and participating in departmental committees and university service.

Qualifications for Assistant Professor position include a PhD degree in a related field and strong research, mentoring and teaching credentials. Qualifications for Associate or Full Professor include all of the above requirements and a program of research and publications expected of a tenured position. Competitive start-up funding, laboratory development resources and ancillary support commensurate with the candidate's qualifications and needs are available with this position.

Applications received before Oct. 1 will receive full consideration. Consideration after that date will be at the discretion of the search committee. Applicants should submit the following materials in a single pdf file format: cover letter; current curriculum vitae; separate statements of research and teaching interests; and three letters of reference sent directly to the application email address, computationalsearch@wustl.edu. Candidate application materials must be submitted electronically as one PDF file to computationalsearch@wustl.edu. Questions regarding the search process should be directed to Kenneth Olsen (kolsen@wustl.edu), Chair of the Search Committee.

Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, age, sex, sexual orientation, gender identity or expression, national origin, genetic information, disability, or protected veteran status.

Joan E. Strassmann, Charles Rebstock Professor of Biology, Department of Biology, Washington University, One Brookings Drive, Campus Box 1137, St. Louis MO 63130 phone: (314) 935-3527 fax: (314) 935-4432, cell: (832) 978-5961skype: strassm, e-mail strassmann@wustl.edu

Lab: strassmannandquellerlab with wordpress dot com Blog: sociobiology with wordpress dot com

Twitter: @JoanStrassmann

"Strassmann, Joan" <strassmann@wustl.edu>

### YaleNUS Singapore Chair

#### \*PROFESSOR AND HEAD OF STUDIES, LIFE SCI-ENCES\*

Yale-NUS College, a collaboration between the National University of Singapore (NUS) and Yale University, seeks to appoint an accomplished scholar to assume a senior role in the field of life sciences. Applicants should be active researchers with a commitment to creative and effective undergraduate teaching and mentoring within their specialties and in the Yale-NUS Common Curriculum. An ongoing research program that incorporates undergraduates would be highly desirable. Preferred research areas include computational biology, microbiology, plant biology, developmental genetics of model organisms, molecular genetics and cell biology, though candidates from all areas of the life sciences are strongly encouraged to apply. We are particularly interested in candidates who bring an interdisciplinary approach to their work in the life sciences.

As a senior academic within the Division of Science, the incoming faculty member will inform and develop the curriculum in the Division, aid in the leadership of both junior and senior faculty, maintain an active research portfolio in his or her given discipline or area of interest, and engage energetically in teaching in the life sciences and in the Common Curriculum (please see http://www.yale-nus.edu.sg/curriculum/commoncurriculum). Additionally, as Head of Studies, the incoming post-holder will be expected to lead, coordinate, and mentor Division of Science faculty members, including reinforcing key standards and expectations for promotion and tenure processes.

The successful applicant should have a specialization in any area of the life sciences, must demonstrate a distinguished international career in the field, and will also exhibit the vision and desire to play a significant role in the formative years of a dynamic start-up in the world of higher education. The position will be a tenured appointment, and the appointee will be expected to begin work in time for the start of the 2017-2018 academic year. Salary, benefits, and leave policies will be competitive at an international level. Yale-NUS College is committed to supporting faculty research through various grants, research, and travel allowances.

The executive search firm Perrett Laver will support Yale-NUS College in identifying and then evaluating candidates. For further information, please contact Perrett Laver at Yale-NUS@perrettlaver.com or +44 (0) 207 340 6200. Applications should consist of the following: a cover letter explaining why the position at Yale-NUS is of interest; a full curriculum vitae, including a complete list of publications; statements on research interests, teaching experience, and teaching philosophy, including how these might fit with the College's particular mission and curriculum; and the names and contact information of three academic referees. These can be uploaded at http://www.perrettlaver.com/candidates quoting reference 2553. Review of applications will commence on September 30, 2016; early application is encouraged.

The full field of candidates will be reviewed in October and short-listed candidates will be contacted thereafter. The interview process will include on-campus visits for the finalists. The College values diversity and is committed to equality of opportunity. For more information about Yale-NUS College, please visit our web site at: http://www.yale-nus.edu.sg/ . Candidates should understand that by sharing information with Yale-NUS College via Perrett Laver, they authorize Yale-NUS College to use their personal data for the purposes of this application. Candidates may also understand that Yale-NUS College will not use their data for any purposes beyond those relevant to the application process, and that their data remains secure and confidential.

"vinodkumar.saranathan@aya.yale.edu"

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### Call for SSB StudentCouncilMembers

# CornellU Diversity Recruitment Weekend

Call for SSB Student Council Members

The Society of Systematic Biologists Council is inviting nominations for one new graduate student representative. As a member of the SSB Council you will have the opportunity to participate in the workings of a society and interact with many of the great researchers who are members of the society. Student council members will aid the society in developing initiatives to better serve our student members, will participate in council meetings to provide input, and will engage with student representatives from other societies (e.g. the American Society of Naturalists and the Society for the Study of Evolution) to support joint activities, such as studentoriented events at the Evolution meetings. This year we will elect one representative for a 2-year term beginning in December 2016. Representatives will assist the selection of new student representatives at the end of their terms. In order to support participation in council meetings which take place at Evolution meetings, the SSB will cover travel costs (e.g., airfare) and one night accommodation for student representatives. If selected, student representatives are expected to be active members of SSB (student membership is \$25), to attend the annual Evolution meetings, and to serve on the council for their full term (extension into postdoctoral work is fine). If you would like to join us, please email Noor White (noordwhite@gmail.com) by Oct. 21st with the subject "SSB Student Rep" and attach a single PDF document containing your CV and a short paragraph (less than 1 page) about what you hope to contribute or why you want to be a part of the council. You can visit our website, www.systbio.org, to learn more about the society and its activities.

Greetings,

I'm writing to share an exciting opportunity for minority undergraduates and recent graduates.

The Cornell University Departments of Ecology and Evolutionary Biology (EEB) and Neurobiology and Behavior (NBB) are pleased to announce our first PhD \*Diversity\* and Inclusion Recruitment Weekend happening April 21-23, 2017. This event will introduce attendees to our departments and connect them with faculty members that share research interests, as well as to help familiarize them with the graduate school application process.

Participant housing and meals will be covered, as well as up to \$400 in travel expenses. We are accepting applications from underrepresented minority and firstgeneration college students who are interested in applying to graduate school during the fall/winter 2017 application cycle. The deadline for applications is December 1, 2016.

We would appreciate it if you could share this event with any qualified students and post-graduates who are considering graduate school.

If you have any questions, please email CUbio.divrecruit@gmail.com. More information and the application can be found at http://cudiversityrecruitment.weebly.com . All the best,

Kate Eisen

kee39@cornell.edu

ndwhite 10@gmail.com

### CornellU VolFieldAssist WoodpeckerEvolution

Volunteer (unpaid) field assistants wanted for study of Hispaniolan Woodpecker behavioral ecology in the 2017 field season!

This announcement is also available here: https://sites.google.com/site/joshlapergola/volunteer2017 PLEASE APPLY ONLY IF YOU CAN PARTICIPATE FOR A MINIMUM OF 3 MONTHS OF THE FIELD SEASON AND DO NOT REQUIRE A STIPEND.

Six to nine field assistants needed for a study of ecology of colonial, cooperative breeding and sexual size dimorphism in the Hispaniolan Woodpecker in the Dominican Republic. Field research assistants will participate in data collection during an intensive ~3.5-month or 6.5 month field season. Assistant duties will include (but are not limited to) nest monitoring, focal behavioral observations (including nest watches and foraging records), assisting with tree-climbing, color-band reading, nestsearching, assisting with bird capture and processing, and data entry. I am currently looking for:

- Two to four FULL-term assistants are needed to arrive between 10 and 15 January (somewhat flexible) and remain until 30 July. Applications will be accepted until positions are filled, but preference will be given to those submitted by 11 October.

- Two to four 1st half term assistants are needed to arrive between 10 and 15 January (somewhat flexible) and remain until 30 April. Applications will be accepted until positions are filled, but preference will be given to those submitted by 11 October.

- Two to four 2nd half term assistants are needed to arrive between 15 and 20 April (flexible) and remain until 30 July. Applications will be accepted until positions are filled, but preference will be given to those submitted by 1 November.

Location: outside of Jarabacoa and close to Salto Jimenoa I, La Vega province, Dominican Republic

Job description: The Hispaniolan Woodpecker (Melanerpes striatus) nests colonially, ranging from 2 to as many as 20+ simultaneously active nests in the same tree, making it very unique among woodpeckers (only one other picid species of the more than 200 is known to nest in such dense aggregations). Additionally, the Hispaniolan Woodpecker is the most sexually size dimorphic of Melanerpes woodpeckers. Since 2012, I have been color-banding and observing these woodpeckers to better understand the social organization of colonies. Fieldwork in the 2017 field season will focus on further studying social organization of colonies, attempting to answer such questions as:

1) How do nesting substrate (live vs. dead trees) and its availability influence colony size and structure?

2) What information do prospecting birds utilize to "decide" where to nest, and how does this information use influence variation in colony size?

More generally, we will collect data to help test hypotheses regarding the costs, benefits, and consequences of group living, the operation of sexual selection in cooperative societies, and the evolutionary factors driving the woodpecker's exceptional size dimorphism. An important objective of our work also includes studying how parasitic fly larvae in the genus Philornis impact nesting success. A new component in the 2017 season will involve initiating a next-box experiment. We will also

Field research assistants will participate in data collection during an intensive 3.5-month (half term) or 6.5-month (full term) field season. Assistant duties will include (but are not limited to) nest monitoring, focal behavioral observations (including nest watches, dominance watches, and foraging records), assisting with tree-climbing, color-band reading, nest-searching, assisting with bird capture and processing (including metaland color-banding), and data management and entry. All volunteers will have the opportunity to learn various tree-climbing techniques. Assistants will be trained to set up, operate, and take down a unique elevated mistnet system developed specifically for this project but with applications to other ornithological studies.

Days will be long and the work will be physically and mentally demanding, but for those seeking to gain experience in field research, you won't be disappointed. The workweek will typically be 6 days long in humid, mosquito-filled fields and forests, involving hiking sometimes muddy, steep hills, climbing barbed-wire fences, and avoiding bulls; this work will leave you exhausted at the end of the day! Assistants will be involved in all aspects of the project, including discussions of the conceptual framework of the project.

Neotropical bird species are generally poorly known with many aspects of their natural history incomplete or wholly unknown. Hispaniola is an island with many poorly known native or endemic species that will reveal their intriguing secrets to those motivated and patient enough to look. While our work will focus primarily on Hispaniolan Woodpecker, opportunities to

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This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at http://life.biology.-mcmaster.ca/~brian/evoldir.html

#### **DiversifyEEB** list

The DiversifyEEB list, which contains the names, contact information and other relevant and useful information for >940 women and/or underrepresented minorities (post-doctoral researchers, pre- or post-tenure faculty, or research scientists) is currently being used by search committees for advertising this year's TT Ecology and Evolution searches. Many committees are sending emails to members of the list, and we encourage you to do so as well. You can also send a tweet with a link to your position to @DiversifyEEB and we will re-tweet it to followers of the @DiversifyEEB account.

All potential job applicants have added themselves to this list and support you in your effort to create and maintain diversity in ecology and evolution. More context behind the list's creation can be found here: https://dynamicecology.wordpress.com/2016/03/-01/diversifyeeb-introducing-a- new-resource-for-ecology-and-evolutionary-biology/

Best wishes

Gina Baucom

TO ACCESS THE LIST The DiversifyEEB list can be downloaded from this page: https:// /diversifyeeb.wordpress.com/list-2/ TO ADD YOURSELF TO LIST (Self-nominations only) Selfnominations are still being accepted via a google form ( https://diversifyeeb.wordpress.com/). Please note that the DiversifyEEB list is for those who already have a PhD.

GRADUATE STUDENTS (Self-nominations only) A sister list has been created for graduate students ( https://diversifyeebgrads.wordpress.com/) to help diversify young investigator seminar series.

- Regina S Baucom Assistant Professor 2059 Kraus Natural Science Building 830 North University Dept of EEB University of Michigan Ann Arbor, MI 48109 (734) 647-8490 http://sites.lsa.umich.edu/baucom-lab rsbaucom@umich.edu

### **ESEB GHewitt Award Call**

\*\*Godfrey Hewitt Mobility Award 2017 - Call for Applications \*\*

Godfrey Hewitt (1940-2013) was President of the European Society for Evolutionary Biology (ESEB) from 1999-2001. He was exceptionally influential in evolutionary biology both through his research and through his mentoring of young scientists. He was also a great believer in seeing organisms in their environment first-hand and in exchanges of ideas between labs. Therefore, ESEB has decided to offer, annually, mobility grants for young scientists in his name.

Closing date: Monday, 16 January 2017, 12.00 GMT.

\*Eligibility: \* The award is open to PhD students or postdoctoral scientists who are, at the closing date for applications, both within 6 years of the start date of their PhD and ESEB members. The maximum single award will be 2000 Euros. It must be used to support fieldwork or a period of research at a lab that you have not previously visited. There is no restriction on the country of residence or nationality of the applicant. A report will be required by 30 April 2018, by which time the funds must have been used.

\*Application procedure: \* Your application should be sent as a single PDF file to Ute Friedrich at the ESEB office, office@eseb.org. It should include your name, current status and institution, your PhD start date, your ESEB membership number, a description of the work to be carried out (maximum 500 words), an outline budget with brief justification (maximum 100 words) and a signed statement from your PhD supervisor or postdoctoral adviser (maximum 100 words) explaining why the work cannot be funded from your home institution or your proposed host institution.

Applications will be considered by a committee chaired by Roger Butlin. The aim will be to announce decisions before the end of March 2017.

The committee will consider the following key criteria:

1. The value of the proposed mobility in terms of its expected output and impact on the applicant's career. The committee prefers projects that are: a. Not a core component of the applicant's existing PhD or postdoctoral project, but a new venture. b. Clearly based on the applicant's own initiative c. Likely to be completed and have definable output within the award period d. Have the potential to lead to larger future projects or to enhance the applicant's career in evolutionary biology

2. The need for the GHM award, i.e. the potential for the funding provided by ESEB to make a difference, in relation to resources already available through the home or host institution.

Please endeavour to address these points in your application.

Sincerely, Ute Friedrich ESEB Office Manager

European Society for Evolutionary Biology
 Email:office@eseb.org
 Homepage:www.eseb.org
 ESEB <office@eseb.org>

### ESEB GHewitt Award Call 2

Dear Colleagues,

The current call for applications to the Godfrey Hewitt Mobility Award 2017 has been slightly modified in order to clarify the eligibility requirements. Please see the updated call below.

\*\*Godfrey Hewitt Mobility Award 2017 - Call for Applications<br/>\*\*

Godfrey Hewitt (1940-2013) was President of the European Society for Evolutionary Biology (ESEB) from 1999-2001. He was exceptionally influential in evolutionary biology both through his research and through his mentoring of young scientists. He was also a great believer in seeing organisms in their environment first-hand and in exchanges of ideas between labs. Therefore, ESEB has decided to offer, annually, mobility grants for young scientists in his name.

Closing date: Monday, 16 January 2017, 12.00 GMT.

\*Eligibility:\* The award is open to PhD students or postdoctoral scientists who are, at the closing date for applications, both within 6 years of the start date of their PhD and ESEB members. In addition, applicants will be considered who are more than 6 years from the start of their PhD if they have had career breaks, worked part-time, or for other reasons have not worked continuously. The maximum single award will be 2000 Euros. It must be used to support fieldwork or a period of research at a lab that you have not previously visited. There is no restriction on the country of residence or nationality of the applicant. A report will be required by 30 April 2018, by which time the funds must have been used.

\*Application procedure:\* Your application should be sent as a single PDF file to Ute Friedrich at the ESEB office, office@eseb.org. It should include your name, current status and institution, your PhD start date, your ESEB membership number, a description of the work to be carried out (maximum 500 words), an outline budget with brief justification (maximum 100 words) and a signed statement from your PhD supervisor or postdoctoral adviser (maximum 100 words) explaining why the work cannot be funded from your home institution or your proposed host institution.

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Please endeavour to address these points in your application.

Sincerely, Ute Friedrich ESEB Office Manager

– European Society for Evolutionary Biology Email:office@eseb.org Homepage:www.eseb.org office@eseb.org

# ESEB JMaynardSmithPrize CallNominations

#### Dear Colleagues,

The current call for applications to the Godfrey Hewitt Mobility Award 2017 has been slightly modified in order to clarify the eligibility requirements. Please see the updated call below.

\*\*John Maynard Smith Prize 2017: Call for Nominations \*\*

Every year the European Society for Evolutionary Biology (ESEB) distinguishes an outstanding young evolutionary biologist with a prize named after John Maynard Smith (1920 - 2004), eminent scientist, great mentor, author of many books on evolution, and a former President of ESEB.

Nomination:

The prize is open to any field of evolutionary biology. The candidates for the 2017 prize must have begun their PhD study after January 1, 2010. In addition, nominees will be considered who are more than 7 years from the start of their PhD if they have had career breaks taken for family, caring or health reasons; the nature of the reason must be given. The nomination of the candidate may be by a colleague or self-nominated. The nominations should be sent as a single PDF file to Ute Friedrich at the ESEB office <office@eseb.org>. The nomination should include a brief justification, the candidate's CV and list of publications (indicating three most significant papers), a short description of future research plans, and a letter from the candidate approving the nomination. A letter of reference from another colleague (or two in case of self-nomination) should be sent directly to Ute Friedrich.

Nominations and letters of support should arrive no later than January 13, 2017. Please take care to limit the size of attachments (total < 10 MB) in any one email.

The nomination committee, chaired by the ESEB Vice President Juha Merilä, will evaluate the nominations and inform the winner approximately by the end of February 2017.

The prize winner is expected to attend the ESEB congress in Groningen, The Netherlands (20-25 August, 2017), where he or she will deliver the 2017 John

Maynard Smith Lecture. The Society will cover registration, accommodation, and travel expenses (economy fare). The JMS Prize comes with a monetary prize of 2500.- Euro and the possibility of a Junior Fellowship of generally 3 months at the Institute of Advanced Study (Wissenschaftskolleg) in Berlin, Germany. For more information on the Wissenschaftskolleg see www.wikoberlin.de Previous winners of the JMS Prize are listed at the ESEB web site: www.eseb.org Sincerely, Ute Friedrich ESEB Office Manager

– Email: office@eseb.org

European Society of Evolutionary Biology www.eseb.org office@eseb.org

### ESEB JohnMaynardSmith Prize

\*\*\*\* John Maynard Smith Prize 2017: Call for Nominations<br/>\*\*

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Sincerely, Ute Friedrich ESEB Office Manager

Email: office@eseb.org

European Society of Evolutionary Biology www.eseb.org ESEB <office@eseb.org>

### ESEB outreach fund

#### \*\*ESEB Outreach Fund\*\*

The European Society for Evolutionary Biology (ESEB) welcomes applications to the ESEB Outreach Fund for projects that promote evolution-related activities. The goal of this initiative is to improve public knowledge about evolution globally.

Applications for funding will be accepted for educational initiatives that promote evolution, development of evolutionary material (books, films, web sites) intended for a general audience, public outreach seminars, public exhibitions, etc. While most projects will be financed for a sum between 1000-1500 Euro, exceptions can be made if a strong argument is provided for additional funds.

The application form can be found on www.eseb.org (click on the "Outreach Fund" link). Applications will be accepted twice yearly (deadlines March 15, September 15) and should be submitted by email to Ute Friedrich (office@eseb.org; Subject: Outreach).

 Dr. Ute Friedrich ESEB Office Manager Email: office@eseb.org European Society for Evolutionary Biology
 www.eseb.org office@eseb.org

### **EvolutionLetters NewJournal**

#### Dear Members

We are delighted to announce a new journal Evolution Letters http://onlinelibrary.wiley.com/journal/-10.1002/(ISSN)2056-3744

#### Aims and Scope

Evolution Letters is a new venture, jointly owned by the European Society of Evolutionary Biology (ESEB) and the Society for the Study of Evolution (SSE). The journal is Open Access, online only and profits go back into the two societies. The journal is aiming to publish the very best work in evolutionary biology, and to become a high impact journal specifically for our community. The Editor-in-Chief is Professor Jon Slate (University of Sheffield, UK).

Evolution Letters will publish cutting-edge new research in all areas of Evolutionary Biology. Papers should demand rapid publication because they substantially advance the field, are of outstanding clarity and originality, or are of broad interest. Papers that introduce new analytical or methodological frameworks that are likely to be highly influential will also be considered. Opinion and commentary articles on new developments or emerging themes are encouraged. The Editor-in-Chief (j.slate@sheffield.ac.uk) and Editorial Board welcome enquiries about other forms of article. The journal has a flexible approach to the format of manuscripts on submission, and will only ask authors to adhere to a house style once the manuscript is accepted for publication.

The journal can be followed on Twitter @EvolLetters

"j.slate@sheffield.ac.uk" <j.slate@sheffield.ac.uk>

### Fundamental Questions Island Biology

Dear Evoldir member,

We write to you on behalf of the 29 members of the 50 fundamental questions in island biology working group (member names listed at the end of this email).

To mark the arrival of 50 years since the publication of Robert MacArthur and Edward O. Wilson's book in 1967, The Theory of Island Biogeography, we are undertaking a survey to identify the top 50 fundamental questions in island biogeography and island biodiversity. To date we have been working with the approximately 400 attendees of the recently held Island Biology Congress in the Azores (http://www.islandbiology2016.uac.pt) to define a group of 80 questions from an initial pool of more than 200. We now welcome the participation of the broader community of researchers with an interest in island biology to define the final set of 50 questions.

Access to the survey will close at 23.59 on the 16th of September (GMT).

To participate, please access the following link. https:/-/goo.gl/forms/ubjrFXBJIhTUPqUl2 Thank you very much, in advance, for your valuable contribution.

Yours sincerely,

The 50 fundamental questions in island biology working group: Jairo Pati $\tilde{A}$  ±o, Robert J. Whittaker, Paulo A.V. Borges, Jose M. Fernandez-Palacios, Claudine Ah-Peng, Miguel Araujo, Sergio Avila, Erick de Boer, Pedro Cardoso, Josselin Cornuault, Lea de Nascimento, Artur Gil, Aaron Gonzalez, Daniel Gruner, Ana Guida Santos, Ruben Heleno, Joaquin Hortal, Juan Carlos Illera, Christopher Kaiser-Bunbury, Tom Matthews, Anna Papadopoulou, Nathalie Patorelli, Jonathan Price, Manuel Steinbauer, Kostas Triantis, Luis Valente, Pablo Vargas, Patrick Weigelt, Brent Emerson

P.S. we apologize for cross-posting.

Jairo Pati±o, PhD Island Ecology and Evolution Research Group Instituto de Productos Naturales y AgrobiologÃÂ'a (IPNA-CSIC) C/AstrofÃÂ'sico Francisco SÃÂnchez 3, La Laguna, Tenerife, Canary Islands, 38206, Spain http://www.jairopatino.com <jpatino.llorente@gmail.com>

# Funding Turtle Conservation Genomics

#### Dear colleagues:

Apologies for cross-posting - we are trying to get the word out as widely as possible.

My colleagues and I recently launched a crowdfunding effort for a turtle conservation genomics study (available here: https://experiment.com/turtle-climatechange-genes). As next-generation sequencing technologies become more affordable, we can now begin to answer challenging ecological questions about the role of adaptive genetic variation in shaping species' responses to environmental change. With that in mind, our goal is to use next-generation sequencing to quantify adaptive genetic variation in two species of turtles in Wisconsin (the Blanding's Turtle and Snapping Turtle).

This work could have real conservation implications for these two species, and can be accomplished fairly inexpensively. However, we first need to raise the funds necessary to do this work, which can be challenging as funding sources become more scarce.

We feel that crowdfunding could really bridge this gap, and we have already raised over 10% of our funding goal in the past several days. However, we need to raise the remaining funds in 24 days - otherwise we do not get any of the funds at all!

If you can, we would appreciate your support for this work. If you are unable to donate, sharing helps too - so please consider spreading the word about this effort! Again, you can find the project page here: <a href="https://experiment.com/turtle-climate-change-genes">https://experiment.com/turtle-climate-change-genes</a> . All the best,

-Nathan Byer

"nbyer@wisc.edu" <nbyer@wisc.edu>

# Malaysia VolFieldwork WaspEvolution

A field assistant is required to help with a project on behaviour in social wasps. The position is a fantastic opportunity to gain tropical field experience, working in a vibrant research group, lead by Dr. Seirian Sumner, University College London, UK (http://www.sumnerlab.co.uk/). This exciting project combines behavioural experiments with next-generation sequencing to understand the molecular mechanisms behind sociality. The fieldwork will be conducted in Frasers Hill, Malaysia, and will run from January until March/April 2017 (minimum three months). The work involves marking wasps, manipulations, conducting censuses, sample collections, and behavioural observations.

Assistants are generally expected to have a good degree (2:1 or equivalent) in the biological sciences. Background in molecular studies is not required, as fieldwork is behavioural based. A keen interest in behavioural ecology, social evolution, and/or entomology is desirable. Applicants should be fit, enthusiastic, hard working, happy with living in shared accommodation, and working in uncomfortable & challenging conditions. Previous experience of working on social insects would be an advantage. The applicant must be able to commit to the full field season. These wasps can sting when provoked, so applicant must have no known previous allergies to wasp/bee stings. Due to the nature of work you may also be required to work up ladders, and must have full colour vision.

All work-related costs in Malaysia will be paid for, including accommodation and flight. Worldwide applicants are supported, although must be fluent in English.

Please contact Dr. Daisy Taylor (daisy.taylor@bristol.ac.uk) for more details. Applications should include a CV with email addresses for two referees and a 1-page cover letter explaining why you would like to work on the project. Applications should be submitted by e-mail to Dr. Daisy Taylor . Shortlisted applications will be notified by email, and will be invited for interview either in person or over skype/phone.

Dr Daisy Taylor Post-doctoral Research Assistant School of Biological Sciences 24 Tyndall Avenue Bristol BS8 1TQ UK daisy.taylor@bristol.ac.uk

DA Taylor <daisy.taylor@bristol.ac.uk>

#### Peer mentoring

\*Power of Peers Circles\* (\*POP Circles\* < https:/-/sites.google.com/site/powerofpeerscircle/ > \*) are a way to create community, set personal goals, discuss professional challenges, and receive constructive feedback in your field with the support of peers\*. POP Circles are regularly meeting peer mentoring groups that offer access to ideas, information and perspective. Groups provide frequent and safe forums in which to discuss concerns and receive constructive feedback, as well as set realistic personal goals. Participation develops accountability and self-efficacy.

\*Who: \*We plan to launch the following groups soon:

\* Midcareer (tenured or equivalent career stage) women in biological sciences

\* Midcareer (tenured or equivalent career stage) scientists from underrepresented groups in biology \* If you are interested in joining a group that is not listed here or have questions, please be in touch! PowerofPeersCircle@gmail.com

\*What: \*Groups engage in peer problem solving, reflection and mentoring. Each group has 5-10 participants and is launched with an experienced facilitator for the first few meetings.

\*Where: \*Video conference

\*When: \*Groups meet every other week for 1.5 hours.

\*Community connection. Problem solving. Professional development. Sounding board.\*

chorner devine @gmail.com

### Phyloseminar AndrewRoger Oct7

Our next freely-viewable seminar:

Combating phylogenetic artefacts by modeling sitespecific substitution processes with mixture models and approximations

Andrew Roger Dalhousie University Friday, October 7, 2016, 10:00 AM PDT

The most widely used phylogenetic models of amino acid substitution involve a single reversible empirical substitution matrix (e.g. LG, WAG, JTT etc.) and a mixture model of rate heterogeneity cross sites, such as a discretized gamma distribution. However, these models fail to capture important constraints on protein sequence evolution, heterogeneity in the substitution process across the tree, and heterogeneity across multiple proteins in a concatenated data matrix. Failure to model these features of the data can lead to artefacts in phylogenetic reconstructions, especially for "deep" phylogenetic problems. Here I focus on the importance of modeling site-specific heterogeneity in the substitution process.

The structural and functional roles of residues in proteins lead to constraints on the kinds of amino acids that may be substituted at positions over time, a feature that is not captured by the single-matrix models. Site-heterogeneous mixture models have been developed to address this issue. For example, the "CAT" mixture models (CAT-Poisson or CAT-GTR), implemented in the Phylobayes program, have been shown to successfully avoid long branch attraction problems associated with single-matrix analyses in a number of published cases. However, the utility of these and other mixture models is severely limited for very large phylogenomic analyses because of their computational time cost and memory usage. I will discuss several simple rapid and efficient approximations to these full profile mixture models. Our simulation and empirical data analyses demonstrate that these approximations ameliorate long branch attraction artefacts and, in several cases, provide more accurate estimates of phylogenies than the mixture models from which they derive.

For instructions on how to attend this online seminar, see http://phyloseminar.org/attending.html – Frederick "Erick" Matsen, Associate Member Fred Hutchinson Cancer Research Center http://matsen.fredhutch.org/ ematsen@gmail.com

### Python for Biologists

Q&A: Dr. Martin Jones helps us understand the importance of learning Linux and Python.

Posted on 05 September, 2016 by Carlo Pecoraro

The need for Bioinformatics skills has increased and become unconditionally fundamental for experimentalists to acquire at least basic skills to enquiry, retrieve and handle the biological information that is regularly accumulating in various databases.

Most of the time, PhD students and post-doctoral researchers with backgrounds in Biochemistry, Biology, Genetics, Mathematics, Physics, and Engineering have met the need for Bioinformatics skills later in their careers with all the issues related to. So there is an increasing need to attend Bioinformatics courses with highly qualified instructors in order to fill the gap and to gain more independence when doing the analyses.

Here we have the possibility to interview Dr Martin Jones, who is a bioinformatics expert and founder of Python for Biologists (http://pythonforbiologists.com/). Martin started his bioinformatics career with Perl and Linux during the course of his PhD in evolutionary biology, and started teaching other people soon after. Since then he has taught programming and bioinformatics skills to hundreds of biologists, from undergraduates to PIs, and has maintained a philosophy that courses must be friendly, approachable, and practical. In his academic career, Martin mixed research and teaching at the University of Edinburgh, culminating in a two year stint as Lecturer in Bioinformatics. He now runs programming and bioinformatics courses for biological researchers as a full time freelancer.

Martin is the instructor for our first courses during the Autumn season.

Can you briefly describe why it is so important to learn Linux for doing Bioinformatics analysis?

The design of Linux is very well suited to the types of analyses we do in modern data-driven biological science. The command line tools are designed to be composable small programs which work together in a pipeline to do more complex things which mirrors the way that we work in bioinformatics. Also, the Linux environment has tools for automation built in, which allows us to be very productive when working with large datasets. And of course, many of the pieces of software we want to use (particularly those that deal with next-gen sequence data) only run on Linux, and most of the powerful compute clusters that we want to use have Linux as their operating system.

Which are the main benefits from learning Linux in depth?

Learning to use Linux in depth as opposed to just learning which commands to copy and paste in order to run our analysis program allows us to really take advantage of its ability to automate analyses and create repeatable, scalable pipelines. For example, we can write a shell script that combines general command line data processing tools and bioinformatics specific programs to run a complete next-generation sequence analysis workflow. This will then make it easy to repeat the same analysis on many samples, and also provide an easy way of reproducing the analysis. Being familiar with the Linux environment is also hugely helpful when working remotely on powerful servers and compute clusters.

What is the story behind the "project" Python for biologists?

As a lecturer at Edinburgh University I'd been running Python courses as part of the Bioinformatics MSc programme, and over time more and more PhD students and postdocs wanted to take the course as well. To cope with the demand I started running week long intensive courses for anybody who wanted to attend. After doing this for a couple of years I decided to make it a full time job, which has allowed me to run many more courses and given me time to develop new material for additional courses, including the Linux course and some more specific Python courses dealing with software development and data visualisation.

How interested users can improve their analysis learning Python?

Python can fit into our research toolkit in a number of different ways. It's a great tool for data manipulation, and we often use it to automate data cleaning and housekeeping jobs that would otherwise take up a lot of time. It also has really powerful libraries for numerical processing, which means we can develop new methods for data analysis and have them run on genome scale datasets. When it comes time to explore large datasets and make figures for publication we can use the Scientific Python stack of libraries. In general, knowing any programming language changes the way we look at computing: if a tool doesn't already exist to carry out the analysis we want to do, we have the means to build it ourselves.

What are the main advantages of programming in Python comparing to other programming languages (i.e. Perl)?

I don't generally get involved in language wars :-) I have done a lot of work in Perl and still regard it as a perfectly fine language for many

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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

### SmithsonianInst FellowshipProgram ApplOpen

Applications for the 2017 Smithsonian Institution Fellowship Program (SIFP) are NOW being accepted! Please share this notice with colleagues and potential applicants. SI Fellowship Program (Including the Buck Fellowship Program and others specific to evolutionary biology and systematics) Application deadline: Thursday, 1 December 2016

http://www.smithsonianofi.com/fellowship-

opportunities/smithsonian-inst itution-fellowshipprogram/

Who is eligible: Graduate students, post-doctoral and professional researchers may apply. Fellowships are available to US and non-US citizens. Applicants should write and converse fluently in English. All application material must be submitted in English. How do you apply: It is highly recommended that you first contact potential advisors well in advance of applying to discuss you ideas, feasibility and fit for the Smithsonian. Department websites are the best place to get information about potential mentors e.g. http://invertebrates.si.edu or the lengthy http://www.smithsonianofi.com/wp-content/uploads/2016/09/SORS-2 017.pdf. Apply through the Smithsonian Online Academic Appointment System, SOLAA, found at: https://solaa.si.edu/solaa/#/public . Annual Fellowship stipend award rates:

- \$7,000/10-week Graduate Student Fellowship -\$32,700/year for SI Graduate Student and Predoctoral Fellowship - \$48,000/year for SI Postdoctoral Fellowship - \$48,000/year for Senior Researcher Fellowship In addition to stipend, fellowship applicants can apply for a research allowance of up to \$4,000 EACH YEAR. Multi-year fellowships are made possible through the Peter Buck Fellowship Program.

"Osborn, Karen" <OsbornK@si.edu>

#### Software LLPLL

Dear Community,

We would like to announce the release of libpll - a new library that facilitates phylogenetic analyses.

Libpll is a low-level re-design of PLL (see http://sysbio.oxfordjournals.org/content/64/2/356.short), that offers unprecedented flexibility when implementing new models, testing hypotheses and/or developing new tools, methods or pipelines.

Apart from the highly-optimized phylogenetic likelihood function, libpl offers the following functionality:

parsing of alignment file formats (FASTA/PHYLIP)
parsing of tree file formats (binary rooted, unrooted, n-ary trees) - flexibility in defining custom models of dna evolution - support for heterotachous and mixture models - support for models with arbitrary number of states
parsimony functions - support for arbitrary number of rate heterogeneity categories - functions for weighted parsimony - methods for ascertainment bias correction - tree visualization

Libpll is highly optimized and can make use of the SSE3/AVX/AVX-2 instruction sets.

It is available for download at: https://github.com/xflouris/libpll under the Affero GPL 3 License.

The corresponding documentation can be found at: https://github.com/xflouris/libpll/wiki and a number of examples demonstrating a large portion of its func-

tionality are available at: https://github.com/xflouris/libpll/tree/master/examples Alexis

– Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Adjunct Professor, Dept. of Ecology and Evolutionary Biology, University of Arizona at Tucson

www.exelixis-lab.org Alexandros Stamatakis <alexandros.stamatakis@gmail.com>

> Software MareyMap online estimating recombination rates

Subject: MareyMap online: a web-service for estimating recombination rates using physical and genetic maps

Dear all,

We are happy to announce that a new online version of MareyMap, a tool to estimate recombination rates comparing physical and genetic maps (the Marey map approach), is freely available here: http://lbbe-shiny.univlyon1.fr/MareyMapOnline/ MareyMap online is a simplified, easy-to-use web-service version of the MareyMap R package (Rezvoy et al. 2007; Siberchicot et al. 2015). Please find more information about MareyMap and the possibility to download the R package here: https://lbbe.univ-lyon1.fr/-MareyMap-.html Best regards,

G. Marais, A. Siberchicot, L. Gueguen

References - Rezvoy C, Charif D, Guéguen L and Marais G (2007). MareyMap: an R- based tool with graphical interface for estimating recombination rates. Bioinformatics. 23(16):2188-2189. - Siberchicot A, Rezvoy C, Charif D, Guéguen L and Marais G (2015). The MareyMap package. CRAN.

MARAIS GABRIEL <Gabriel.Marais@univ-lyon1.fr>

### Software Transformer4 2 0 2

Dear EvolDir members:

We are pleased to announce the release of version 2.0.2 of the software Transformer-4, which includes its own Java Runtime Environment.

As its preceeding versions, this software boosts the analysis of genotype matrices of any size in PC, Mac or Linux. It admits data coding formats compatible with all the molecular techniques used in the investigation of biodiversity, either codominant (allozymes, nuclear microsatellites, SNP coded with two letters per genotype), or dominant (chloroplast microsatellites, AFLPs, RFLPs, ISSR or any other molecular technique that can be binary-coded).

Most matrices resident in T4's matrix explorer can be transformed easily, swiftly and simultaneously into the input formats of one or several of the 38 most commonly used population genetic software (and for any possible combination of the populations that each matrix contains).

T4-2.0.2 also allows the users to quickly publish "genetic diversity digests" in the Demiurge information system. Such digests are peer-reviewed and made up by a georeferenced T4 genotype matrix plus any ancillary information relevant to its interpretation that the authors see fit to include (see an example of a published digest in http://www.demiurge-project.org/matrix\_digests/14).

The Demiurge website (http://www.demiurgeproject.org/) and the following paper contain more detailed explanations of T4's capabilities: Caujapé-Castells J et al. (2013) Molecular Ecology Resources 13: 484-493.

To download T4-2.0.2 for free, just register in the Demiurge information system by clicking on

http://demiurge-project.org/register With all best wishes on behalf of all the Demiurge developing team,

Juli –

Dr. Juli Caujapé Castells

Director Jardin Botanico Canario "Viera y Clavijo"-Unidad Asociada al CSIC Consejería de Medio Ambiente, Emergencias y Participación Ciudadana Cabildo de Gran Canaria,

Delegate on land plant biodiversity Scientific Council of

Gran Canaria's Biosphere Reserve Consejería de Medio Ambiente, Emergencias y Participación Ciudadana

Cabildo de Gran Canaria,

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The Jardín Botánico Canario "Viera y Clavijo"-UA CSIC (Cabildo de Gran Canaria) http://www.jardincanario.org/ https://www.facebook.com/-JardinBotanicoCanarioVierayClavijo The Department of Molecular Biodiversity & DNA Bank http:/-/www.jardincanario.org/biodiversidad-molecular < http://www.bioclimac.com/mbdna/ > http://www.jardincanario.org/banco-de-adn The Demiurge information system for biodiversity's genetic diversity http://www.demiurge-project.org/ http:/-/vimeo.com/29828406 The Island-biodiv project http://www.island-biodiv.org GreenTank, plataforma informativa sobre biodiversidad e investigación http:/-/www.greentank.es The Island Plant Conservation http://www.bgci.org/ourwork/islands/ Network julicaujape@gmail.com

### **Transcriptomics**

Dear Evoldir community,

Has anyone experience with transcriptomics of fish spleen? I have two treatments and I can't see any differential response although I expect it.

I hypothesize that the fish were not doing well and that actually the spleen response may suggest a possible infection ongoing instead of their response to the treatment stress. But I don't know exactly how to prove/test this.

I have just begun working on this and I would be glad to get hints or suggestions related to your experience with spleen transcriptomics.

Many thansk in advance Chiara

Dr. Papetti Chiara University of Padova Biology Dept. Via U. Bassi 58/B 35131 Padova Italy ORCID iD: https://orcid.org/0000-0002-4567-459X Chiara Papetti <papetti.chiara@googlemail.com>

#### Twitter and science

New class: using Twitter to advance your career

Twitter can be a powerful tool for scientists, alt-ac researchers, and academics generally. When used effectively, Twitter can advance research careers, improve productivity, and further outreach goals. Unfortunately, very few researchers receive any training on how to use Twitter for professional purposes.

That's where SciFund Challenge, an outreach-focused nonprofit, comes in with our new class: Using Twitter to Advance Your Research Career. Over three weeks, you'll learn the basics of Twitter, how to avoid social media pitfalls, and how to use Twitter to advance your goals. Even better, by the end of the class, you'll have created a personal Twitter plan to further your research career or outreach.

The class will be running for three weeks, from September 18-October 8, 2016. The class is intended for academics that are new to Twitter, but would like to get started with it. The class is open to academics at any level, in any discipline. The class will be online, so all countries are welcome.

The deadline to apply is September 17th, but our classes usually fill up early. Act soon if you are interested! Here's the link for more information: http://bit.ly/-2b3VACn Jai Ranganathan National Center for Ecological Analysis and Synthesis ranganathan@nceas.ucsb.edu

jai.ranganathan@gmail.com jai.ranganathan@gmail.com

# UNL Argentina VolFieldAssist AvianConservation

Other: UNL-Argentina.VolFieldAssist.BirdsbotfliesEcoepidemiology

The Lab. Of Wildlife Diseases (ICIVET-Litoral, UNL-CONICET) is recruiting volunteers for the upcoming field season (sep. 2016 - march 2017) to work on the study of a host-parasite system in Argentina.

The genus Philornis comprises approximately 50 species

of parasitic flies with neotropical distribution This group has special interest because their larvae parasitize nestlings and reduce markedly chick survival. Since these are generalist parasites and several species of this genus are threatening endangered birds species (i.e.: Darwin finches in Galapagos), proposed studies are of importance for the conservation of neotropical birds.

The questions we want to assess this year are: \* Micoenvironmental characteristics of birds' nests species and its role on the prevalence and intensity of parasitism of Philornis torquans. \* How does parental feeding rates may help to tolerate P. torquans parasitism? \* Cues used by P. torquans to select its hosts. \* Humoral immune response and its relationship with the parasitism of P. torquans.

Activities mainly involve field (6-8 hrs day/3 days

per week) and lab work (rest of week days) at Esperanza city (Santa Fe, Argentina). Weekends are mostly free. This schedule is specially designed for volunteers to travel and know the local culture during weekends. For more info on the city and nearby area please visit http://www.esperanza.tur.ar/sitio or www.santafeturismo.gov.ar . We expect foreign candidates to spend, at least, one month working with our group. No previous experience is required. Furthermore, those topics and other that may arise may be used for volunteers for their own undergrad thesis (we will be happy to mentor/co-mentor students). If interested please send your CV and a presentation letter to María José Saravia (majosaravia18@gmail.com) o Martín Quiroga (mquiroga06@hotmail.com).

Martin Quiroga<mquiroga<br/>06@hotmail.com>

# **PostDocs**

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### **AarhusU EpigeneticsAdaptation**

Two year post-doctoral position, Aarhus University, Department of Bioscience, Denmark. Epigenetics/Genomics

I have a post-doctoral position available in my group at the Department of Bioscience, Section for Genetics, Ecology & Evolution, Aarhus University, that has a research focus on the evolutionary genetic consequences of inbreeding mating system associated with permanent sociality in Stegodyphus spiders, using a population genomics approach. The post doc position will have a focus on the role of epigenetic modifications in adaptation, involving assembly of whole genome sequences and annotation, and subsequently methylation profiling.

Requirements: PhD in evolutionary genetics or relevant field, extensive experience in bioinformatics and analysis of next generation sequencing data, proficient in a programming language. Please contact Jesper Bechsgaard jesper.bechsgaard@bios.au.dk for more detail.

The position is available for for two years and funded by the Villum Foundation. Please email Trine Bilde trine.bilde@bios.au.dk to apply. Include a cover letter, CV, statement of research interests and email addresses for three references. Application review will begin immediately; start date is flexible with latest possible start 1 April 2017.

Trine Bilde Professor of Evolutionary Biology Head of Genetics, Ecology & Evolution Section Department of Bioscience Aarhus University Ny Munkegade 116 DK - 8000 Århus C Denmark Tel: +45 871 56565 Mobile: +45 6020 2702 Email: trine.bilde@bios.au.dk

Trine Bilde <trine.bilde@bios.au.dk>

#### **BarcelonaUPF HumanPopGenomics**

\*Postdoctoral in Human Population Genomics\*

The goal of the postdoctoral position is to undertake large-scale analyses of human genome wide data and complete genomes at a population level to carry out independent research, contributing as a team member to the wider program of research led by Dr. David Comas (http://www.biologiaevolutiva.org/dcomas). This will involve contributions to the design and development of new studies, leading modest-scale research projects and playing a key role in collaborative human population genetics studies. Current research focuses on complete genome analyses in human populations to unravel the evolutionary processes (demographic and adaptive) that have shaped the extant genomic diversity.

Specifically the postdoctoral researcher will:

• Lead analyses of human genome wide and complete genomes data and bioinformatic analyses to explore evolutionary processes.

• Lead and undertake innovative research that will advance understanding of the genomic determinants of human diversity, using strategic vision, supervisory skills, innovative ideas and high-level research skills as an experienced researcher working at the interface of bioinformatics, genetics, human biology and biomedicine. This will include making significant contributions to journal papers and could include development of novel statistical genetic methods where relevant to on-going studies.

• Contribute to the international profile of the team by presenting research to research teams, local audiences and international conferences.

• Co-supervise junior members of staff and research students and provide advice and guidance to other members of the team and to collaborators.

• Contribute to broader team goals including the par-

ticipation in University teaching of undergraduate and master students.

\*Qualifications, Knowledge and Experience:\*

Essential

- PhD in Population Genetics or a related field.

- Knowledge of human genomics.

- Experience of techniques used in bioinformatics, genomics and statistical genetics, with particular expertise in computational approaches to genomic analyses.

- Evidence of bioinformatic or statistical programming competency.

- Evidence of research productivity (including highquality research publications, presentations) and involvement in innovative, high-level research.

Desirable

- Evidence of training students

- Experience of Linux, scripting and use of a High Performance Computing Linux cluster

\* Skills, Abilities and Competencies:\*

Essential

- High level of proficiency in English, sufficient to undertake research and teaching to communicate effectively with staff and students.

- Ability to work independently and also as part of a research team.

- Excellent written and oral communication skills.

- Effective interpersonal and organizational skills, excellent time management skills.

- To demonstrate research potential, high motivation and enthusiasm of the subject area and deliver high quality research.

- Computational skills, including statistical programming (ideally R) and ideally also a programming language such as Python, Perl or C++.

- Ability to supervise research students and junior staff

A full-time position for 2 years with the possibility of extension is offered. Salary will be similar to postdoc positions offered by the Spanish Ministry ("Juan de la Cierva" contracts). Starting date November 2016 but alternative dates can be discussed. Candidates are asked to supply contact details for referees, a CV and a covering letter to support the application. Candidates shortlisted for interview will be contacted by the team leader. Applications should be sent to david.comas@upf.edu. Review applications will begin on October 1st, 2016 and continue until the position is filled. Applications received by October 1st will be given priority consideration.

David Comas <david.comas@upf.edu>

### **Budapest EvolutionaryGenomics**

A postdoctoral position is available to join the recently funded Evolutionary Genomics Research Group (under a highly competitive 5 year grant from the Hungarian Academy of Sciences' "Momentum" program).

The Evolutionary Genomics research group's aim is to develop a coherent treatment of evolutionary processes at different time scales, from the diversification of species over hundreds of millions of years, to the decade long development of tumours. The successful candidate will have the opportunity to choose between two topics that are currently the subject of intense scientific interest, each aiming to extract quantitative information on the underlying biological processes from large genomic datasets: 1. reconstructing a dated tree of life from complete genomes using phylogenetic discord as molecular fossils and 2. to understand cancer evolution in hierarchically differentiating tissue using tumour genomes. The successful candidate will either have a background in Evolutionary Biology, Bioinformatics or a related field, or come from a strong quantitative background such as Applied Mathematics or Statistics, or Statistical or Biological Physics with the ambition to pursue research in Evolutionary Biology.

The position is for up to 5 years with a salary of up to 500,000 HUF per month conditional on experience (adjusting for cost of living this corresponds to approx. EUR 2,500 in Berlin, 2,600 in Vienna and 3,500 in Paris [numbeo.com]). The research group is lead by Dr. Gergely Szollosi (https://scholar.google.hu/citations?user=sPrYT-oAAAAJ) and actively collaborates with the research groups of Vincent Daubin, Nicolas Lartillot and Bastien Boussau (Evolutionary Genomics and Phylogeny, CNRS, Lyon France) as well as Eric Tannier (Bioinformatics, Computer Science, IN-RIA Lyon France), Tom Williams (Molecular evolution, phylogenetics, University of Bristol) and Carolin Kosiol (Bioinformatics, Vetmeduni Vienna). The successful candidate will have the opportunity to work with and visit for periods of up to several months the collaborating parties.

The research group is hosted at Eötvös Universities In-
stitute of Physics. The Institute of Physics has been included in the Excellence Group of European Universities, and has achieved top placement in the number of citations, the number of ERC grants, the time available for PhD research and the gender balance of master's students in the CHE Excellence Ranking. The research group is associated to the Depts. of Biological Physics and Complex Systems composed of several interdisciplinary research groups including those of Prof. Imre Derényi, Prof. Tamás Vicsek, and Prof. István Csabai with experience in the analysis of large scale datasets, including next generation sequencing data.

Please direct all enquiries to Dr. Gergely Szollosi (ssolo@elte.hu).

sszolo@gmail.com

#### Canada ConservationBiol

Liber Ero Fellowship Program - call for post-doctoral applications

We are delighted to announce the fifth call for postdoctoral applications for the Liber Ero Fellowship Program. The Liber Ero Fellowship Program supports exceptional post-doctoral fellows who address pressing conservation challenges of relevance to Canada. The Program aims to develop the next generation of conservation scientists, trained in the latest methods and in the skills necessary to affect policy and improve conservation of Canada $\hat{A}^1$ s wild places and natural resources.

The Liber Ero Fellowship is open to candidates from any country whose research furthers conservation goals within Canada. Fellows must be hosted at a Canadian institution, with mentorship teams drawing from expertise in non-governmental organizations, government, and universities. Applications are now being accepted, with a deadline of November 1, 2016. See http://liberero.ca/ for more details.

Please see http://liberero.ca/meet-the-fellows/ to read about the current cohort of fellows and their projects.

Contact information: info@liberero.ca

Anita Miettunen Liber Ero Program Coordinator T: 604-822-5041 E: info@liberero.ca W: liberero.ca

"info@liberero.ca" <info@liberero.ca>

# ChicagoFieldMuseum 2 VertebratePaleontology

The Field Museum seeks two postdoctoral scholars working in vertebrate paleontology, with a focus on archosaur paleobiology and evolution. Successful candidates will have a PhD in earth or life sciences or in a related discipline, and are expected to have a track record of publication and grant writing. Demonstrated experience working with three-dimensional data generated through scanning of fossils is desirable.

The postdoctoral scientists will work directly with Dr. Peter Makovicky to conduct research on dinosaur evolution and paleobiology, and will also collaborate with Dr. Makovicky and staff in the Exhibit department on the creation of exhibits related to dinosaurs. For more information, please contact Dr. Peter Makovicky (see address information below).

Each postdoctoral scientist will be employed by the Museum on a 12-month term, with benefits. The term for each position is up to two years with a review of performance after the first year. Review of applications will begin immediately and will conclude when both position are filled. To apply please send a statement of research interests and experience, a curriculum vitae including publications list, and names of three referees (with e-mail addresses) to: Peter Makovicky, Earth Sciences Section, The Field Museum, 1400 S. Lakeshore Dr., Chicago, IL 60605-2496 USA; e-mail: pmakovicky@fieldmuseum.org; phone: (312) 665-7633.

Peter J. Makovicky Associate Curator Section of Earth Sciences The Field Museum 1400 S Lake Shore Drive Chicago IL, 60605 Ph: (312) 665 7633 Fax: (312) 665 7641 http://fieldmuseum.org/users/petermakovicky Twitter: @PeteMakovicky

Peter Makovicky cpmakovicky@fieldmuseum.org>

CIBIO Portugal EvolutionaryGenomics

POST-DOCTORAL RESEARCH FELLOWSHIP

Reference: ICETA 2016-81 Link to the call: http://www.eracareers.pt/opportunities/index.aspx?task=-global&jobId=83398 Application deadline: 16 October 2016.

MAIN RESEARCH FIELD: Biological Sciences - Evolutionary Genomics

JOB DESCRIPTION: A Post-doctoral Research Fellowship (BPD) (Reference 2016-81) in the R&D project PTDC/BIA-EVF/1624/2014 "CHANGE - Seasonal Coat Colour and the impact of Climate Change on the genetic composition of boreal species" is available at CIBIO/ICETA, Instituto de Ciências e Tecnologias Agrarias e Agro-Alimentares da Universidade do Porto, funded by FCT/MCTES.

ELIGIBILITY REQUIREMENTS: The post-doc fellowship is suitable for candidates of any nationality holding a PhD degree in biology, bioinformatics or related areas. We seek candidates with i) strong experience in analyses of next generation sequencing data and programming, ii) proven publication record, iii) excellent verbal and written communication skills in English, iv) good communication and teamwork skills. The candidate's Curriculum Vitae must be compatible with the work plan.

WORK PLAN: The project investigates the evolution of seasonal coat colour change in mammals and uses historical samples to assess consequences of dramatic recent changes in the habitat of species. Approaches include for example tracking gene expression changes, performing genome scans for association studies from wild populations and applying NGS approaches to museum samples. The work of the fellowship holder will be mainly focused in analyses of next generation sequencing data (both genomics and transcriptomics), from raw data treatment to population genetics analyses. He/she is also expected to assist in the coordination of several tasks of the project (including sampling and genomic data acquisition) and interact closely with the PI (Jose Melo-Ferreira), his research team, and several collaborators.

WORKPLACE: The work will be primarily conducted at Centro de Investigacāo em Biodiversidade e Recursos Geneticos (CIBIO-InBIO), Universidade do Porto (located at Campus de Vairao, 4485-661 Vairao). CIBIO-InBIO is a young and dynamic research centre located near Porto, in Northern Portugal, which conducts research in all fields of biodiversity and evolution (http:/-/cibio.up.pt/). The Centre hosts 20 research groups, which include over 160 PhD level researchers and over 100 MSc and PhD students from across the world. The Centre has state of the art ecology and molecular laboratories, including a next-generation sequencing platform (http://cibio-newgen.pt/). The working language of the institute is English. Visits to other collaborating labs in Europe and the USA may take place.

APPLICABLE LEGISLATION: A fellowship contract will be celebrated according to the regulations defined by FCT "Regulations for Advanced Training and Qualification of Human Resources", in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of 29 January, and Decree-Law No. 89/2013 of 9 July, to Fellowships Regulation of FCT (www.fct.pt/apoios/bolsas/docs/-RegulamentoBolsasFCT2015.pdf), and to Fellowships Regulation of ICETA approved by FCT.

DURATION OF THE FELLOWSHIP: The fellowship will have a duration of 12 months, potentially renewable for an additional period of 12 months, preferentially starting up to January 1st 2017.

SALARY: Monthly stipend is €1495 plus Social Security (Seguro Social Voluntario), according to the stipends established by FCT, I.P. in Portugal (http://-alfa.fct.mctes.pt/apoios/bolsas/valores).

SELECTION CRITERIA: Evaluation of applications will be done according to the required competences (see above) and will be based on: a) academic qualifications (25%); b) demonstrated experience and skills in relevant areas (50%); c) motivation letter and interest for the project (25%). The jury may decide to select candidates to an interview (in person or by videoconference) to establish the final ranking, and may not award the fellowship if the profile of the candidates does not meet the requirements of the project.

JURY: Jose Melo-Ferreira (Chair), Paulo Celio Alves (vowel), Miguel Carneiro (vowel), and Rita Campos (substitute vowel).

PUBLICITY AND COMMUNICATION OF RESULTS: The ranking of applications will be published at a visible and public area of ICETA facilities, and all candidates will be informed by email about the result of their application.

HOW TO APPLY:

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

# ColumbiaU GenomeEvolution

Postdoc Opportunity: Columbia University

Genome Rearrangement, Epigenetics, and Non-coding RNAs

# COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Postdoctoral Research positions are available in our brand new lab (with Hudson River views) in the Department of Biochemistry and Molecular Biophysics, with a research focus on Genome Rearrangement, Epigenetics, Chromatin, Genome Evolution, Transposons, and Non-coding RNAs.

Professor Laura Landweber is seeking to hire postdoctoral researchers to study the mechanism and evolution of scrambled gene and genome rearrangements in ciliates, particularly the role of non-coding RNAs or epigenetic factors.

Requirements: PhD in molecular biology or relevant field. Strong experimental training, experience, and publications from the Ph.D., ability to work independently and creatively, as well as collaboratively and strong research and written/oral communication skills are necessary. Note that the full-time positions available at Columbia are for experimentalists, but a joint position is also available for a computational postdoc to serve as a liaison with a collaborative group at USF in Tampa, Florida, and spend time at both institutions.

This is a one-year initial appointment with the possibility of renewal. Funding is available for longer. Please email Laura.Landweber@columbia.edu to apply. Include a cover letter, CV, statement of research interests and email addresses for three references. Application review will begin immediately; start date is flexible.

The Landweber lab has a strong commitment to diversity and to supporting its students, postdocs, and alumni at all career stages. Many lab alumni have received tenure in academic positions (10) or chosen other successful options. Conference participation is encouraged throughout the postdoc period, as part of training for a scientific career.

#### -Laura Landweber

Professor of Biochemistry and Molecular Biophysics and of Biological Sciences

Columbia University New York, NY 10032 212-305-3898 old lab website: www.p

old lab website: <a href="https://www.princeton.edu/~lfl">www.princeton.edu/~lfl</a> "Landweber, Laura" <<a href="https://www.princeton.edu/~lfl">Landweber, Laura"</a>

# CornellU TemporalPopulationGenomics

Postdoctoral opportunity to study temporal genomic variation in fish populations

The laboratory of Nina Overgaard Therkildsen at Cornell University is looking for a highly motivated postdoc to help advance different research projects focused on tracking genomic change over time in exploited or threatened fish populations. Time-series of samples collected repeatedly from the same population provide powerful opportunities for studying rapid adaptation and demographic changes at a level of precision that can not be achieved with single snapshot observations. We use lowcoverage whole genome sequencing of archived samples collected over the past century to examine how fishing pressure, climate change, and various management measures have affected fish populations. Current projects focus on Atlantic cod and Atlantic silverside, but there will also be opportunities for the postdoc to start up new projects on additional species, including inland sport fish.—

Qualifications: Candidates should have completed or be within 6-10 months of completing a PhD in evolutionary genetics, molecular ecology, bioinformatics or a related field. We are looking for a creative and talented scientist with a good publication record and excellent organizational and communication skills. The successful candidate must have a strong computational background and previous experience with analyzing large population genomics data sets. Experience working in the Unix environment is essential and familiarity with one or several programming languages is highly desirable. The candidate will be expected to contribute to securing funding through fellowship and grant applications.

The position will be based in the Department of Natural Resources at Cornell University (the start date is flexible). Interested candidates should send their CV, a description of their motivation and research interests and contact information for three references to Nina Overgaard Therkildsen (nt246@cornell.edu). Review of applications will begin immediately and continue until the position is filled.

"nt246@cornell.edu" <nt246@cornell.edu>

### **DesMoinesU** Paleobiology

Paleobiology postdoc position to start immediately. Des Moines University, Des Moines, IA

Description: Applications are now being accepted for a postdoctoral scholar for an NSF-funded project on Natural Trap Cave to start immediately, but consideration will be given to candidates that can start as late as January 1, 2017. This 1-year postdoctoral position (plus health benefits) will be based in Des Moines, IA at Des Moines University with PI Julie Meachen. The postdoc will be working with the field site of Natural Trap Cave, Wyoming. Duties will include an independent research project related to Natural Trap Cave, helping the PI with fossil curation duties, and assisting in the field for 2-3 weeks in the summer of 2017. The postdoc will also travel to Lawrence Livermore Laboratories in the Bay Area of California to analyze AMS radiocarbon samples (this will be about 2-3 weeks per year on-site in Livermore), a living stipend will be offered to defray these costs. There will also be time for the postdoc to work on independent research projects and with students. If desired, the candidate may also obtain some human gross anatomy laboratory experience.

Qualifications include a Ph.D. in a paleo-related field (Biology, Geology, or Anthropology), with a degree in hand no later than the start date. Field experience is preferred, and the candidate should have the ability to do rigorous fieldwork (rappelling and ascending 85 feet). Experience with AMS radiocarbon dating is a plus, but not a requirement. Experience using R programming language is also viewed positively. The candidate must be willing to travel for approximately 1 month a year and be able to work independently. Des Moines University (www.dmu.edu) is a private, non-profit, osteopathic medical college. Des Moines University is the second oldest osteopathic medical school and the fifteenth largest medical school in the United States. It offers Doctorate degrees in Osteopathy, Physical Therapy, and Podiatry and Master's degrees in Biomedical Sciences, Health Care Administration, Physician's Assistant Studies, and Anatomy. It is located in the heart of Des Moines, IA, an affordable city, which offers the amenities of a bigger city with the convenience of a small town. It was voted Forbes Magazine "Best City for Young Professionals" in 2014. More about Des Moines can be found here: http://www.dmgov.org/Pages/default.aspx . To Apply: Please apply at www.dmu.edu/employment Questions about the position can be directed to Julie Meachen at julie.meachen@dmu.edu. Initial screening of applicants will begin immediately and will continue until the position is filled.

Des Moines University is an equal opportunity employer. We evaluate qualified applicants without regard to race, color, national origin, ethnicity, creed, religion, age, disability, sex, gender identity, sexual orientation, pregnancy, veteran status, genetic information and other characteristics protected by law ("protected class"). Applications from candidates from underrepresented groups are encouraged to apply.

Kim Steelman, SHRM-CP|Recruitment/Engagement Specialist| Des Moines University office: 515-271-1482 | fax:515-271-7144| email: kim.steelman@dmu.edu

"Steelman, Kim" <Kim.Steelman@dmu.edu>

### EarlhamInst EvolutionaryBiology

To adapt to desert, mammals developed different phenotypes to cope with the lack of water or food paucity associated to such environment. For example, some rodents have evolved to increase the water retention capacities of kidneys, others show a decrease of the general metabolism activity helping to cope with food shortage and high temperature often associated to such environment. Despite the different study at the physiologic level, very few is known about the molecular and evolutionary mechanism of adaptation to desert environment.

We are currently seeking to appoint an enthusiastic and highly motivated Postdoctoral Scientist that will combine comparative and population genomic approaches to study the evolutionary and molecular mechanisms of mammalian adaption to desert. The successful candidate will be responsible for developing computational methods and analysing primary genomic resources, in order to identify and study genomics signatures of environmental adaptation. The post holder will work in a highly collaborative and interdisciplinary environment. He or She will interact with other group members and external collaborators such as the Sanger Institute or the European Bioinforantic Institute , and with peoples coming from a variety of backgrounds, to include; Experimental Biologists, Field Ecologists and Computational Biologists.

To be considered for this post you will hold a PhD in Evolutionary Biology or Population Genomic or Computational biology. You already have experience with genomic data analysis (genomics/Transcriptomics/epigenomics) in population genomics or molecular evolution or gene expression regulation. The successful candidate will also have extensive knowledge in R and other script languages such as Perl or Python, be autonomous, organised and collaborative and also possess strong problem solving skills.

Earlham Institute is a vibrant, contemporary research institute and actively explores and implements new applications of DNA sequencing technologies and acquired a world -class expertise in genomic and computational biology. The Institute is located in Norwich (http:/-/www.visitnorwich.co.uk) and is part of the Norwich Research Park (NRP), which includes world leading research institutions such as John Innes Centre (JIC), The Sainsbury Laboratory (TSL) and the University of East Anglia (UEA). The NRP has a vibrant multidisciplinary scientific community in the field of environmental science, genomic, plants, food diet, microbes and health (http://www.norwichresearchpark.com/home.aspx).

At Earlham Institute we offer competitive salaries, excellent defined contribution pension scheme, life assurance,tailored learning and development and on site sports facilities that are available to all staff and their guests.

As a user of the disability symbol, we guarantee to interview all disabled applicants who meet the minimum essential criteria for this vacancy.

For further information, including details of how to apply,please visit http://jobs.tgac.ac.uk/. Should you have any informal questions about the project, please contact David Thybert at david.thybert@earlham.ac.uk

David Thybert, PhD Research Fellow

Norwich Research Park Norwich Norfolk NR4 7UH +44 1603 450 782 david.thybert@earlham.ac.uk www.earlham.ac.uk "David Thybert (EI)" <David.Thybert@earlham.ac.uk>

# ETH Zurich EcologyEvolutionGenomics

The ETH Zurich center for Adaptation to a Changing Environment (ACE) www.adaptation.ethz.ch invites applicants for two postdoctoral fellowships in the areas of ecology, evolution, and genomics. ACE was established to connect the rapidly increasing availability of genomic information to ecological dynamics, as mediated by rapid evolutionary change. Postdocs, graduate students and faculty interact in a single center located on the ETH campus in Zurich. Those interested in applying their backgrounds in ecology, evolution, and genomics to the goals of the center are encouraged to apply. The following topical areas are emphasized: Genomics of ecologically relevant traits Eco-evolutionary dynamics of species interactions Evolutionary responses to changing environments Projects can range from the theoretical to empirical, and must be conducted in collaboration with ETH faculty participating in ACE (see website). Postdoctoral positions are for two years and must commence before summer 2017. Work-related interactions will be in English and salaries are adequate to take advantage of the high quality of life in Zurich. Requirements include a PhD degree in ecology, evolution, bioinformatics or a closely related discipline, high-quality publications, fluency in English, and good communication skills. Your application includes a research statement, including one to two paragraphs describing how your research interests relate to the center and associated faculty, a curriculum vitae, and the contact information for three references. Application review will begin October 15, 2016, and continue until the positions are filled. To apply, visit: https:/-/apply.refline.ch/845721/4888/pub/1/index.html Mirjam von Rütte <acecontact@env.ethz.ch>

# FloridaStateU EvolutionSpeciesCoexistence

Florida State University. Eco-evoSpeciesCoexistence

Post-doc, for up to three years: We seek a post-doc to participate in a US National Science Foundation supported project entitled "The Paradox of Coexistence: The Evolution of Ontogenetic Interactions". This research is a continuation of an ongoing experimental study of the interactions between ecology and evolution in natural streams in the Northern Range Mountains on the island of Trinidad. Our project is built around four experimental introductions of guppies into previously guppy-free tributaries that contained only one other fish species - the killifish Rivulus hartii. Our prior research has characterized how each of these species evolves in response to the other and to the way the ecosystem changes after the guppy introduction. One discovery is that their interactions include bi-directional intra-guild predation. Theory predicts that such an interaction is very unlikely to be stable, yet it proves to be reliably stable in all four introductions and in all natural streams where these fish coexist. This apparent anomaly is the basis for an exploration of factors not included in theory that could lend to this stability, including the contemporary evolution of both participating species and how these interactions change with the age and size of individuals in both species. Our project is an integration of the development of new theory, new experiments to be performed in natural and artificial streams in Trinidad and the continued study of the four introductions in natural streams. The post-doc's home base will be with Joseph Travis (PI) at Florida State University but will include extensive periods of time in Trinidad, where he/she will execute experiments in natural and artificial streams. The successful applicant must have a completed PhD, publication record and extensive field experience. We will review applications until a suitable candidate is found. Start date is negotiable, but sooner is better. You can learn more about our project at our website <CNAS.UCR.EDU/guppy>. To apply, please send a CV and arrange to have at least three letters of reference sent to David Reznick at david.reznick@ucr.edu.

Ronald Bassar <rdbassar@gmail.com>

### **INRA France Bioinformatics**

A postdoctoral research assistant position in bioinformatics is available at the Joint Research Unit ECO-BIOP "Fish Behavioural Ecology and Population Biology" (INRA - Univ. Pau & Pays Adour).

Project description: With the massive application of next generation sequencing techniques in the field of ecology and evolutionary biology, numerous genetic markers of interest that either show high genetic differentiation between populations or are found to be linked to adaptive phenotypic traits are identified. However, these candidate markers are often detected in a restricted set of populations or among a limited number of individuals and may required further investigation in a broader context to better understand their ecological or evolutionary implication and potential application for population management and conservation. The research project TrackNat (DNA tracability for natural resources management applied to fishes and forest tree species) coordinated by Dr. Rémy Petit (INRA UMR BIOGECO), aims at bridging the gap between NGS data generated during basic population genomics research projects and applications in the field. The successful candidate will take part to the fish aspect of the project, led by Dr. Olivier Lepais, that focuses on salmonids species. The candidate will be involved in ongoing research that includes two different basic objectives. The first objective is to identify differentially expressed genes and genetic variability linked to precocious male maturation in Atlantic salmon by analysing available RNAseq data to better understand functional aspect of this intriguing alternative mating tactics. The second objective is to use RADseq methods in brown trout to estimate populations divergence and demographic parameter in the context of a species impacted by human exploitation and management. The candidate will be involved in bioinformatics data analyses from raw sequence to more advanced data analyses including functional annotation, differential gene expression statistics, variant detection and in population genetics data analysis including demographic scenario reconstruction.

Research environment: The successful candidate will be based at ECOBIOP (https://www6.bordeaux-aquitaine.inra.fr/st\_pee\_eng/UMR-Ecobiop), a Joint Research Unit between INRA (the French National Institute of Agronomical Research) and the University of Pau & Pays Adour, that studies migratory fish behaviour, evolution and population dynamics using complementary disciplines (physiology, ecology, population genetics and modelling). The candidate will work in close collaboration with Dr. Olivier Lepais. The working place will be located at INRA Aquapole in Saint-Pée-sur-Nivelle (20 km south of Bayonne and Biarritz, France).

Required qualification and skills: We are looking for candidates with a PhD degree in evolutionary biology or related relevant fields, with experience in molecular ecology or population genomics and strong bioinformatics, NGS sequence data or statistical genetics analyses skills. Knowledge of fish biology is not necessary but computer programming experience (R and Unix shell scripting) is essential. Candidates should be independent, creative, have good communication skills and should be fluent in written and oral English.

Terms and salary: The post is a full-time, fixed term from 1st January 2017 to 31st December 2017. The gross salary is 2300 euro/month.

Application: To apply, please send to Dr. Olivier Lepais (olepais@st-pee.inra.fr) a cover letter (exposing you background and motivation), a detailed CV including a publication list and email addresses of two references. Review of applications will begin the 17th October and will continue until a suitable candidate is found.

"olepais@st-pee.inra.fr" < olepais@st-pee.inra.fr >

Data, Nucleic Acid Research, ...) - Analyze the database over a question of fundamental interest (e.g. re- analysis of the dataset comparing trans and cis-evolution ; see Stern and Orgogozo Evolution 2008) and submit a meta-analytical article in a peer-reviewed journal (e.g. Evolution, MBE, G3, Bioessays)

For more details, please contact Virginie Courtier-Orgogozo (virginie.courtier@ijm.fr) and Arnaud Martin (arnaud@gwu.edu), and include a CV and a short letter of intent (<20 lines). Deadline submission is October 15, 2016.

Arnaud Martin <arnaud@email.gwu.edu>

#### InstJacquesMonod Gephebase

We are hiring a short-term post-doctoral researcher to join the research team of Virginie Courtier-Orgogozo at the Institut Jacques Monod in Paris to work on the development, curation, and analysis of Gephebase, our new database of evolutionary-relevant genotypephenotype relationships. The candidate must hold a PhD (or be close to completion) and be familiar with the field of Evolutionary Genetics. The Gephebase project aims at collecting in the contemporary literature the genes and mutations that are responsible for the evolution of morphological, physiological, and behavioral phenotypic traits across all eukaryotes. A preliminary version of the database is available at the URL: http:/-/www.gephebase.org The position is available starting on November 1st 2016 and would end on May 15th 2017 (6-months appointment) as a full-time or half-time appointment, depending on the availability of the candidate.

The candidate will, depending on its own interests, lead at least two of the following aspects: - Improving the database web interface, in interaction with our contracted software development team (AtoutLibre) that developed the database and website (no programing skills are required). - Fill and curate the Database with new entries following the selection of recent research articles in evolutionary genetics. - Elaborate a longterm plan for the curation of the database in future years. - Create a research network associated to the database: maintain a Twitter account and Wiki website, distribute tasks to researchers willing to participate, coordinate the action of different contributors, create a mailing list. - Write a Gephebase white paper for publication in a peer-reviewed journal (e.g. Nature Scientific A 2-year postdoc opportunity is available in Niklas Wahlberg's group at Lund University looking into Lepidoptera phylogenomics.

LundU LepidopteraPhylogenomics

The successful candidate will join the research group headed by Niklas Wahlberg studying the evolutionary history of Lepidoptera (butterflies and moths). The successful candidate will work with researchers in the systematic biology group at the Department of Biology, Lund University, as well as a broad network of international colleagues. The postdoc project will involve generating and analysing molecular data from transcriptomes and/or gene capture methods, using phylogenomic analyses to generate phylogenetic hypotheses and performing statistical analyses on diversification rates in Lepidoptera. One of the aims will be to target important lineages that have not been included in phylogenomic analyses to date, possibly using museum specimens.

The successful candidate will be expected to do phylogenomic analyses, timing of divergence analyses, and analyses of diversification dynamics, using the latest algorithms and programs. Experience with these is desirable.

More information and applications at https://lu.mynetworkglobal.com/en/what:job/jobID:114328/ Niklas Wahlberg Professor in Biological Systematics and Scientific Director of Biological Museum Department of Biology Solvegatan 37 Lund University SE-223 62 Lund SWEDEN

Skype: niklas\_w2 phone: +46 46 222 31 02

Nymphalidae Systematics Group: http://www.nymphalidae.net Twitter: @LepPhylo Niklas Wahlberg <niklas.wahlberg@biol.lu.se>

# MaxPlanckInst Ploen EvolutionaryGenomics

Postdoc Theoretical evolutionary biology and evolutionary genomics

A postdoctoral position is available for two years in the field of theoretical biology and evolutionary genomics with the Max Planck research group "Environmental Genomics". The Max Planck group is affiliated with the Max Planck Institute for Evolutionary Biology in Plon and the Christian-Albrechts University of Kiel in the North of Germany. The position is funded by the German Research Foundation, DFG, in the framework of the Priority Program "Rapid Evolutionary Adaptation Potentials and Constraints". The project will be conducted in close collaboration with Prof. Wolfgang Stephan, Museum für Naturkunde, Berlin, Germany.

#### Background

In this project we aim to investigate the role of recombination in rapid adaptation of two closely related fungal plant pathogens Zymoseptoria tritici and Zymoseptoria ardabiliae. Comparing patterns of genome evolution in the two species will allow us to address the impact of ecological constraints on evolution of pathogens. We have used a population genomic approach to infer the genomic recombination landscape in the two species and show the presence of dynamic recombination hot spots in coding sequences in both species. In this next step we aim to identify signatures of positive selection in the genomes of Z. tritici and Z. ardabiliae using composite likelihood ratio (CLR) statistics and modeling. A particular goal is to infer the genome-wide distribution of selective sweeps accounting for demography in the two species and we will correlate this information with recombination maps to assess the importance of recombination to adaptive evolution. The development and application of appropriate models will be conducted with Prof. Wolfgang Stephan.

#### Description

The candidate should have a PhD in the field of population genetics with expertise in population genomics analyses and theoretical modeling. Proficiency in Linux scripting, in a major programming language and in handling large datasets are needed. The selected candidate will have the opportunity to collaborate with a team of biologists (molecular biologists, evolutionary biologists and population geneticists) as well as to pursue unique research in the fields of population genomics and evolutionary genomics of pathogenic fungi as well as theoretical population genetics. For further information please contact Eva Stukenbrock (stukenbrock@evolbio.mpg.de <mailto:stukenbrock@evolbio.mpg.de>).

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

This position requires a highly self-motivated candidate with excellent oral communication skills and great interpersonal skills. Interested candidates should send a motivation letter including a description of current research directions, an up-to-date CV, together with the names and the contact information of two references to Eva H. Stukenbrock as pdf. Application deadline is October 15th, 2016, however the position will remain open until filled by a qualified candidate.

Max-Planck-Institut für Evolutionsbiologie, Prof. Dr. Eva Stukenbrock, August-Thienemann-Str. 2, 24306 Plon, Germany

"estukenbrock@bot.uni-kiel.de" <estukenbrock@bot.uni-kiel.de>

#### Montpellier AestheticsEvolution

Three French Laboratories of Excellence (Labex Agro, Labex CeMEB and Labex NUMEV) are launching a Call for Proposals to support interdisciplinary research projects. Six post-doctoral grants will be funded for a duration of 18 months (2017-2018). We are looking for applicants interested in working on The Efficient Coding Theory of Aesthetic Preferences, an interdisciplinary project at the interface between evolutionary biology, psychology, visual computing and mathematics. Evidence has accumulated that humans tend to find beautiful those stimuli that are easy to process. This finding potentially has dramatic consequences for research on aesthetics in the humanities, in artificial intelligence and in biology including evolutionary biology. The goal of the post-doc is to develop a sound methodological framework rooted in the Theory of Information in order to test the efficient coding theory and to extend

it to non-human animals. The post-doc will generate methods for manipulating visual stimuli in order to alter the efficiency of their encoding by different levels of an animal brain. Then, she or he will setup online experiments with humans to test the theory, and will contribute to a research program on sexual preferences in a fish species, performed at the University of Maryland (contact: Tamra Mendelson tamram@umbc.edu).

The candidate should have training in visual computing, be familiar with the general concepts of Information Theory applied to biological systems, and be interested in animal behaviour and evolutionary biology. The postdoc will be hosted at the Centre d'Ecologie Fonctionnelle et Evolutive (UMR5175) of Montpellier, and the Laboratoire Charles Coulomb (UMR5221) of Montpellier. The proposal will be written by the supervising researchers in collaboration with the selected applicant. Dead-line for applying to our project: Monday, 10th Oct. 2016.

Contacts: Julien Renoult (jurenoult@gmail.com; Biologist at UMR8218 and UMR5175)

Frédéric Geniet (frederic.geniet@umontpellier.fr; Physicist at UMR5221)

François-René Molino (Francois.Molino@umontpellier.fr ; Mathematician at UMR5221).

More details on eligibility and schedule: http:/-/www.labex-cemeb.org/sites/default/files/cfp\_interlabex\_tor.pdf Tamra Mendelson <tamram@umbc.edu>

cluding genetic mapping, gene expression analysis, comparative genomics, bioinformatics, and evolutionary, developmental, and molecular biology. An extensive bioinformaticsresearch community at NC State University provides access to computing resources and technical expertise, and opportunities for collaboration with allied faculty. The lab is an active member of the NC StateGenetics Program, The Keck Center for Behavioral Biology, and the ComparativeMedicine Institute, providing a vibrant scientific community.

Anideal candidate will have expertise in genomic strategies, bioinformatics, molecular biology, and organismal biology; however, anyone with a subset of these skills is encouraged to apply. Candidates must have aPhD in an appropriate field, and the motivation, creativity, and analyticalskills to drive and develop a multi-faceted research project.

The position is full-time for one year, with further extension subject to satisfactoryperformance in the first year.

Interested applicants should send a brief note (~1 page) describing previous research experience and their interests and goals in our lab, as wellas a current CV including contact information for at least two references. Please send application materials or any questions regarding theposition to reade\_roberts@ncsu.edu. See also job posting at: https://jobs.ncsu.edu/postings/55533. Applications will be considered on anon-going basis until the position is filled.

nbhodges@ncsu.edu" < nbhodges@ncsu.edu>

### **NorthCarolinaStateU EvolGenomicsCichlids**

Apostdoctoral position in evolutionary genetics is currently available in the lab of Reade Roberts in the North Carolina State University Department of Biological Sciences (Raleigh, NC).

Theoverarching research aim of the Roberts Lab is to understand the genetic basis of adaptive evolution and developmental differences, using EastAfrican cichlid fishes as a comparative model system. Active projects focuson dietary adaptation at the level of the gastrointestinal tract and the evolution of sex determination systems, and the successful candidate would be expected to contribute to these on-going research themes (see http://readerobertslab.weebly.com/for additional insight into research projects and the lab).

# **NPI** Tromso **MarineEvolutionaryGenomics**

Postdoctoral Research Fellow in Antarctic marine predator evolutionary genomics (2 years)

The Norwegian Polar Institute (NPI) in Tromsø, Norway invites applications for a postdoctoral research fellow position in Southern Ocean molecular ecology, which includes studies of the molecular ecology of two krillpredators in the Southern Ocean, Antarctic fur seals and macaroni penguins. The position is supported by the Norwegian Antarctic Research Expedition (NARE) project entitled "Population structure and contemporary gene flow in two sympatrically-breeding Southern Ocean predators with contrasting demographics".

Researchin the lab draws on a variety of skill sets, in- The work will be conducted in our Research Depart-

ment, Section of Biodiversity, in collaboration with the national Antarctic programs of Australia, Chile, France, South Africa, the United Kingdom and Germany. The position of postdoctoral research fellow is a fixed-term position for a period of 2 years with a possible extension, depending on funding.

#### Work Content

The aims of the project are three-fold: 1) to provide a comprehensive description of contemporary, circumpolar gene flow of two sympatrically-breeding species, used by the Commission for the Conservation of Antarctic Living Marine Resources (CCAMLR), to monitor the ecological state of the Southern Ocean, 2) to characterise the demographic histories of each species in terms of bottlenecks, founder effects and expansion events and 3) to characterise patterns of selective pressure in each species across regional scales using genome scans.

The work will require nuclear and mitochondrial DNA to be extracted and prepared from blood and other tissue samples taken from each species (already collected), at each of nine sub-Antarctic island locations. Analyses to achieve the project aims will then require the appropriate application of markers that are either selectively neutral (e.g. species-specific microsatellites and mtDNA) or under active selection (ddRAD-TAG sequenced Single Nucleotide Polymorphisms) and subsequent analyses using bioinformatic tools.

#### Qualifications

The candidate must hold a PhD in molecular ecology or a closely related field. A documented completed degree is a prerequisite for employment.

We seek candidates with expertise in laboratory work (DNA extraction, preparation, PCR, sequencing) and numerical analytical techniques. Experience with High Throughput Sequencing technology is required, and candidates that have worked with restriction site associated DNA tags (RAD-TAG) will be preferred. A proven ability to synthesise molecular genetic data into an ecological and environmental context is considered an asset. Publication of results is of great importance and recent articles in highly rated peer-reviewed scientific journals must demonstrate such ability.

The candidate must have experience with more than one of the following tools: ABC (Approximate Bayesian Computing), BAYESASS, BEAST, bioinformatics, MATLAB, MIGRATE, STRUCTURE, and R.

We seek a candidate with good collaboration skills, but who also can conduct independent research. Good written and spoken communication skills in English are required.

#### General

The work place is Tromsø, Norway. The salary will be commensurate with the qualifications of the successful candidate, under the Norwegian state salary code 1352, scale 57-64 (currently NOK 486 100 - 556 700 per year). The position is open immediately.

The main objective of the appointment as a postdoctoral research fellow is to qualify for work in senior academic positions. No one may be appointed to more than one fixed-term period as a postdoctoral research fellow at the same institution. The maximum appointment-period for position as postdoctoral research fellow is four years.

The project will involve a placement with Dr Joe Hoffman at the University of Bielfeld (Germany) and close collaboration with Dr Julianna Vianna of the Pontificia Universidad Católica de Chile.

The Norwegian State Administration strives to mirror the diversity of its population and thereby achieve a balanced mix of age, gender and ethnic backgrounds among its employees. All qualified candidates with different backgrounds are encouraged to apply. The Norwegian Polar Institute is an IW-enterprise and adjustments will be made to the workplace regarding health issues, if necessary.

Tromsø is a city of 70.000 residents situated in northern Norway at nearly  $70 \text{Å}^{o} \text{N}$ . Tromsø is known as a good place to experience the midnight sun, polar night, varied outdoor activities and a lively cultural and entertainment environment. It is also a major, and expanding, center for research, with numerous government and private research institutions and a major university. The NPI's Research Department is very diverse, both in scientific interests and in nationalities.

Further inquiries about the position may be directed to Research Scientist Dr. Andrew Lowther,lowther@npolar.no, tel. +358 407 561 971, Dr. Joe



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#### **OregonStateU MarineEvolGenomics**

A postdoctoral position is available for a motivated investigator in the lab of Felipe Barreto in the Department of Integrative Biology at Oregon State University, Corvallis, Oregon. Work in our lab examines broad questions in evolutionary biology in marine animals, integrating physiological and biochemical assays with molecular genetics and genomics/transcriptomics approaches. The successful candidate will have the opportunity to participate in work examining the genetics of physiological adaptations and reproductive isolation in the lab's primary study system, the intertidal copepod \*Tigriopus californicus\*, and will also be encouraged to develop additional projects on new questions and/or new study species within the general area of evolutionary genetics.

Please visit the P.I.'s homepage for more details on the lab's research: http://www.science.oregonstate.edu/-~barretof/ The candidate must have a Ph.D. in evolutionary biology or related fields.

Preferred qualifications:

- experience with basic molecular genetic approaches;

- experience analyzing Next-Generation sequencing data, and willingness to learn additional bioinformatic approaches;

- interest in computational analyses of population genetic and molecular evolution processes.

For a complete description of the position and required/preferred qualifications, visit the job posting at

https://jobs.oregonstate.edu/postings/28258 Corvallis is located in Western Oregon, within the lush Willamette Valley, and close to a multitude of wilderness areas that satisfy all outdoor enthusiasts. The university is also less than 60 miles from outstanding coastal habitats, such as estuaries, bays, marshes, and rocky shores. The Department of Integrative Biology comprises a vibrant mix of evolutionary biologists, ecologists, and organismal biologists, and the university's Center for Genome Research and Biocomputing provides top-notch training and infrastructure resources for genomic and computational analyses.

Additional information:

Dept. of Integrative Biology:

ib.oregonstate.edu/ Center for Genome Research and Biocomputing: http://cgrb.oregonstate.edu/ For application instructions, visit https://jobs.oregonstate.edu/postings/28258 For inquiries about the position, please contact Felipe Barreto (felipe.barreto@oregonstate.edu)

Application deadline is September 30, 2016. Start date is flexible, but could begin as early as December 1, 2016.

IMPORTANT: For technical reasons, the application deadline was extended from that of a previous posting. Applications submitted in the first posting period are still under consideration and need not be re-submitted.

#### Felipe S. Barreto

Assistant Professor Department of Integrative Biology 3029 Cordley Hall Oregon State University Corvallis, OR 97331

Felipe Barreto <felipe.barreto@oregonstate.edu>

### PVBMT Reunion StatisticalGeneticsPhylogenomics

We are seeking to fill two post-doctoral positions of 18 months each in statistical genetics and phylogenomics. The successful applicants will join the "Genomics and epidemiology of emergent plant pathogens" group of the PVBMT laboratory in La Réunion Island (http://umrpvbmt.cirad.fr/en) and take part in a wider project on plant epidemio-surveillance funded by Agropolis Fondation. The fellows will also be expected to actively participate in collaborative research and teaching activities within Labex Agro partner institutions in Montpellier through dedicated missions.

Eligibility: Agropolis Fondation targets young researchers (less than 3 years after PhD) who have not spent more than 1 year in France over the 3 past years. Still, we encourage all interested candidates to contact us as such eligibility criterion may be flexible.

Salary: Depending on experience. The basic salary (after taxes) for both positions ranges between 1800 and 2200 euros/month. For applicants fulfilling the above eligibility criteria, extra allowance from the Agreen-Skills program (https://www.agreenskills.eu/) will be requested to provide more attractive employment conditions.

http://- Application closing date: 20 october 2016 Starting date:

December 2016 / Beginning of 2017

Post-doctoral fellowship 1 (Statistical genetics)

Approximate Bayesian Computation (ABC) is now a reference method for the reconstruction of the routes of invasions. Among other methods the dedicated software DIYABC has facilitated the use of ABC for purely sexual species. Yet, among particularly devastating pathogens of plants, animal and humans, some species present frequent sexual reproduction in their native area and clonal reproduction in invaded areas. This is for instance the case of the fungal plant pathogen responsible for the rice blast disease, of several aphid species as well as Plasmodium species. Such geographic variability in mating system (and thus in the coalescence process) cannot yet be easily accounted for in available ABC software. We propose to extend the scope of DIYABC to allow the analysis of the routes of emergence of species comprising both sexual and asexual populations. To do so, we look for a young talented post-doctoral fellow who would be in charge of modifying the code, testing the robustness of the modified program on simulated data sets and applying it to already available datasets.

The research will mainly be conducted at PVBMT (Saint-Pierre, Réunion Island) under the supervision of Virginie Ravigné and in tight collaboration with Pr. Pierre Pudlo (University of Marseille, France) who is much involved in DIYABC programming. The postdoctoral fellow will be encouraged to visit specialists of the evolutionary ecology of the fungus M. oryzae (Pierre Gladieux, Elisabeth Fournier and Didier Tharreau) at laboratory BGPI (Montpellier, France) for the application of the modified method to their dataset.

For informal queries on the role and/or application, please contact Virginie Ravigné: Virginie.Ravigne@cirad.fr

Post-doctoral fellowship 2 (Phylogenomics)

Deciphering the history of propagation of plant pathogens is one important component of epidemiosurveillance surveys. To this aim, Bayesian phylogenybased methods (e.g., BEAST) have proven particularly powerful. However, various factors such as significant amount of recombination, incomplete temporal signal, scarce historical record or also large effective population sizes may affect the accuracy of such inferences. Concurrently, Approximate Bayesian Computation (ABC) has emerged as an alternative of phylogeny-based methods for the inference of species invasion history. In an effort to compare those two approaches, we seek a young talented post-doctoral fellow with attested skills in either (or both) methodologies. The hired person will first be in charge of testing the relative robustness of existing methods depending on dataset features (such as data type, temporal/spatial depth, completion of sampling, diversity level, degree of recombination and effective population size). Besides identifying forces and weaknesses of each method, this will be the opportunity to statistically assess the influence of the sampling over the inference. We then propose to produce a pipeline to apply methods of reconstruction to species with distinct life history traits and compare the power and robustness of Bayesian phylogeny-based and ABC procedures on simulated datasets. Finally, the post-doctoral fellow will be given the opportunity to apply one or the two methods to a number of already available datasets of emerging plant pests (including bacteria, fungi and viruses).

The research will mainly be conducted at PVBMT (Saint-Pierre, Réunion Island) under the supervision of Pierre Lefeuvre and Adrien Rieux and in

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# ReedC Oregon ComputationalBiology

\*\*\*Post-doctoral Researcher Position in Computational Biology\*\*\*

A post-doc position in computational biology (initial contract for 1 year, with the possibility of renewals annually based on performance) is available in the lab of Sarah Schaack at Reed College in Portland, OR.

Details: I am searching for a post-doc who will be involved in the analyses of genomic datasets for several ongoing projects, as well as the opportunity to initiate new projects based on the previous experience of the successful applicant, the resources in our lab, and publicly-available data. New projects can relate to mutation, transposable element dynamics, and/or genome evolution. Current projects involve analyzing recently generated whole genome sequence and transcriptome data for a lepidopteran crop pest and other arthropods, long-term mutation-accumulation experiments using cladocerans, and more. More information on the specific projects, as well as opportunities for independent projects, collaborative work, participation in outreach activities, and travel will be discussed in more depth with shortlisted candidates.

Requirements: Experience with analyzing NGS sequence data, programming, and a working knowledge of computational tools and statistics related to genome-wide datasets. In addition to a background in sequence analysis and computational biology, oral and written communication skills are required.

Reed is a highly rigorous undergraduate institution with a strong research emphasis, which offers a unique training environment for post-docs. Features include close collaboration with the PIs, the opportunity to work with talented undergraduates, and the chance to network with other post-docs in the department and with biologists throughout Portland and the region. The scientific and intellectual environment at Reed is stimulating and provides a number of opportunities for interactions (including an excellent weekly seminar series, journal clubs, and discussion groups).

Salary will be based on the NIH post-doc pay scale and will be commensurate with experience. To apply, submit a cover letter detailing your research interests, a CV, and contact information for 3 references to schaack@reed.edu with your LAST NAME in all caps in the subject line. To receive full consideration, send materials on or before Oct 10, 2016, however applicants will be considered until the position is filled.

Reed College is an Equal Opportunity Employer. Candidates from underrepresented groups are strongly encouraged to apply.

Sarah Schaack, PhD Associate Professor Reed College schaackmobile@gmail.com https://sites.google.com/site/schaackwork/ Sarah Schaack <schaackmobile@gmail.com>

### **RutgersU 2 ViralEvolution**

A full-time postdoctoral position is available in the Duffy Lab (http://www.rci.rutgers.edu/~siobain/) at Rutgers University to work on developing methods to detect evolutionary pressures shaping viral variation during experimental evolution. Our experimental system is the single-stranded DNA viruses that cause cassava mosaic disease (CMD), a leading threat to food security in East Africa, which we are passaging in cassava in controlled conditions at our partner location, Biosciences East and Central Africa (located at a major research center, the BecA-ILRI hub, in Nairobi, Kenya).

The postdoc will be responsible for curating illumina data, processing and filtering viral polymorphisms from sequencing errors, assisting in database development and maintenance, developing hypotheses, analyzing results, preparing/presenting data at national/international conferences, generating high quality journal publications and assisting in grant preparation. Additionally, the postdoc is expected to participate in highly collaborative research environments at Rutgers and at our partner institutions (BecA and the labs of Ignazio Carbone, Linda Hanley-Bowdoin and George Kennedy at North Carolina State University). The position is funded for 4 years by the Partnerships in International Research and Education program at the NSF, though renewal after the each year is contingent on performance.

Ideal candidates will have a strong background in bioinformatics and have previously worked and published in molecular evolution or related computational biology research. The successful applicant will be highly organized, have strong interpersonal skills, and have a demonstrated ability to write clearly in English. Applicant must be willing and able to travel to Nairobi a few times over the postdoc to work with participants on the project. Depending on postdoc interest, longer periods of time could be spent at the BecA-ILRI hub in Kenya and/or North Carolina State University, where other researchers on the project will be located. Applicants must have a PhD/have successfully defended their dissertation before taking up the position.

Rutgers, the State University of New Jersey, is a leading public research university. New Brunswick is within an hour's drive of New York City and beaches on the Atlantic Ocean, and within a 90 minute drive of Philadelphia and the Appalachian Trail. New Jersey is one of the most ethnically diverse states, with over 20% of the population having immigrated to the US.

All queries should be addressed directly to Siobain Duffy (duffy@aesop.rutgers.edu). To apply, please send the following items: (1) a cover letter stating preferred start date (2) a curriculum vitae with contact information for three references, and (3) a brief statement of research interests and career goals. As we have multiple positions available in the lab, please specify interest in the cassava virus project.

Applications will be reviewed until the position is filled. The start date is flexible for the right candidate but the preferred start is in late 2016/early 2017. Salary is based on qualification and experience. Rutgers is an equal opportunity/affirmative action employer, and candidates from all backgrounds are encouraged to apply. A full-time bioinformatics postdoctoral position is available in the Duffy Lab (http://www.rci.rutgers.edu/-`siobain/) at Rutgers University to work on developing methods to determine the deep phylogenetic relationships among eukaryote-infecting viruses with circular, Rep-encoding single-stranded DNA (CRESS DNA) genomes.

The postdoc will be responsible for data collection, data curation, developing hypotheses, analyzing results, preparing/presenting data at national/international conferences, generating high quality journal publications and assisting in grant preparation. Additionally, the postdoc is expected to participate in our highly collaborative research environment and will be encouraged to supervise undergraduate student projects. The position is funded for 2 years by the Assembling the Tree of Life program at the NSF, though renewal after the first year is contingent on performance.

Ideal candidates will have a strong background in bioinformatics and have previously worked and published in molecular evolution or related computational biology research. The successful applicant will be highly organized, have strong interpersonal skills, and have a demonstrated ability to write clearly in English. Applicants must have a PhD/have successfully defended their dissertation before taking up the position.

Rutgers, the State University of New Jersey, is a leading public research university. Opportunities for collaboration with other molecular evolution faculty will be encouraged. New Brunswick is within an hour's drive of

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### TrentU Canada ConservationGenomics

Postdoctoral fellow opportunity to perform research on contemporary evolution in amphibians in response to rapid changes in selective pressures - Trent University

Infectious diseases play major roles in species adaptation, evolution, and persistence. The selective pressures imposed by pathogens are predicted to increase due to habitat modifications and climate changes altering disease dynamics by promoting the invasion of emerging diseases and disease vectors. With amphibians under threat globally due to a combination of pathogens, habitat alteration, and changing environmental conditions, it is unclear what capacity amphibians have to adapt to rapid changes in pathogen-mediated selection that threaten their persistence. One approach for understanding adaptation to disease is to examine the correlation between the geographic distribution of host immunogenetic variation and of disease variants, with these correlations interpreted relative to demographic parameters such as gene flow that also influence the distribution of adaptive and non-adaptive genetic variation. We are seeking a postdoctoral fellow to take both a metabarcoding approach to identify genetic variation of key pathogens and an adaptive landscape genomics approach to investigate contemporary evolution and demographic constraints on local adaptation among coevolved and naïve disease vectors. These questions are of practical relevance given the pronounced climatic changes associated with changing infectious disease dynamics and northward movements of both pathogens and invasive species.

This work will take place with a large collaborative group as part of a NSERC Strategic Grant to investigate amphibian declines. The successful candidate will also be encouraged to develop/explore independent research within the framework of existing funding. This research will be conducted with a collaborative team that includes the Ontario Ministry of Natural Resources and Forestry researchers within the Natural Resources DNA Profiling and Forensic Centre (www.nrdpfc.ca). Applicants would ideally hold a PhD in a relevant field such as Landscape or Population Genetics / Genomics / Metabarcoding / Bioinformatics, and have experience processing large data sets from massively parallel sequencing platforms. The position will commence as soon as possible, ideally Jan 2017, but no later than May 2017. Applications will be accepted until a suitable candidate has been found.

All candidates should submit a letter of application and research interest, curriculum vitae, unofficial transcripts, and names and contact information for three referees to: Drs. Kyle (christopherkyle@trentu.ca); Murray (dennismurray@trentu,ca; www.dennismurray.ca); Lesbarreres (dlesbarreres@laurentian.ca); and Wilson (chris.wilson@ontario.ca)

Additional Information: Trent University's (Peterborough, Ontario, Canada) DNA building houses separate genomic DNA and DNA cloning laboratories for molecular work and an automation laboratory for high throughput sample preparation and a suite of DNA analyses. Our facility also includes access to a bio-containment Level II lab for processing potentially infectious tissues and an Indigenous Pathogen Containment Level III (IPCL 3) laboratory that is certified for several indigenous pathogens.

Christopher Kyle <christopherkyle@trentu.ca>

### **UEdinburgh QuantGenetics**

Postdoctoral scientist in quantitative genetics and family interactions

Jarrod Hadfield: Institute of Evolutionary Biology. University of Edinburgh.

Applications to be received by 5pm on Monday 10th of October 2016

Grade 7: 30,738 - 37,768 p.a.

We are seeking an evolutionary biology postdoctoral scientist to work on an established experimental population of blue tits (http://jarrod.bio.ed.ac.uk/index.html). The post provides an opportunity to join a new NERCfunded project investigating the quantitative genetics of family interactions and the selective forces they create. The post will involve experimental field manipulations, development and application of new statistical techniques to long-term data and some theory.

In this post, you will perform large-scale field experiments in blue tits in order to obtain experimentally verified measures of selection on parental care. This will involve managing a team of 3-4 field workers from mid-April to the end of June. These experiments will be complemented by a series of analyses of long term data (10,000 birds from 1000 partially cross-fostered nests) exploring the genetic basis of parental care and sibling competition. There will be opportunities to develop bespoke statistical methods to analyse the data and to use theoretical tools to place the results in context. You can expect to obtain some of the first estimates/tests of key evolutionary parameters and to be trained in cutting-edge statistical/computational methodology.

You will hold a PhD in evolutionary biology and will have experience in quantitative genetic or mixed model analysis. You will also have experience with programming, including familiarity with statistical packages such as R. Some experience with C/C++ would be helpful, as would some experience with large-scale fieldwork. You must have good communication skills and be able to

### UFlorida JumpingSpider SexualSeletion

The post is full-time and fixed term from 1<sup>st</sup> February

On-line applications are to be made at https:/-

erq\_jobspec\_version\_4.display\_form and causal enquiries can be made to Jarrod Hadfield (j.hadfield@ed.ac.uk)

/www.vacancies.ed.ac.uk/pls/corehrrecruit/-

Jarrod Hadfield <j.hadfield@ed.ac.uk>

manage a team of field assistants.

2017 to 1<sup>st</sup> February 2020.

\*POSTDOC position: Sexual selection and sensory exploitation in jumping spiders\*

I am currently seeking a postdoctoral researcher to study sensory exploitation and the evolution of male courtship colors in jumping spiders. This NSF-funded project integrates ideas from across three areas of animal behavior (sensory traps, sexual imprinting, and cross-contextual learning) to ask how a female's experiences with colorful (and sometimes aposematic) prey will influence her responses to the same colors in a male's courtship display. The first phase of the project will involve extensive experiments with two target species, while the second phase of the project will use a comparative approach to test ideas about why elaborate/colorful ornamentation has evolved in some jumping spider taxa, but not others. The position is based in Gainesville, FL with opportunities for fieldwork in Arizona and Kenya. Further information about current work in the Taylor lab can be found here: https://spiderpalooza.wordpress.com . Successful candidates will have the following skills, experience, and interests:

- PhD in ecology, evolutionary biology, or a related field - Strong quantitative skills - Strong publication record - Experience designing and running behavioral experiments in the lab and/or field - Experience with field work - Ability to work independently as well as with a team (including high school students, undergraduates, and graduate students) - Desire and ability to mentor undergraduate researchers (including mentoring through the process of writing and publication) - Genuine interest in contributing to (or leading) our broader impacts' missions, which include an innovative community college course and a traveling arachnid art exhibit - \*\*While not required, experience with phylogenetic comparative methods and advanced skills in mathematical modeling will also be helpful\*

Start date is flexible. Initial appointment will be for one year, with the possibility of a second year (contingent on satisfactory progress during year 1). Salary starts at \$47,476 plus benefits.

To apply, send the following: (1) a cover letter that highlights relevant skills, experience, and interests, (2)a CV, (3) contact information for three references, and (4) two relevant first-author publications or manuscripts to lisa.taylor@ufl.edu. Review of applications will begin on September 30th and continue until the position is filled.

Please contact Lisa Taylor (lisa.taylor@ufl.edu) with any questions.

Lisa Taylor Department of Entomology and Nematology 1881 Natural Area Drive Stein-Hall University of Florida metzGainesville, FL32611 http://spiderpalooza.wordpress.com lisa.anne.taylor@gmail.com

### UGeorgia CropWildIntrogression

A postdoctoral position studying the genomic consequences of crop-wild hybridization in sunflower is available in the Burke lab at UGA. This position will involve population genomic analyses aimed at documenting genome-wide patterns of introgression over the history of sunflower cultivation in North America. The results of this research will thus provide insight into the longterm fate of crop alleles/traits in the wild. Moreover, when coupled with the results of prior studies of selection in experimental hybrid populations, this work will enable an investigation of the reliability of experimental studies for predicting long-term, real-world evolutionary outcomes.

The ideal candidate will have a strong background in population genetics and experience handling and analyzing large, genome-scale datasets. Funds are currently available to support this position for up to three years, and the successful candidate will also be given the opportunity to develop independent lines of inquiry.

To apply, please send your CV, a brief statement of research interests, and contact information for three references to: jmburke@uga.edu

Informal inquiries are also encouraged. Review of applications will begin immediately and continue until the record in publishing scientific papers in ISI-listed jour-

position is filled.

Information on the plant science research community at UGA can be found at:

https://plantcenter.uga.edu/ Information about the UGA Department of Plant Biology can be found at:

http://plantbio.uga.edu/ And information on the Burke lab can be found at:

http://www.theburkelab.org/ – John M. Burke, Ph.D. Tel: 706.583.5511 Fax: 706.542.1805 http://www.theburkelab.org/ University of Georgia Department of Plant Biology Miller Plant Sciences Athens, GA 30602

"jmburke@uga.edu" <jmburke@uga.edu>

### **UJohannesburg MarineGenomics**

Postdoc: Postdoctoral fellowships in marine genomics, University of Johannesburg

Topic: Various new and ongoing projects; deadline: October 14, 2016

The Molecular Zoology Laboratory at the University of Johannesburg (Auckland Park, South Africa; https://sites.google.com/site/drpeterteske/) invites applications for postdoctoral positions to investigate population structure, demographic changes, systematics and environmental adaptation in various marine organisms. Fellowships are awarded for 1 year and can be renewed annually, depending on satisfactory progress.

The exact type of work to be done is flexible, and applicants may be involved in multiple projects and collaborate with postgraduate students. Collaboration with previous host institutions is also encouraged. There may also be opportunities to collaborate on genomic projects with other South African universities (including Stellenbosch and KwaZulu-Natal).

Applicants should have at least 2 of the following skills:

1. Development of next-generation sequencing libraries (ddRAD, ezRAD, RNA-seq etc.) or comparable laboratory skills (e.g. microsat library development)

2. Analysis of genomic/transcriptomic data by means of unix-based software, or experience with comparable ("user-unfriendly") software

3. Good scientific writing skills and an adequate track

nals

4. Good inter-personal skills and the ability to work well in a team, but also independently

Successful candidates will apply for financial support through the University of Johannesburg's Global Excellence and Stature fellowship (ZAR 220 000/year, this will likely increase, details to follow closer to the deadline). The cost of living in South Africa is approximately half that in Europe, North America or Japan ( https://www.expatistan.com/cost-ofliving/comparison/london/johannesburg?). The University is located near Melville, one of Africa's most cosmopolitan suburbs (https://en.wikipedia.org/wiki/-Melville,\_Gauteng).

Interested candidates should please contact Prof. Peter Teske: pteske101@gmail.com. In your application, please include

a) a full CV, including publications (excluding those published in journals listed in https://scholarlyoa.com/-2016/01/05/bealls-list-of-predatory-publishers-2016/), software experience and laboratory skills;

b) contact information of 3 academic referees, and

c) a personal statement describing research experience, interests and career goals (500 words maximum).

Prof. Peter Teske Molecular Zoology Lab Department of Zoology University of Johannesburg, Kingsway Campus Auckland Park 2006 South Africa Molecular Zoology Lab: http://sites.google.com/site/drpeterteske/ pteske101@gmail.com

pteske101@gmail.com

### **ULausanne ComputationalBiol**

Postdoc position in Computational Biology and Evolutionary Modeling

\*Job description\*

A postdoctoral position is available in my group in the Department of Computational Biology of the University of Lausanne to develop and improve current methods for estimating the rates of evolution of phenotypic traits along phylogenetic trees.

The first objective is to develop a novel model testing framework to further understand the evolution of the variance in phenotypic traits within a macroevolutionary framework based on our recent work (Kostikova et al. 2016, Syst Biol). The second objective is to model the evolution of phenotypic traits across speciation events to better understand the relationship between macro-evolutionary models and micro-evolutionary processes.

\*Profile requirements\*

The ideal candidate should be an autonomous person with enthusiasm for inter-disciplinary work, who will need to interact productively with evolutionary biologists, genome biologists and computer scientists, and read the corresponding range of scientific literature. She/he should have a strong mathematical or statistical and computer science background and deep interest in computational biology and theoretical aspects of evolutionary biology. Previous experience with evolutionary biology and/or computational biology is also expected. Candidates must have completed their PhD degrees or equivalent in a relevant field.

The position is for up to two years and are part of a project funded by the Swiss National Science Foundation. Interested candidates should apply by sending a letter describing your research motivation and experience, a detailed CV and contact details of three referees to Nicolas Salamin (see contact details below) directly.

\*Working environment\*

The successful candidates will be part of the Department of Computational Biology of the University of Lausanne as well as the Swiss Institute of Bioinformatics. The Department of Computational Biology of the University of Lausanne offers a supportive and stimulating environment, with access to excellent computer and academic facilities.

#### \*Contact details\*

Do not hesitate to contact me for any information on this position. To apply, please send by email i) a letter describing your research motivation and experience, ii) a detailed CV, iii) contact details of three referees. The application deadline is set to October 31th 2016. The start date is flexible and will be discussed with the candidates.

Nicolas Salamin nicolas.salamin@unil.ch www.unil.ch/phylo www.isb-sib.ch/salamin-nicolas

# ULausanne EvolutionAndFunctionOfLncRNA

Junior/senior postdoctoral associate University of Lausanne & Swiss Institute of Bioinformatics

Start date: 01.01.2017 (or as soon as possible thereafter) Contract: 1 year renewable (funding readily available for 2 years)

Salary: CHF 64,000-72,000 Reference: Nr. 3920.LNCRNA Application deadline: 15.10.2016

The postdoc will take part in an interdisciplinary collaboration between the labs of Christophe Dessimoz, Ana Claudia Marques and Sven Bergmann. The project aims to better understand the role of long non-coding RNA birth and death on gene expression network remodeling. To this end we will leverage the expertise in ACM's lab on the functional genomics of lncRNAs, particularly in the context of embryonic stem cell biology, the expertise in CD's lab on fine'grained orthology inference and evolutionary genomics; and the recent advances by the group of SB on the reconstruction of cell'type specific regulatory networks.

The successful candidate will also have the opportunity to gain teaching experience (e.g. via student project supervision and contribution to undergraduate or graduate teaching) and to contribute to other ongoing projects in the host labs.

At least 50% of the regular working hours will be devoted to personal research work.

Working conditions in Lausanne are extremely competitive, and include access to state-of-the-art computing and sequencing facilities. The environment is highly international, and all activities are conducted in English.

#### Requirements

Essential: - Doctorate degree in bioinformatics or biology with solid quantitative component - Solid statistical knowledge - Excellent spoken and written English proficiency - Demonstrated programming skills - High level of motivation - Publications in peer-reviewed journals - Ability to collaborate in an interdisciplinary environment

Desirable: - Experience in comparative genomics and molecular evolution - Experience in the analysis of transcriptomics data - Experience in functional genomics analysis and integration of different omics data. How to apply

The application should consist of a single PDF file containing the following elements:

- Motivation letter - Curriculum vitae including list of publications - Copy of university diplomas - Reference to best paper accompanied by a brief supporting statement (approx. 200 words) - One page statement on research and career objectives

Applications should be sent to Prof. Christophe Dessimoz (Christophe.Dessimoz@unil.ch).

For informal information, please contact Prof. Dessimoz, Prof Marques (Anaclaudia.Marques@unil.ch), or Prof. Bergmann (Sven.Bergmann@unil.ch).

Seeking to promote an equitable representation of men and women among its staff, the University of Lausanne encourages applications from women.

More info:

Dessimoz lab: http://lab.dessimoz.org Marques lab: https://www.unil.ch/physiologie/home/menuinst/groupes-de-recherche/ana-claudia-marques-1.html

Bergmann Lab: http://www2.unil.ch/cbg SNSF Prof, UNIL Dept of Ecol. and Evol. & UNIL Centre for Integrative Genomics Reader, UCL Genetics Evolution and Environment & UCL Computer Science Group Leader, Swiss Institute of Bioinformatics

http://lab.dessimoz.org - Tel: +41 21 692 4155 - Twitter: @cdessimoz

Christophe Dessimoz <Christophe.Dessimoz@unil.ch>

# ULincoln UK CampylobacterEvolution

Population genomics of Campylobacter

Post-doctoral Research Fellow position (2 years Fixed Term)

Campylobacter is responsible for 14% of all human diarrheal cases worldwide, with over 280,000 food poisoning cases in the UK per year and around 100 deaths. It costs the UK economy more than 580m per year, much of this imposed on the NHS. It is an extremely serious issue. Given the social impacts, defeating Campylobacter is a clear industry and government policy aim, any techniques which reduces the impact of this disease will underpin both the economic and social sustainability and food security of consumers. This project is part of a larger programme funded by BBSRC and Innovate UK.

The successful candidate will conduct and develop methods to evaluate bacterial community ecology and population genomics with Illumina DNA sequence data. You will analyse: hundreds of sets of 16S rDNA amplicon sequences; hundreds of pooled whole genome sequences of Campylobacter; and, thousands of individual Campylobacter whole genome sequences. The aim of this work is to evaluate land-scape scale patterns (i.e. patterns in space and time) for both entire bacterial communities, and populations and strains of Campylobacter. You will have a good background in the population genetics and community ecology of bacteria, especially using molecular data, and especially have experience with bacterial metagenomics and population genomics. You should demonstrate excellent theoretical, statistical, analytical genetic and computational skills. This full-time post will be offered on a fixed-term contract for a period of 2 years.

Informal enquires can be addressed to Prof Matthew Goddard at mgoddard@lincoln.ac.uk.

For applications please go to https://jobs.lincoln.ac.uk/vacancy.aspx?ref=COS353 Location: The University of Lincoln, UK Salary: From 32,004 per annum This is a Fixed Term post for 2 years Closing Date: Sunday 20 November 2016 Interview Date: Thursday 08 December 2016 Reference: COS353

The University of Lincoln Since being opened by Her Majesty the Queen, the University of Lincoln has climbed more places in university league tables than almost any other institution.

World-class teaching and research The University has established an international reputation for the quality of teaching and research, with academics and students working together on major projects across areas as varied as cancer treatment, water conservation and low-carbon technology.

High student satisfaction The University of Lincoln has some of the most satisfied students in the UK. Lincoln is 1st in the UK for student satisfaction in the National Student Survey (NSS) 2016 for Zoology, Transport and Travel, Design, Biochemistry, and Animal Science.

Historic city centre location The University of Lincoln's award-winning campus provides a modern, studentcentred environment on the picturesque Brayford Pool marina, where everything you need is either on campus or just a short walk away in the city centre. With its medieval castle and one of the finest cathedrals in Europe, Lincoln is steeped in history and home to galleries, cinemas, shopping, restaurants, bars and nightclubs.

Prof Matthew Goddard, Ph.D. Professor of Population and Evolutionary Biology

http://goddardlab.auckland.ac.nz School of Life Sciences Joseph Banks Laboratories University of Lincoln Lincoln, LN6 7DL UK t: 01522 837486

and

Associate Professor School of Biological Sciences The University of Auckland New Zealand

The University of Lincoln, located in the heart of the city of Lincoln, has established an international reputation based on high student satisfaction, excellent graduate employment and world-class research.

The information in this e-mail and any attachments may be confidential. If you have received this email in error please notify the sender immediately and remove it from your system. Do not disclose the contents to another person or take copies.

Email is not secure and may contain viruses. The University of Lincoln makes every effort to ensure email is sent without viruses, but cannot guarantee this and recommends recipients take appropriate precautions.

The University may monitor email traffic data and content in accordance with its policies and English law. Further information can be found at: http://lincoln.ac.uk/legal . Matthew Goddard <mgoddard@lincoln.ac.uk>

### UMassAmherst PlantEvoDevo

Job Title: Postdoctoral Research Associate

Location: University of Massachusetts, Amherst, MA 01003 USA

Degree Required: Doctorate

Area of Study: Plant biology, evolutionary biology or related field.

Description: A postdoctoral position is available in the Bartlett lab at the University of Massachusetts Amherst to work on an NSF-funded project on stem cell homeostasis and the CLAVATA-network genes. The CLAVATA (CLV) genes encode receptor-like kinases and their protein ligands, and have conserved roles controlling stem cell (meristem) homeostasis. This role in regulating meristem biology makes the CLV- network genes central players in the development of plant form, and in the evolution of plant form under domestication. Both the CLV receptors and the CLV ligands are members of highly redundant gene families with complicated evolutionary histories, impeding the accurate assessment of CLV-network gene function. In collaboration with the Jackson (CSHL), Lippman (CSHL) and Nimchuk (UNC) labs, we are working to understand this redundancy by determining the evolutionary histories of CLV-network genes, and by determining how these genes regulate meristem homeostasis, particularly in maize floral development.

The successful applicant to this position would work primarily on a molecular evolution project, uncovering the evolutionary history of the CLV-network genes in vascular plants. The project will involve extensive phylogenetic analysis of CLV-network gene families as well as analyses of non-coding sequences controlling CLVnetwork gene expression. Depending on the interests and expertise of the person hired, this project could include elucidating the molecular function of CLV-network genes in maize floral development, in a reverse genetics project using CRISPR/Cas9 genome editing.

This is a benefited, full-time Postdoctoral Research Associate position. Initial appointment is for one year, reappointment beyond the first year (up to two additional years) is contingent upon job performance and availability of funding. It is expected that the appointee will work extended hours as necessary to complete individual experiments. Postdoctoral Research Associates at the University of Massachusetts are unionized and receive standard salary and benefits, depending on years of experience. Salary is subject to bargaining unit contract.

UMass Amherst is home to a vibrant research community, with strengths in genomics, molecular biology, plant biology, and evolutionary biology. Opportunities exist both to learn a range of cutting edge experimental and analytical methods, and to develop new research projects. The Pioneer Valley, where the town of Amherst is located, is a great place to live and work. The area is naturally beautiful, and UMass Amherst is part of a consortium of five colleges in the area, making for an intellectually rich environment. The position is available immediately, but the start date is negotiable.

Required Qualifications: Qualified candidates are required to have a Ph.D. in plant biology, evolutionary biology, or a similar field of study, conferred within the last six years. Expertise in molecular phylogenetics, and in the analysis of genomic data in an evolutionary context is required. A keen interest in plant development and evo-devo is essential.

Preferred Qualifications: Molecular lab experience work-

ing with DNA, RNA, and protein is preferred

Application Instructions: Candidates must apply online by submitting a cover letter, CV, and the contact details of three references willing to provide letters of recommendation to:http://umass.interviewexchange.com/joboffer. Review of applications will begin September 28, 2016 and continue until the position is filled. Questions can be addressed to Dr. Madelaine Bartlett at mbartlett@umass.edu.

Extra: Contact Lisa Barry at lisab@bio.umass.edu for more information.

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members.

Madelaine Bartlett Assistant Professor Biology Department 374 Morrill IV South 611 North Pleasant Street University of Massachusetts Amherst Amherst, MA 01003 http://www.bartlettlab.org/ < http://www.bio.umass.edu/biology/bartlett/ > phone: 413-545-2235

madelaine.bartlett@gmail.com

### UMassAmherst PlantEvoDevo 2

University of Massachusetts

Postdoctoral Research Associate Position

A postdoctoral position is available in the Bartlett lab at the University of Massachusetts Amherst to work on an NSF-funded project on stem cell homeostasis and the CLAVATA-network genes. The CLAVATA (CLV) genes encode receptor-like kinases and their protein ligands, and have conserved roles controlling stem cell (meristem) homeostasis. This role in regulating meristem biology makes the CLV-network genes central players in the development of plant form, and in the evolution of plant form under domestication. Both the CLV receptors and the CLV ligands are members of highly redundant gene families with complicated evolutionary histories. impeding the accurate assessment of CLV-network gene function. In collaboration with the Jackson (CSHL), Lippman (CSHL) and Nimchuk (UNC) labs, we are working to understand this redundancy by determining the evolutionary histories of CLV-network genes, and by determining how these genes regulate meristem

homeostasis, particularly in maize floral development.

The successful applicant to this position would work primarily on a molecular evolution project, uncovering the evolutionary history of the CLV-network genes in vascular plants. The project will involve extensive phylogenetic analysis of CLV-network gene families as well as analyses of non-coding sequences controlling CLVnetwork gene expression. Depending on the interests and expertise of the person hired, this project could include elucidating the molecular function of CLV-network genes in maize floral development, in a reverse genetics project using CRISPR/Cas9 genome editing.

Qualified candidates are required to have a Ph.D. in plant biology, evolutionary biology, or a similar field of study, conferred within the last six years. Expertise in molecular phylogenetics, and in the analysis of genomic data in an evolutionary context is required. A keen interest in plant development and evo-devo is essential. Molecular lab experience working with DNA, RNA, and protein is preferred.

This is a benefited, full-time Postdoctoral Research Associate position. Initial appointment is for one year, reappointment beyond the first year (up to two additional years) is contingent upon job performance and availability of funding. It is expected that the appointee will work extended hours as necessary to complete individual experiments. Postdoctoral Research Associates at the University of Massachusetts are unionized and receive standard salary and benefits, depending on years of experience. Salary is subject to bargaining unit contract.

UMass Amherst is home to a vibrant research community, with strengths in genomics, molecular biology, plant biology, and evolutionary biology. Opportunities exist both to learn a range of cutting edge experimental and analytical methods, and to develop new research projects. The Pioneer Valley, where the town of Amherst is located, is a great place to live and work. The area is naturally beautiful, and UMass Amherst is part of a consortium of five colleges in the area (www.fivecolleges.edu), making for an intellectually rich environment.

The position is available immediately, but the start date is negotiable. Candidates must apply online by submitting a cover letter, CV, and the contact details of three references willing to provide letters of recommendation to:

#### http://umass.interviewexchange.com/-

jobofferdetails.jsp?JOBID=3D76408 Questions can be addressed to Dr. Madelaine Bartlett at mbartlett@umass.edu. Review of applications will begin September 28, 2016 and continue until the position is filled.

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members.

Lisa Barry Biology Department Morrill Science Center South, Room 348 611 North Pleasant Street University of Massachusetts Amherst, MA 01003

Phone: 413-545-2602 Fax: 413-545-3243

Lisa Barry <lisak@bio.umass.edu>

# **UMontpellier Phylogenetics**

. Project title: Bayesian methods and graphical approaches to improve our understanding of molecular evolution using mutation maps. Principal investigator: Stephane Guindon (CNRS) . Associate investigators: Nicolas Galtier (CNRS), Fabio Pardi (CNRS), Anne-Muriel Chifolleau (UM), Francois Chevenet (IRD) & Anne-Laure Banuls (IRD). Host institution: CNRS-University of Montpellier, France. Funding: NUMEV (Digital and Hardware Solutions, Environmental and Organic Life Modeling). Net salary: ~2100 euros/month. Starting date: no later than April 2017.

A 18 month postdoc position in statistical phylogenetics is available at the University of Montpellier (UM), France. The successful candidate will join the "Methods and Algorithms in Bioinformatics" group and work in close collaboration with other Montpellier-based research teams (see above for more information about the personnel involved).

The project relies on Bayesian sampling techniques that map mutations on phylogenies [1]. These approaches are very relevant from a biological [2,3] and a computational [4] perspective. However, we believe that their full potential has not been reached yet. In particular, applying novel data exploration techniques to visualize mutation maps should help us improve our understanding of the fine scale mechanisms governing molecular evolution.

The postdoc candidate will thus develop original information visualization methods that will provide relevant summaries of the mutational process. The proposed techniques will also detect episodes of evolution that are not well predicted by our Markov models of evolution. Applications of these new visualization techniques are manifold. Adaptive evolution and biased gene conversion are associated with peculiar substitution patterns that mutation maps could potentially help identify. Similarly, errors in sequence alignment and/or improper orthology relationships are expected to generate atypical maps. Lastly, preliminary analyses of Mycobacterium tuberculosis genomes demonstrated how mutation maps can help recover the series of mutations leading to antibiotic resistance. The successful candidate will further develop one or several of these research leads.

The ideal candidate for the proposed project will have a PhD in statistical phylogenetics or population genetics, although pure statisticians and physicists with strong interest in molecular evolution should also apply. Good skills in data analysis with modern tools and programming languages (R and/or Python and/or Java or C/C++) are essential.

Please send CVs and inquiries to Stephane Guindon (guindon@lirmm.fr).

**Bibliography:** 

[1] Nielsen, R. Mapping mutations on phylogenies. Systematic biology. 51. 729-739. 2002.

[2] Dutheil J, Pupko T, Jean-Marie A, Galtier N. A model-based approach for detecting co-evolving positions in a molecule. Molecular biology and evolution.
22. 1919-1928. 2005.

[3] Dutheil J, Galtier N. Detecting groups of co-evolving positions in a molecule: a clustering approach. BMC evolutionary biology. 7. 2007.

[4] Rodrigue N., Philippe H., Lartillot N. Uniformization for sampling realizations of Markov processes: applications to Bayesian implementations of codon substitution models. Bioinformatics. 24. 2007.

stephane.guindon@lirmm.fr

# UMunich AvianEvolutionaryGenomics

Post doc position in avian evolutionary genomics A research position funded by the European Research Council (ERC-Starting Grant) is available at the research group of Jochen Wolf at the Division of Evolutionary Biology, Ludwig-Maximilians University of Munich, Germany. The position is initially limited to two years with the possibility of extension for another two years after evaluation.

-Background- Recombination is a central biological process with important implications for adaptation, speciation and, more generally, genome evolution. Theory predicts that recombination modulates the efficacy of selection and will impact the distribution of genetic diversity and divergence across the genome. This project will utilize state of the art sequencing technology to leverage information from population-scale processes bearing on linkage disequilibrium and meiosis at the level of individuals to infer fine-scale (recombination) genetic maps in several avian species. Our primary focus lies on the genus Corvus where we have access to several high-quality genome assemblies. The integration of recombination information with extensive population re-sequencing data (1, 2) and transcriptome data (3)will help elucidate the evolutionary processes acting during early and later stages of species diversification. In addition, comparative genomic analyses extending the framework beyond the level of the genus have the potential to disclose the contribution of recombination to the remarkable syntenic conservation of avian genome. In that, the project will contribute to our understanding of how population-level processes may translate into long-term evolution.

–Qualifications– The successful applicant holds a PhD degree, has an excellent track record with a thorough background in population genetics and/or comparative genomics, and is skilled in analyzing large genome-wide data sets.

-Research environment- In our research group we apply an integrative approach to explore micro-evolutionary processes and genetic mechanisms underlying species divergence, adaptation and genome evolution. Using large-scale genetic approaches, as well as field based experiments, we characterize genomic divergence across populations and (sub-)species and assess its relationship to phenotypic divergence (4)- sometimes with an applied angle (5, 6). In addition, we engage in comparative approaches to study evolution across larger timescales (7). Empirical systems include natural populations of birds (swallows (8) and corvids (1-3)), marine mammals (pinnipeds and killer whales) (9, 10) and, recently added, the European hemiclonal water frog system and fission yeast. The group is currently transitioning from Uppsala University to the University of Munich. Information on our activities can be found at http://www.ieg.uu.se/evolutionary-biology/wolf/ (Munich site under construction).

The University of Munich is consistently ranked among the top Universities worldwide, in particular the life science branch with its newly inaugurated campus offering excellent technical facilities and many interaction possibilities including the gene center, several Max-Planck-Institutes and the Helmholtz Centre (http:/-/www.campusmartinsried.de/en/336-2/#). With the highest concentration of supercomputing in Germany the Leibniz Supercomputing Centre and its local partners provide access to state-of-the art computing facilities (https://www.lrz.de/english/). Munich, Bavaria's capital, is a vibrant, yet relaxed city with many traditions still alive, a high quality of living and the Alps nearby.

-How to apply-Applications including a CV, a statement of motivation and the contact details of at least two references should be sent to Jochen Wolf j.wolf@bio.lmu.de. The position remains open until filled, starting date is flexible.

-Literature reflecting lab activities during the last 3 years-1. J. W. Poelstra et al., The genomic landscape underlying phenotypic integrity in the face of gene flow in crows. Science. 344, 1410-1414 (2014).

2. N. Vijay et al., Nat. Commun., in press.

3. J. W. Poelstra, N. Vijay, M. P. Hoeppner, J. B. W. Wolf, Transcriptomics of colour patterning and coloration shifts in crows.

Mol. Ecol. 24, 4617-4628 (2015).

4. A. B. A. Shafer, J. B. W. Wolf, Widespread evidence for incipient ecological speciation: a meta-analysis of isolation-by-ecology. Ecol. Lett. 16, 940-950 (2013).

5. A. B. A. Shafer, J. M. Northrup, M. Wikelski, G. Wittemyer, J.

B. W. Wolf, Forecasting Ecological Genomics: High-Tech Animal Instrumentation Meets High-Throughput Sequencing. PLoS Biol. 14, e1002350 (2016).

6. A. B. A. Shafer et al., Genomics and the challenging translation into conservation practice. Trends Ecol. Evol. 30, 78-87 (2015).

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UMunich UppsalaU AvianEvolutionaryGenomics Post doc position in avian evolutionary genomics

The position is initially limited to 2-years and can be extended to a 4 year period after evaluation. It is funded through a collaborative project grant of the prestigious 'Knut an Alice Wallenberg Foundation' and comes with the possibility to work both with Prof. Hans Ellegren at the Evolutionary Biology Centre, Uppsala Sweden and with Prof. Jochen Wolf at the Department of Evolutionary Biology, Ludwig-Maximilians University of Munich, Germany.

-Background- We are interested in understanding the genetic basis of population divergence using two avian model systems, Ficedula flycatchers and Eurasian Crows (Corvus (corone) spec.). Building on years of experience and comprehensive population genomic and transcriptomic background information in both systems 1-3, this project will focus on evolution of DNA methylation and its impact on gene expression and phenotypic traits relevant to speciation. The setup does not only allow comparing methylome evolution over short evolutionary timescales at the level of the genus, but also comparative analyses across 40 million years of avian evolution. In that it will provide insight into the relative stability of epigenetic features and their relationship to population genetic processes and long-term evolution.

-Qualifications- The successful applicant holds a PhD degree, has an excellent publication record demonstrating a thorough background in population genetics and/or comparative genomics, and is experienced in handling large genome-wide data sets. Experience of working with methylome data is welcome.

-Research environments- The Evolutionary Biology Centre (http://www.ebc.uu.se/) is one of the world's leading research institutions in evolutionary biology. The Ellegren lab is part of the Department of Evolutionary Biology (http://www.ebc.uu.se/Research/IEG/evbiol/), an active environment addressing fundamental evolutionary questions with a wide range of different approaches. As a member of the Science for Life Laboratory (http://www.scilifelab.se/) we have access to high performance computing resources (https:/-/www.uppmax.uu.se/uppnex), excellent lab facilities and extended bioinformatic infrastructure (http://www.scilifelab.se/platforms). The lab is situated in the student town of Uppsala, that offers rich opportunities in cultural and outdoor activities. Sweden's capital Stockholm is less than an hour's train ride away.

Munich University is consistently ranked among the top Universities worldwide, in particular the life science branch with its newly inaugurated campus offering excellent technical facilities and many interaction possibilities including the gene center, several Max-Planck-Institutes and the Helmholtz Centre (http://www.campusmartinsried.de/en/336-2/#). With the highest concentration of supercomputing in Germany the Leibniz Supercomputing Centre and its local partners provide access to state-of-the art computing facilities (https://www.lrz.de/english/). Munich is Bavaria's capital, a vibrant, yet relaxed city with many traditions still alive considered by many to have a high quality of living (https://en.wikipedia.org/wiki/-Mercer\_Quality\_of\_Living\_Survey) and the Alps nearby.

-How to apply– Applications should include a CV, a statement of motivation and the contact details of at least two references, and shall be sent to Jochen Wolf j.wolf@bio.lmu.de and Hans Ellegren hans.ellegren@ebc.uu.se.

Please include 'Post-doc avian evolution' in the subject header.

The positions remains open until filled. Starting date is flexible.

-Literature – 1. Ellegren, H. et al. The genomic landscape of species divergence in Ficedula flycatchers. Nature 491, 756-760 (2012).

2. Poelstra, J. W. et al. The genomic landscape underlying phenotypic integrity in the face of gene flow in crows. Science 344, 1410-1414 (2014).

3. Poelstra, J. W., Vijay, N., Hoeppner, M. P. & Wolf, J. B. W.

Transcriptomics of colour patterning and coloration shifts in crows.

Mol. Ecol. 24, 4617-4628 (2015).

Jochen B. W. Wolf, Professor

Division of Evolutionary Biology Faculty of Biology Ludwig-Maximilian University of Munich Grosshaderner Strasse 2 82152 Planegg-Martinsried Germany

phone: +49 (0)89 / 2180-74102 fax: +49 (0)89 / 2180-74104

http://www.evol.bio.lmu.de/research/j\_wolf/index.html



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### UNotreDame InfectiousDiseaseDynamics

Candidates for two postdoctoral research positions are sought for the Perkins Lab at the University of Notre Dame. These positions are supported by two new, federally funded projects on the spatial dynamics of chikungunya and Zika virus transmission and control.

Project 1 has a focus on spatial dynamics of chikungunya virus transmission and control at geographic scales and will be conducted in close collaboration with the Institute for Disease Modeling (http://idmod.org). Project 2 has a focus on spatial dynamics of the invasion of Zika virus into the city of Iquitos, Peru, as well as the deployment of control measures in response to its invasion. This project will be conducted in close collaboration with colleagues at UC Davis, NAMRU-6, Emory, IHME, and other institutions, many of whom are actively engaged in field work that will complement modeling activities.

Both projects will involve extensive simulation of stochastic transmission models specified at different spatial scales and will make use of considerable computational resources through the Microsoft Azure cloud computing platform and the University of Notre Dame's Center for Research Computing (https://crc.nd.edu). Simulation will be used in combination with techniques for fitting high-dimensional models to data to address key scientific questions of relevance to the public health impacts of chikungunya and Zika. To complement these computationally intensive approaches, a number of other approaches are routinely used in the Perkins Lab, including probability theory, stochastic processes, dynamical systems, scripting, and social coding. Essential qualities of competitive candidates for both positions include (1) a Ph.D. in Biology, Computer Science, Engineering, Physics, Mathematics, or Statistics; (2) strong programming and software development skills; and (3) experience conducting research on disease dynamics or other topics in biology using mathematical models.

Both positions are available for a minimum of two years, with a more extended appointment possible contingent on satisfactory progress in the first two years and the continued availability of funding. Minimum annual salary is \$52,000 and may be augmented depending on each candidate's experience and qualifications. Benefits will be provided, and support is available for travel to conferences and to visit field sites and collaborators as appropriate. Start date is flexible.

For further information, please email Alex Perkins (taperkins@nd.edu) with a statement of interest, a CV, and contact information for three references.

Alex Perkins, Ph.D. Eck Family Assistant Professor Eck Institute for Global Health Department of Biological Sciences University of Notre Dame email: taperkins@nd.edu web: perkinslab.weebly.com

Alex Perkins <taperkins@nd.edu>

# UOxford EvolGeneticsPhytoplankton

#### EVOLUTIONARY GENETICS OF MARINE PHYTO-PLANKTON

Postdoctoral Research Assistant position at the University of Oxford, United Kingdom.

This project is devoted to evolutionary genetic analysis of mineralising marine phytoplankton, such as diatoms and coccolithophores, that play an important role in global carbon cycle, being the dominant contributors to carbon sink to the deep ocean. Although phytoplankton has attracted a lot of attention from climatology researchers, surprisingly little is known about its evolutionary genetics. Our study will help to fill this void. The successful candidate will have strong interest in evolutionary genetics and significant experience in population genetic and phylogenetic data analysis. Previous experience with marine evolutionary genetics as well as high-throughput sequence data analysis, programming/scripting and unix environment will be a significant advantage. For further details please contact Dmitry.Filatov@plants.ox.ac.uk

This project is at the interface between evolutionary genetics, palaeontology and climatology, and involves a collaboration between Oxford departments of Plant Sciences (Prof. Dmitry Filatov) and Earth Sciences (Prof. Ros Rickaby). The grant is held by Prof Dmitry Filatov and the work is to be conducted in his lab in the Department of Plant Sciences, Oxford. Filatov's lab is part of a broader Oxford community of evolutionary biologists and geneticists based in the departments of Plant Sciences, Zoology, and Statistics.

Responsibilities/duties

The postdoc on this project will be responsible for evolutionary genetic analysis of high-throughput sequence data from multiple species of mineralising marine phytoplankton and preparation of papers for publication. Most of the data will be available on or soon after the PDRA start date, so it is expected that wet lab work will be minimal (if any) and the bulk of the work will be computer-based. The postdoc will also be encouraged to participate in other on-going projects in the lab (see http://www.plants.ox.ac.uk/people/dmitry-filatov )

https://www.recruit.ox.ac.uk Vacancy ID: 125466

Closing Date : 28-Oct-2016

Salary: pounds 30,738 - pounds 37,768 p.a.

Prof. Dmitry A. Filatov, PhD Professor of Evolutionary Genetics, Department of Plant Sciences, University of Oxford, South Parks Rd, Oxford OX1 3RB United Kingdom

http://www.plants.ox.ac.uk/people/dmitry-filatov Dmitry Filatov <dmitry.filatov@plants.ox.ac.uk>

# UPaulSabatier Toulouse AmazonianBiodiversity

Job description: Spatial modeling of Amazonian biodiversity (post-doctoral research associate)

We are seeking a post-doctoral research associate to collaborate on a project funded by the Laboratory of Excellence CEBA (Center for the study of Biodiversity in Amazonia; www.labex-ceba.fr/en/). The overall goal of the project is to map biodiversity across the territory of French Guiana, for a range of taxonomic groups using innovative methods for detecting environmental variability in tropical forest environments. The objective will be to quantify the environmental variation of the territory by combining environmental and remote sensing data. Databases of species occurrences have already been gathered using a range of methods and for several taxonomic groups (plants, arthropods, amphibians). Based on this information, the post-doctoral research associate will implement spatial modeling of species community composition, and explore the determinants of species diversity variation across taxa at regional scale. We expect to develop novel approaches of spatial biodiversity modeling tailored for tropical forest environments. The position is open at the EDB research unit (Evolution et Diversite Biologique: http://www.edb.ups-tlse.fr) located in Toulouse France. Field trips in French Guiana

are to be expected. Principal collaborators will be Dr Jer0me Chave (http://chave.ups-tlse.fr) and Dr. Jer0me Murienne (http://jmurienne.ups-tlse.fr).

The position is expected to start on January 2017 or earlier. Salary will be commensurate with experience according to the CNRS.

Qualifications:

The successful applicant should hold a PhD in ecology and/or environmental science, and is expected to bring strong skills in remote sensing analysis and to have prior knowledge in community ecology modeling.

How to apply: Interested applicants should submit a complete application package no later than October 15<sup>th</sup>, 2016, to Amaia Iribar, Universite Toulouse III Paul Sabatier, Laboratoire EDB UMR5174, Toulouse 31062 cedex 9, France (e-mail: amaya.pelozuelo@univtlse3.fr). Application package: CV, statement of research interests and accomplishments, including the contact information for three referees. Incomplete applications will not be examined.

– Amaia IRIBAR-PELOZUELO

Chargee de coordination scientifique CEBA

Laboratoire Evolution et Diversite Biologique UMR 5174 Universite Paul Sabatier, bat 4R1, bureau 124 118 route de Narbonne, 31062 Toulouse Cedex 9 - France

tel : + 33 (0)5 61 55 64 95 fax : + 33 (0)5 61 55 73 27 link: www.labex-ceba.fr Amaia Iribar-Pelozuelo <amaya.pelozuelo@univ-tlse3.fr>

#### **URhodeIsland Phylogenomics**

#### POSTDOC POSITION IN PHYLOGENOMICS AND/OR GENOME EVOLUTION

A Postdoctoral Research Associate position is available in the new Schwartz lab (http://rachelss.github.io) in the Department of Biological Sciences at the University of Rhode Island. The lab is focused on understanding evolutionary history using large genomic datasets, and developing methods and software for researchers interested in empirical questions. A successful candidate will work on projects related to genotype calling from high-throughput error-prone sequencing data, efficient ortholog finding from these data, identification of paralogous genes, and evaluation of the characteristics of phylogenetically informative data. These methods will be incorporated into the software SISRS (https://github.com/rachelss/SISRS), for finding phylogenetically informative data without a reference genome. The postdoc will also have some flexibility to develop new projects related to their own interests, and opportunities for collaboration at URI and elsewhere.

#### MINIMUM QUALIFICATIONS:

PhD in bioinformatics, computational biology, biostatistics, genomics, molecular biology or related fields
Experience in scientific computing and programming/scripting languages in UNIX platforms (e.g. Bash, Python, R) - Expertise in phylogenetics, population genetics, or similar - Record of publication

#### DESIRED QUALIFICATIONS AND SKILLS:

- Experience in processing and analyzing highthroughput sequencing - Experience in development/maintenance of scientific software - Experience in statistical analysis and method development - Experience in high-performance parallel computing

START DATE AND DURATION: Preferred start date is January 2017, with a possible start date as late as July 2017. An earlier start date is also possible. Funding is initially for one year, with renewal for an additional year pending satisfactory performance. Continued renewal will depend on funding and performance.

APPLICATIONS: Send a cover letter, your CV, and the names and contact information for three references to Rachel Schwartz at rsschwartz@uri.edu. The cover letter should describe why you are interested in this job, your relevant experience, and your research / career goals. Review of applications will begin October 1st and will continue until a strong candidate is hired.

ABOUT URI: The University of Rhode Island is an Equal Opportunity/Affirmative Action employer and is strongly committed to achieving excellence through increased diversity of its faculty, staff, and students (http://web.uri.edu/affirmativeaction/files/All-3-Anti-Discrimination-Policy-Stmts.pdf). Individuals from under-represented groups are encouraged to apply. The University of Rhode Island is located 30 minutes from the city of Providence, 90 minutes from Boston, and 2.5 hours from New York City. The university is located in the town of South Kingstown, close to numerous beaches with opportunities for diving, sailing, surfing, and other water activities, and not far from hiking and skiing.

Rachel Schwartz, PhD Assistant Professor Department of Biological Sciences College of the Environment and Life Sciences The University of Rhode Island Kingston, RI 02881

rsschwartz@gmail.com Phone: 401-874-5404

"rsschwartz@uri.edu" <rsschwartz@uri.edu>

### UToronto PlantSexChromsomeEvolution

Postdoctoral fellowship in the Wright and Barrett labs on the Evolutionary genomics of plant sex chromosomes

Area of Research: Evolutionary genomics of sex chromosomes in the genus Rumex

Description of duties: Plants provide an outstanding opportunity to examine the early stages of sex chromosome evolution, allowing important insights into the factors driving Y chromosome degeneration, sex ratios and the evolution of sex-biased gene expression. The laboratories of Stephen Wright and Spencer Barrett in the Department of Ecology and Evolutionary Biology at the University of Toronto are using the genus Rumex to investigate the factors governing the rate and nature of genome degeneration, the role of haploid selection during pollen competition in governing sex chromosome evolution and mechanisms governing biased sex ratios. The postdoctoral fellow will be involved in the generation and analysis of next generation sequencing data of both genome and transcriptome data from representative species across the genus, to investigate the factors governing the dynamics of sex chromosome evolution. Opportunities to investigate a range of related problems on haploid selection, sex ratio bias and Y chromosome degeneration are also encouraged.

Salary: \$40,000 per year Please note that should the minimum rates stipulated in the collective agreement be higher than rates stated in this posting, the minimum rates stated in the collective agreement shall prevail.

Required qualifications: The candidate must have a recent PhD in evolution, genetics, bioinformatics or a related field. The ideal candidate would have experience with next-generation sequence data and population genomics analyses, have good quantitative and computing skills, and have experience working with plants. However, consideration will be given to any motivated applicant interested in evolutionary genomics.

Application instructions: All individuals interested in this position must submit a CV, the names and contact info of three references, and a cover letter explaining the candidate's interest in the position and overall research aims and accomplishments to Prof. Stephen Wright (stephen.wright@utoronto.ca) by the closing date. Closing date: October 31, 2016 This position will remain open until filled, however we will begin to review complete applications after September 30, 2016.

Supervisor(s): Prof. Stephen Wright (http://wright.eeb.utoronto.ca/); and Prof. Spencer Barrett (http://labs.eeb.utoronto.ca/barrett/)

Expected start date: January 1, 2017 with flexibility for an earlier or later start date

Term: 12 months with the potential for a renewed term assuming suitable progress

FTE: 100% Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement. This job is posted in accordance with the CUPE 3902 Unit 5 Collective Agreement.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

Stephen Wright <stephen.wright@utoronto.ca>

### UTurku Finland SalmonEvolEcol

Post-doc position in Evolutionary Ecology (3 years)

We recently discovered a gene that explains 40% of the variation in age (and size) at maturity in Atlantic salmon that also resolves intra-locus sexual conflict (Barson et al. 2015). However, we lack data for understanding the behvioural and physiological mechanisms by which the gene modifies age at maturity trajectories, as well as fitness estimates demonstrating sexual conflict resolution.

The post-doc will be responsible for conducting and co-supervising the evolutionary ecology research approaches of the project, which will include experiments for studying reaction norms of fitness-related traits in common garden and semi-natural conditions, matechoice experiments and analysis of long-term life history data series. Spending longer periods at collaborator labs and field sites in Norway and northern Finland may also be required. Experimental design and interpretation of results will be coordinated with a second postdoc project with a functional genomics focus that is being advertised simultaneously. Suitable applicants will have a strong background in the design and implementation of common garden experiments as well as in statistical analysis and tools (e.g. R software) of evolutionary ecological data, as demonstrated by publications on relevant topics. Experience with the additional approaches noted above is an advantage, and experience in evolutionary genetics and/or experience with fish husbandry.

Informal inquiries should be directed to Prof. Craig Primmer (craig.primmer@utu.fi). Formal applications should include a CV (with names and contact details of at least two referees), a publication list and a max. 2 page letter of motivation and can be uploaded at http://www.utu.fi/en/university/universityas-an-employer/open-vacancies/Pages/home.aspx .The deadline for applications is October 9, with the preferred starting date being January 2017. The position is available until the end of 2019 with a further 2 year extension possible. The starting salary is  $i\gg3155 - 3500$ EUR per month, depending on the previous relevant research experience of the candidate.

Finland is a member of the EU, has high quality free schooling (also in English) and healthcare and was recently ranked as the best country in the world for expat families. Turku is Finland's 5th largest city (183 000 people) and is located in southwestern Finland. It has a rich academic and cultural history and is the gateway to a beautiful archipelago. The University of Turku is one of the major multidisciplinary universities in Finland and is ranked in the top 1.6% of universities in the world.

Barson et al. (2015) Sex-dependent dominance at a single locus maintains variation in age at maturity in salmon. Nature 528:405-408.

See also Aykanat T et al. 2015. Low but significant genetic differentiation underlies biologically meaningful phenotypic divergence in a large Atlantic salmon population. Molecular Ecology 24, 5158-5174

Johnston et al. 2014. Genome-wide SNP analysis reveals a genetic basis for sea-age variation in a wild population of Atlantic salmon (Salmo salar). Molecular Ecology 23:3452-3468.

Craig Primmer, Professor of Genetics Room 332, 3rd floor, Natura Building Division of Genetics and Physiology Department of Biology, 20014, University of Turku, FINLAND

Mobile +358 40 1560 365 craig.primmer@utu.fi http://users.utu.fi/primmer Twitter: @FishConGen

craig.primmer@utu.fi

# UValencia PDF predoc Drosophila

Positions- 1 Junior Post doc (one year) & 1 PhD student.

What- We are looking for post docs/PhD students interested in studying the role of gut microbiota in mediating sexual conflict and kin recognition in Drosophila melanogaster. The research project involves extensive behavioural experiments, some molecular work (such as metagenomic analysis of gut microbiota or analysis of cuticular hydrocarbons) and, potentially, some theoretical modelling.

Who- We are the Behaviour and Evolution Lab (http://paucarazo.com). We are generally interested in the function of behaviour and its role as a spearhead of evolutionary change. Currently, or main line of research is on the evolutionary biology of sexual conflict and its interaction with ageing and kin selection.

Where- The Behaviour and Evolution lab is part of the Ethology unit of the Ecology, Ethology and Evolution group at Cavanilles Institute for Biodiversity and Evolutionary Biology (University of Valencia, Valencia, Spain).

Candidates-

Post doc:

- Requirements: PhD in animal behaviour/evolutionary biology and good verbal and written English.

- Advantages: background in social evolution, sexual conflict or sexual selection; molecular experience; experience in microbiology; experience working with Drosophila; modelling.

PhD student:

- Requirements: MSc in biology, ecology, evolutionary biology or similar and good verbal and written English.

- Advantages: background in social evolution, sexual conflict or sexual selection; experience with behavioural analysis; molecular experience. We are looking for a motivated, enthusiastic, hard-working candidate with some background (and/or a strong interest) in animal behaviour and evolutionary biology.

Funding- The junior post doc position is fully funded for one year (beginning early 2017; preferably January). PhD candidates would ideally join our lab for a period of 6-12 months as part-time or full-time lab assistants (funded), with the objective to learn the system, obtain hands-on research experience and apply for independent funding for their PhD via our University's or the Spanish national fellowship scheme (starting 2018).

Applications- Applications must contain a motivation letter in English (why you are good candidate for the position, why you are interested, how you could contribute to the project, etc.), CV (including publication list, if any), and 2 contact persons for references. Email to pau.carazo@uv.es. Deadline for applications is 31<sup>st</sup> October 2016.

Many thanks,

Pau

Dr. Pau Carazo Ramon y Cajal Fellow Instituto Cavanilles of Biodiversity and Evolutionary Biology University of Valencia Tel: +34 963544051 Research Associate Department of Zoology, University of Oxford

Pau Carazo <pau.carazo@uv.es>

# UZurich CH ComputationalEvolGenetics

Post-doctoral research position in Computational Evolutionary Biology

University of Zurich, Switzerland University Research Priority Program "Evolution in Action" 2-year position available starting January 2017

Deadline for application: Tuesday 1st November 2016

A post-doctoral position is available to work with Prof Frederic Guillaume, Department of Evolutionary Biology and Environmental Studies, and Dr Peter Szoevenyi, Department of Systematic and Evolutionary Botany, at the University of Zurich, in collaboration with Dr Katalin Csillery, ETH Zurich - Adaptation to Changing Environment (ACE) centre.

The position is funded for two years (100% equivalent) by the URPP Evolution in Action at UZH (http://www.evolution.uzh.ch/en.html). The program brings together evolutionary and molecular biologists with a research focus on diversification and adaptation, fostering integrative approaches using genomic tools in model and non-model species. The program provides excellent opportunities to mix with the community of evolutionary biologists in Zurich through formal and informal gatherings.

The project will centre on the genetics of polygenic

adaptation, divided between a modelling part and data analysis of genomic data in Sphagnum magellanicum.

-Modelling: you will develop a computational model to evaluate methods for the detection of signature of selection at multiple loci. Such methods require information on LD or functional relationship among loci contributing to a (quantitative) trait. The genomic computational model will require the implementation of such elements (including epistasis). You will implement it in Nemo, our in-house forward-time individual-based simulation software (http://nemo2.sourceforge.net/). Nemo is coded in C++. This part will be led by Fred Guillaume.

-Data analysis: you will use the tested methods with a genomic dataset in Sphagnum magellanicum to detect signals of selection at multiple loci. Genomic data (resequencing and ddRAD) for several populations spanning a large European latitudinal and three Alpine altitudinal transects are available. This part will be led by Péter Szövényi.

To successfully apply, you will have: - a PhD in Computational Sciences or Evolutionary Biology, or relevant discipline - a proven and documented background in programming (C/C++ is a plus) - a strong interest in Evolutionary Biology - a background in statistical genetics or genomic data analysis - the ability to work in a collaborative environment - the ability to clearly and efficiently communicate your research

We offer a competitive working environment in the beautiful international city of Zurich, one hour from the closest powdery slopes. The work-related activities are conducted in English, German is thus not required.

Please send you application package as a \*single\* PDF to frederic.guillaume@ieu.uzh.ch with your letter of motivation and summary of research interests, detailed CV, publication list, and the contact information of two to three references. Application review will begin November 1st, 2016, and continue until the position is filled. Casual enquiries are welcome.

Frédéric Guillaume (frederic.guillaume@ieu.uzh.ch) Péter Szövényi (peter.szoevenyi@systbot.uzh.ch) Katalin Csilléry (katalin.csillery@env.ethz.ch)

"frederic.guillaume@ieu.uzh.ch" <frederic.guillaume@ieu.uzh.ch>

### Vienna EvolutionGeneExpression

#### Evolution of Gene Expression

A postdoctoral position is available at the Institute of Population Genetics, Vetmeduni Vienna (Austria). 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, functional genetics, empirical population genetics, bioinformatics and statistics.

The successful candidate will be part of a team of scientists studying adaptation of experimental Drosophila populations to temperature stress. She/he can build on several highly replicated Drosophila populations that have evolved under various temperature regimes. We are planning to address the importance of plasticity in gene expression for adaptation to novel temperature regimess and how expression differences translate into fitness.

We are looking for a candidate with a good quantitative training and experience in handling large data sets. Previous experience with RNA-Seq data analysis is a bonus, but not required. Active contribution to fly work during common garden experiments is expected, as well as a keen interest in linking the gene expression data to the biology of the fly.

The position available isfor atleast two years starting between November 2016and January 2017.The application should be emailed to christian.schloetterer@vetmeduni.ac.at <christian.schloetterer@vu-wien.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 6.10.2016 to ensure full consideration.

#### Background:

1: Jaksic, A.M., and Schlötterer, C. (2016). The interplay of temperature and genotype on patterns of alternative splicing in \*Drosophila melanogaster\*. Genetics\* 204\*, 315-325.

2: Chen, J., Nolte, V., and Schlötterer, C. (2015a). Temperature stress mediates decanalization and dominance

of gene expression in \*Drosophila melanogaster\*. PLoS Genetics\* 11\*, e1004883. 10.1371

3: Chen, J., Nolte, V., and Schlötterer, C. (2015b). Temperature related reaction norms of gene expression: regulatory architecture and functional implications. Molecular Biology and Evolution.

4: Tobler, R., Hermisson, J., and Schlötterer, C. (2015). Parallel trait adaptation across opposing thermal environments in experimental \*Drosophila melanogaster\* populations. Evolution\* 69\*, 1745-1759.

5: Schlötterer, C., Tobler, R., Kofler, R., and Nolte, V. (2014). Sequencing pools of individuals - mining genome-wide polymorphism data without big funding. Nature reviews Genetics\* 15\*, 749-763.

6: Tobler, R., Franssen, S.U., Kofler, R., OrozcoterWengel, P., Nolte, V., Hermisson, J., and Schlötterer, C. (2013). Massive habitat-specific genomic response in\* D. melanogaster\* populations during experimental evolution in hot and cold environments. Molecular Biology and Evolution\* 31\*, 364-375.

Christian Schlötterer Institut für Populationsgenetik Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390 http://www.vetmeduni.ac.at/en/population-genetics/ Vienna Graduate School of Population Genetics http://www.popgen-vienna.at Christian Schlötterer <christian.schloetterer@vetmeduni.ac.at>

# VirginiaCommonwealthU Adaptation

#### POSTDOC POSITION IN ECOLOGICAL GE-NOMICS

The Eckert laboratory (http://eckertlab.blogspot.com/) at Virginia Commonwealth University (VCU), Department of Biology (http://biology.vcu.edu/), has an opening for a Postdoctoral Scholar. The position is part of a collaborative NSF-funded project addressing the interactions among climate change, evolutionary history, and invasion of an exotic fungal pathogen on the continued persistence of southwestern white pine (Pinus strobiformis) in the sky islands of the desert southwest.

#### MINIMUM QUALIFICATIONS

- Ph.D. in molecular biology, evolutionary biology,

botany, genetics, bioinformatics or a related field - Expertise in population genetics, landscape genetics, genomics, and/or phylogenetics - Fluency in at least one scripting and/or programming language (e.g. R, Python) - Experience with the analysis of short-read DNA sequence data - Record of publication

#### DESIRED QUALIFICATIONS

- Experience with high performance computing - Experience with ddRADSeq and/or exome sequencing

#### START DATE AND DURATION

The position is available as soon as November 1, 2016 and will remain open until a suitable candidate is found. The appointment will be for 1.5 years (18 months). Currently, there are not funds to extend the position beyond 18 months. Salary is dependent upon experience, but will comply with VCU mandated salaries for Postdoctoral Scholars. Health benefits are included with this position.

#### APPLICATION PROCESS

Interested candidates should send the following to Andrew Eckert (aeckert2@vcu.edu): (1) a CV, (2) a statement of research interests, and (3) names plus contact information for three references. Review of applications will begin immediately.

#### ABOUT VCU

VCU is located in downtown Richmond, Virginia. It is an urban, research-oriented university with approximately 31,000 enrolled undergraduate students. The Department of Biology at VCU currently houses a vibrant group of evolutionary researchers working on molecular evolution, phylogeography, microbiome evolution, and the evolutionary consequences of gene flow. Richmond is a dynamic city with strong art and food scenes. The overall cost of living is reasonable. The James River runs through downtown and provides opportunities for hiking, rafting, and kayaking. For example, my daily commute to work includes a three mile walk or bike ride mostly through the riparian forests of the James River where ospreys and bald eagles nest.

Eckert Assistant Professor Department Andrew of Biology Virginia Commonwealth University e-mail: aeckert2@vcu.edu personal website: http://ajeckert.blogspot.com/ laboratory website: http://eckertlab.blogspot.com/ "aeckert2@vcu.edu" <aeckert2@vcu.edu>

# Wadenswil-Zurich PhD-postdoc CompSciPhylogenetics

PhD / postdoc position in computational science and phylogenetics

A PhD studentship (3 years) or a postdoc position (1.5 years) is available at the Applied Computational Genomics Team of Maria Anisimova, Institute of Applied Simulations, Zurich University of Applied Sciences (ZHAW Wadenswil). The research project will focus on predicting optimally binding configurations of protein repeats using phylogenetics and computational prediction.

The research group has a wide-ranging expertise in computational biology and is an active member of the Swiss Institute of Bioinformatics, providing further training and networking opportunities.

The successful candidate will have a strong background in computational science, including computational statistics, algorithmics, statistical estimation procedures, and computational prediction. Fluency in programming is required. Previous knowledge in phylogenetics is a plus but is not essential. The candidate is expected to develop a background in phylogenetics and molecular evolution.

We are looking for an individual with an MSc /PhD degree or equivalent, who is highly self-motivated and can work independently. The working language in the team is English. German skills, although helpful for day-to-day life, are not essential. Ideally, the candidate would be able to start on the 1st of March 2016, but can commence earlier.

To be considered, please send a single (!) PDF file merged from the following parts to maria.anisimova@zhaw.ch: CV including publication list (if available), a scanned academic transcript (list of grades in university courses), a motivation statement not exceeding two pages, and three references. Please include "REPEAT2016" in the subject line of your email. Candidates will be considered until the position is filled, so early applications are recommended.

Maria Anisimova Head of Applied Computational Genomics Institute of Applied Simulation School of Life Sciences & Facility Management Zurich University of Applied Sciences Phone: +41 (0)58 934 5882 ZHAW : www.zhaw.ch/en/about-us/person/anis SIB: www.sib.swiss/anisimova-maria "Anisimova Maria (anis)" <anis@zhaw.ch>

### Warwick 5yr AncientMetagenomics

Job: Ancient Metagenomics Research Fellow (AMRF) for Ancient Pathogen DNA and Medium Throughput Genomics of Modern Salmonella

Salary: up to FA-6 (28,982 - 37,768 pa.)

This five year fellowship is associated with a 2.2M Wellcome Trust Investigator award to Professor Mark Achtman to determine How old are bacterial pathogens, and what evolutionary steps have they undergone? The research fellow will play a key role in the sequencing and analysis of modern bacterial genomes and metagenomes from ancient DNA, with a focus on Salmonella enterica. Ancient DNA has huge potential to shed light on the evolution of pathogens. We have already demonstrated that an ancient S. enterica genome can be reconstructed from a thousand year old human tooth, providing unique insights into evolutionary history of these bacteria. During the course of the project we will be generating hundreds of ancient DNA metagenomes from ancient human and human associated remains and sequencing ten thousand modern pathogen genomes. This unique data set will allow us to paint a historical picture of the evolution of this important vertebrate pathogen.

Generating this data will be the responsibility of the Ancient Metagenomics rESEARCH Fellow (AMrF). The AMrF will be responsible for manual extraction of DNA from 100s of archaeological samples in a dedicated aDNA laboratory, and their sequencing (Illumina NextSeq). Secondly, the AMrF will be responsible for supervising a dedicated technical assistant, and running a medium throughput, robotically assisted pipeline for isolating bacterial DNA from 10,000 bacterial isolates, and normalizing their concentrations, prior to external sequencing. Finally, the AMRF will be responsible for processing sequence reads through existing software pipelines, ensuring that the data are uploaded to existing databases, and collaborating with experienced bioinformaticians in the population genetic and evolutionary analyses of these data.

The ideal candidate will have a background in ancient DNA analyses with an interest in bioinformatics and/or population genetics. The candidate should have a first degree in natural sciences or engineering, and hold a PhD in a relevant field. Expertise in the evaluation of genomic sequences is desired, as evidenced by high quality publications in this area. The ideal candidate will also integrate tightly into an existing group of bioinformaticians and population geneticists.

If you have not yet been awarded your PhD but are near submission or have recently submitted your PhD thesis, any offer of employment made to you will be an under-appointment to the post of Research Assistant at Level 5 in the University's grade structure, and with a salary of 28,143. Once your PhD has been awarded and we have evidence of this from you, you will be appointed to the substantive post of Research Fellow at Level 6, with a salary within the annual salary range of

28,982 - 37,768. The projected start date is as soon as possible. Enquiries should be sent to Prof. Mark Achtman (m.achtman@warwick.ac.uk).

– Prof Mark Achtman FRS, Warwick Medical School Coventry CV4 7AL, UK Google Scholar: https://scholar.google.com/citations?user=a5VMuFUAAAAJ&hl=en \*\*

### Argentina ConservationGenetics Jan29-Feb12

ACCEPTING APPLICATIONS for the XI Workshop on Conservation Genetics: Genes, ecology and society of the Red de Genética para la Conservación (ReGeneC): January 29th to February 12th 2017.

Application deadline: October 31st, 2016. See "Requisitos para la Pre-Inscripción" http://regenec.org/taller/ene2017/noticias/ for application process details.

This 13-day intensive graduate course, directed primarily at Latin American postgraduate students and young professionals, will be offered in Spanish and Portuguese at the Universidad Nacional de Misiones, Posadas - Argentina. Instructors confirmed to date are faculty representing five Latin American countries (Argentina, Brazil, Chile, Colombia, and Venezuela), and also from USA and Canada, with a wide array of scientific perspectives within Conservation Genetics.

The course combines discussion sessions, hands-on data analysis, and in-depth review and presentation of ongoing research by participating students, with formal lectures in project design, marker choice, statistical analysis, phylogenetics, phylogeography, and population genetics. Throughout the course, we emphasize practical applications to the real-world process of conservation.

Organized by the Universidad Nacional de Misiones in collaboration with ReGeneC, this year's course is supported (until now) by The American Genetic Asso-

SanDiego PAG-PopulationConservationGenomics
Jan14-18
SaoPaulo Brazil ComparativeEmbryology Nov27-Dec11
154
Scotland LandscapeGenetic Oct17-21 Accommodation-
Scholarships
TropicalStudies ArachnidEvol Jan3-17 BeetleEvol Jun5-
24
UEdinburgh 4 DataAnalysis Nov-Dec156
UGothenburg Bioinformatic Pipelines Nov7-11 $\dots 157$
UM anchester Morphometrics Nov7-Dec 16 Online $.158$
UNdMisiones Argentina ConservationGenetics Jan29-
Feb12
Waiheke NewZealand Taming the BEAST Feb5-10 $160$
Weggis Switzerland CoevolutionaryInteractions Jan8-13
160

ciation (AGA), Instituto de Ecología y Biodiversidad (IEB), Instituto Luísa Pinho Sartori.

For more information, please visit our website http://regenec.org/taller/ene2017/ or send an email to asistenciaregenec@gmail.com or regenec@gmail.com \*\*\*\*\*

ABIERTO PERAODO DE POSTULACIONES para el décimo primer curso intensivo de la Red de Genética de la Conservación (ReGeneC): "Genes, ecología y sociedad" 29 de enero - 12 de febrero de 2017.

Fecha límite: 31 de octubre de 2016. Ver la sección "Requisitos para la Pre-Inscripción" http://regenec.org/-taller/ene2017/noticias/ para detalles del proceso de postulación.

Este curso intensivo de 13 días, dirigido principalmente a estudiantes de posgrado y jóvenes profesionales latinoamericanos, se ofrecerá en Castellano y Portugués en la Universidad Nacional de Misiones, Posadas, Argentina. En el curso participarán como Instructores profesores investigadores de cinco países latinoamericanos (Argentina, Brasil, Chile, Colombia y Venezuela), así como de USA y Canadá, con una amplia gama de enfoques dentro la genética para la conservación.

El curso combinará sesiones de discusión, clases prácticas de análisis de datos y revisión profunda y presentaciones de investigación activa por los estudiantes, con ponencias formales en diseño de proyectos, selección de marcadores, análisis estadísticos, filogénia, filogeografía y genética de poblaciones. A través del curso, se enfatizarán aplicaciones prácticas al proceso de conservación en el mundo real.

Organizado por la Universidad Nacional de Misiones,

en colaboración con ReGeneC, esta versión del curso recibe apoyo financiero (hasta la fecha) de The American Genetic Association (AGA), el Instituto de Ecología y Biodiversidad (IEB), y el Instituto Luísa Pinho Sartori.

Para más información, visite nuestro sitio web http:/-/regenec.org/taller/ene2017/ o contáctenos por correo electrónico en las siguientes direcciones: asistenciare-genec@gmail.com y regenec@gmail.com

Dr. Elie POULIN Laboratorio de Ecología Molecular (LEM) Instituto de Ecología y Biodiversidad (IEB) Departamento de Ciencias Ecológicas Facultad de Ciencias, Universidad de Chile Las Palmeras 3425 CP 7800003, Ãuñoa, Santiago, Chile

\*http://cursos.ciencias.uchile.cl/cienciasecologicas/index.html \*https://www.researchgate.net/profile/-Elie\_Poulin < http://www.ciencias.uchile.cl/ecologia/jml/ >http://www.ieb-chile.cl/

Phone: (56)-2-29787298 E-mail: epoulin@uchile.cl

Elie Albert Poulin <epoulin@uchile.cl>

for this course will be centered on the R language for statistics. This will include the use of specialized packages particularly ape, phangorn, and adegenet.

Requeriments: Knowledge of multivariate statistics, phylogenetics and molecular evolution. User level of R.

PLACE: Facilities of the Centre of RestauraciÂÂ i InterpretaciÂÂ Paleontologica, Els Hostalets de Pierola, Barcelona (Spain).

Organized by: Transmitting Science, the Institut CatalÂÂ de Paleontologia M. Crusafont and the Centre de RestauraciÂÂ i InterpretaciÂÂ Paleontologica de Els Hostalets de Pierola.

Places are limited and will be covered by strict registration order.

With best regards

Soledad De Esteban-Trivigno, PhD. Scientific Director Transmitting Science www.transmittingscience.org Soledad De Esteban-Trivigno <soledad.esteban@transmittingscience.org>

# Barcelona PhylogeneticAnalysisUsingR Mar6-10

Dear Colleague,

Registration is open for the fourth edition of the course PHYLOGENETIC ANALYSIS USING R, March 6th-10th, 2017.

INSTRUCTORS: Dr. Emmanuel Paradis (Institut de Recherche pour le Développement, France) and Dr. Klaus Schliep (University of Massachusetts, USA).

information: http://-More www.transmittingscience.org/courses/phylogeny/phylogenetic-analysis-using-r/ This course is for biologists dealing with the analysis of multiple molecular sequences at several levels: Populations, species, clades, communities. These biologists address questions relative to the evolutionary relationships among these sequences, as well as the evolutionary forces structuring biodiversity at different scales. The objectives are: (i) to learn the theorical bases phylogenetic analysis, (ii) to know how to choose a strategy of molecular data analysis at the inter $\hat{A}(\widehat{C})$  or intraspecific levels, (iii) to be able to initiate a phylogenetic analysis starting from the files of molecular sequences until the interpretation of the results and the graphics. The software used

# Berlin EukaryoticMetabarcoding Feb20-24

Eukaryotic-metabarcoding

Monday 20th to Friday 24th February 2017 in Berlin, Germany

http://www.physalia-courses.org/courses/course4/ Instructor: Dr Owen S. Wangensteen (http://www.physalia-courses.org/instructors/t2/)

#### Overview:

Metabarcoding techniques are a set of novel genetic tools for qualitatively and quantitatively assessing biodiversity of natural communities. Their potential applications include (but are not limited to) accurate water quality, soil diversity assessment, trophic analyses of digestive contents, diagnosis of health status of fisheries, early detection of non-indigenous species, studies of global ecological patterns and biomonitoring of anthropogenic impacts. This workshop gives an overview of metabarcoding procedures with an emphasis on practical problem-solving and hands-on work using analysis pipelines on real datasets. After completing the workshop, students should be in a position to (1) understand the potential and capabilities of metabarcoding, (2) run complete analyses of metabarcoding pipelines and ob-

#### October 1, 2016 EvolDir

tain diversity inventories and ecologically interpretable data from raw next-generation sequence data and (3) design their own metabarcoding projects, using bespoke primer sets and custom reference databases. All course materials (including copies of presentations, practical exercises, data files, and example scripts prepared by the instructing team) will be provided electronically to participants.

#### Intended audience:

This workshop is mainly aimed at researchers and technical workers with a background in ecology, biodiversity or community biology who want to use molecular tools for biodiversity research and at researchers in other areas of bioinformatics who want to learn ecological applications for biodiversity-assessment. In general, it is suitable for every researcher who wants to join the growing community of metabarcoders worldwide. This workshop will review mostly techniques and software useful for eukaryotic metabarcoding. Another workshop focused on procedures currently used in microbial metabarcoding will be available from Physalia-courses.

#### Teaching format:

The workshop is delivered over ten half-day sessions (see the detailed curriculum below). Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organizer's discretion.

#### Assumed background:

No programming or scripting experience is necessary, but some previous expertise using the Linux console and/or R will be most welcome. All examples will be run in a Linux environment. Thus, either a Linux PC or a virtual box running Linux under Windows or Mac environment will be needed. MacOSX systems might be OK, although installation of some additional Python packages might be needed in that case. The syllabus has been planned for people which have some previous experience running simple commands in Linux and using the R environment (preferently RStudio) for performing basic plots and statistical procedures. You will need to have a laptop with Python 2.7 installed for running OBITools, the main metabarcoding software package we will be using during the course, but no experience with Python is necessary. If in doubt, take a look at the detailed session content below or send Owen S. Wangensteen an email (owenwangensteen@gmail.com mailto:owenwangensteen@gmail.com ).

#### Where:

Seminar room at Molecular Parasitology, Humboldt-Universität zu Berlin, Philippstr. 13, Haus 14, 10115

#### Berlin

Course programme:

Monday 20th - Classes from 09:30 to 17:30

Session 1. Introduction to metabarcoding procedures. The metabarcoding pipeline.

In this session students will be introduced to the key concepts of metabarcoding and the different next-generation sequencing platforms currently available for implementing this technology. The kind of results that we may obtain from metabarcoding projects is explained using examples from real life. I will outline the different steps of a typical metabarcoding pipeline which will be further reviewed along the course. I will also explain the format of the course. In this session, we will check that the computing infrastructure for the rest of the course is in place and all the needed software is installed. Core concepts introduced: next-generation sequencer, multiplexing, NGS library, metabarcoding pipeline, metabarcoding marker, clustering algorithms, molecular operational taxonomic unit (MOTU), taxonomic assignment.

Session 2. Metabarcoding markers. Primer design. PCR and library preparation protocols.

In this session students will learn about the various molecular markers that can be used for metabarcoding different kinds of samples and the quality of the information which can be retrieved from them. They will know about the most commonly used primer sets for each target

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# CollegePark Maryland Bioinformatics Sep15-18

Last call. Registration closes Tuesday, September 6th at noon.

https://biodatatraining.wordpress.com For those of you considering traveling to Maryland for this, we will be in the Biology-Psychology Building in the center of campus just across from the Reagents Drive Parking lot. There is also a Metro station nearby. Here is an interactive map that can also be used to plan Metro and bus access:

http://maps.umd.edu/map/ Please contact us if you have any questions or need additional info.

Hope to see you in Maryland.

Ian & Nic

Fall Workshop in Introductory Bioinformatics University of Maryland College Park, Maryland September 15-18, 2016

There is no prerequisite for this course other than a willingness to learn and to work hard throughout the week. All workshop exercises will be implemented via VirtualBox and focus primarily on Illumina data; however, we will also include PacBio data during the genome assembly tutorial.

Course participation is limited to 25 students to ensure an intimate learning environment. Course tuition is \$800 and is open to graduate students, postdocs, staff, faculty, and industry researchers on a first come basis.

Full course information, contact, instructor info and application instructions at: https://biodatatraining.wordpress.com nblouin69@gmail.com

# CostaRica EvolutionaryEntomology Jan

Explore the amazing world of tropical insects

BIO 380 Entomology is a 4 credit lab course designed to provide students with an in-depth understanding of the systematics, ecology, behavior, physiology, and evolution of one of the most important, and certainly the most diverse group of organisms on Earth, the insects. The course will be offered in Costa Rica at two world famous biological stations, La Selva and Palo Verde, which represent contrasting Neotropical rain and dry forests, respectively. The course will take place during the winter inter–session, January 2-22, 2017. It will include insect identification, survey and collecting methods, basic field observation, and experimentation techniques.

La Selva will serve as a base of operations for the course. It is an ideal location because the station provides housing and meals, laboratory space, microscopes, transportation to and from the airport in San Jose, and a well-marked trail system for students to carry out their collecting and experiments. There is long tradition of entomological research at La Selva and amazing resources (libraries, plant and insect collections, local expertise) to carry out a class.

Undergraduate Tuition (subject to change) NY residents per credit: \$270; Non-residents per credit: \$988 Program Fee: \$3,200 (Includes housing, three meals per day, group excursions, and international health insurance).

Apply Online By October 1, 2016: www.stonybrook.edu/studyabroad/process.html For further information, contact:

Fredric Vencl,

Ecology and Evolution

Stony Brook University

fred ric.vencl @stony brook.ed u

# CzechRepublic Phylogenomics Jan22-Feb4

We are pleased to announce that we are accepting applications for the 1st Workshop on Phylogenomics which is being held in beautiful  $\tilde{A}esk\tilde{A}\frac{1}{2}$  Krumlov, Czech Republic from 22 January - 4 February, 2017. More information is below and can be found on our website at http://evomics.org . Full Schedule: http://evomics.org/2017-workshop-on-phylogenomics-cesky-krumlov/ An on-line application form can be found at: http://evomics.org/registration-form/apply-2017-workshop-on-phylogenomics/ 2017 Workshop on Phylogenomics,  $\tilde{A}esk\tilde{A}\frac{1}{2}$  Krumlov, Czech Republic

Dates: 22 January - 4 February, 2017

Application Deadline: 1 October, 2016 is the preferred application deadline, after which time people will be admitted to the course following application review by the admissions committee. However, later applications will certainly be considered for admittance or for placement on a waiting list.

Registration Fee: \$1,800 USD. Fee includes opening reception and access to all course material, but does not include other meals or housing. Special discounted pricing has been arranged for hotels, pensions and hostels. Information regarding housing and travel will be made to applicants following acceptance.

APPLY HERE: http://evomics.org/registration-form/apply-2017-workshop-on-phylogenomics/ FELLOW-SHIP PROGRAM: http://evomics.org/registrationform/2017-workshop-on-phylogenomics-fellowship/
Useful Links: Direct Link to the Full Workshop Schedule: http://evomics.org/2017-workshop-onphylogenomics-cesky-krumlov/ General Workshop information: http://evomics.org Frequently Asked Questions (FAQ) about the Workshop and AeskA $\frac{1}{2}$ Krumlov can be found here: http://evomics.org/workshops/faq/ Workshop Overview: The Workshop on Phylogenomics consists of a series of lectures, demonstrations and computer laboratories that cover various aspects of phylogenomic analysis. Faculty are chosen exclusively for their effectiveness in teaching The course is designed for theory and practice. established investigators, postdoctoral scholars, and advanced graduate students. The Workshop is designed to provide lectures and extensive hands-on laboratories on modern tools and techniques used for the analysis of phylogenomic data. Lecturers and laboratories will be given by a team of internationally recognized scholars. By the end of the Workshop, participants will be familiar: Lectures and computer laboratories total ~90 hours of scheduled instruction.

Topics to be covered include: - The design and implementation of a full phylogenomic analysis - Method selection for phylogenetic inference - Estimation of divergence times - Detection of selection on genomic scales - Manipulate and construct large data matrices - The value of using transcriptomic or genomic data for phylogenomic analysis - The use of phylogenomics for species tree estimation - Detection of horizontal gene transfer

Co-directors: Toni Gabaldon, Jordi Paps Montserrat, Guy Leonard, and Scott A. Handley

For more information and online application see the Workshop web site - http://evomics.org The materials in this email are private and may contain Protected Health Information. If you are not the intended recipient, be advised that any unauthorized use, disclosure, copying, distribution or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this email in error, please immediately notify the sender via telephone or return email.

"Handley, Scott" <shandley@pathology.wustl.edu>

# Edinburgh EvolQuantGenet Oct31-Nov4 Reminder

#### Dear All,

I would like to draw your attention to the course the Bruce Walsh will be giving in Edinburgh shortly.

Registration will be closing soon.

Regards,

John

# Short course in EVOLUTIONARY QUANTITATIVE GENETICS

The course: This course will give a comprehensive review of modern concepts in Evolutionary Quantitative Genetics. The contents of the course are basic statistics, population genetics, quantitative genetics, evolutionary response in quantitative traits, estimating the fitness of traits and mixed models and their extensions.

Course dates: 31 Oct - 4 Nov 2016.

Location: The Roslin Institute < http://www.roslin.ed.ac.uk/ >, The University of Edinburgh, Scotland, UK.

Instructor: Dr Bruce Walsh < http://eeb.arizona.edu/people/dr-j-bruce-walsh >, Department of Ecology & Evolutionary Biology, University of Arizona.

Brief programme: Monday, Oct 31- Background: Basic stats, population genetics. Tuesday, Nov 1- Basic Quantitative Genetics. Wednesday, Nov 02- Evolutionary response in quantitative traits. Thursday, Nov 03-Estimating the fitness of traits. Friday, Nov 04- Mixed Models and their extensions.

A more detailed syllabus can be downloaded here.

Participants: Participation at the course is open to all.

Course fees: Level 1 - 300 - Internal University of Edinburgh students and staff. Level 2 - 400 - External academics. Level 3 - 500 - Industry.

The course fee includes tuition, lunch and light refreshments.

Registration: Pre-registration is now open, please email Maria Sanchez </br/>Maria.Sanchez@ed.ac.uk> subject Walsh course EQG.

Hosts: John Hickey < http://www.alphagenes.roslin.ed.ac.uk/group-members/johnhickey/ >, Division of Genetics and Genomics, The Roslin Institute, University of Edinburgh. Josephine Pemberton < http://pemberton.bio.ed.ac.uk/home >, Institute of Evolutionary Biology, University of Edinburgh, University of Edinburgh. Chris Haley < http://www.hgu.mrc.ac.uk/people/c.haley.html >, MRC Human Genetics Unit, MRC IGMM, University of Edinburgh.

For any further information please contact Maria Sanchez </br/>Maria.Sanchez@ed.ac.uk>.

http://www.alphagenes.roslin.ed.ac.uk/short-coursein-evolutionary-quantitative-genetics/ HICKEY John <John.Hickey@roslin.ed.ac.uk>

> England AdvancedPythonForBiologists Feb6-10

### "Advanced Python for biologists"

http://prstatistics.com/course/advanced-python-forbiologists-apyb/ This course is being delivered by Dr Martin Jones, an expert in Python and author of two text books,

Python for Biologists [http://www.amazon.com/-Python-Biologists-complete-programming-beginners/dp/1492346136/] Advanced Python for Biologists [http://www.amazon.com/Advanced-Python-Biologists-Martin-Jones/dp/1495244377/]. This course will run from 6th - 10th February 2017 at Flatford Mill field centre, Suffolk, England

This workshop is aimed at researchers and technical workers with a background in biology and a basic knowledge of Python.

The workshop is delivered over ten half-day sessions. Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organizer's discretion. Each session uses examples and exercises that build on material from the previous one, so it's important that students attend all sessions. A description of the sessions can be found under programme.

Students should have enough biological/bioinformatics background to appreciate the examples and exercise problems (i.e. they should know what a protein accession number, BLAST report, and FASTA sequence is). Curriculum:

Day 1:

Session 1 - Data structures in Python In this session we will briefly recap Python's basic data structures, before looking at a couple of new data types tuples and sets and discussing where each should be used. We will then see how we can combine these basic types to make more complex data structures for solving specific problems. We'll finish our discussion by looking at specialized data types that are found in the Python core library. This session will also be our first introduction to benchmarking as we talk about the relative performance of different data types. In the practical session we'll learn how to parse an input file into a complex data structure which we can then use to rapidly query the data. Core concepts introduced: tuples, sets, higher-order data structures, default dicts, Counters, big-O notation.

Session 2 - Recursion and trees In this session we will cover two very closely related concepts: trees (i.e. the various ways that we can store hierarchical data) and recursive functions (the best way to operate on treelike data). As recursion is inherently confusing, we'll start with a gentle introduction using biological examples before moving on to consider a number of core tree algorithms concerning parents, children, and common ancestors. In the practical session we'll look in detail at one particular way of identifying the last common ancestor of a group of nodes, which will give us an opportunity to explore the role of recursion. Core concepts introduced: nested lists, storing hierarchical data, recursive functions, relationship between recursion and iteration.

### Day 2:

Session 3 - Classes and objects In this session we will introduce the core concepts of object-oriented programming, and see how the data types that we use all the time in Python are actually examples of classes. We'll take a very simple example and use it to examine how we can construct our own classes, moving from an imperative style of programming to an object-oriented style. As we do so, we'll discuss where and when object-orientation is a good idea. In the practical we will practise writing classes to solve simple biological problems and familiarize ourselves with the division of code into library and client that object-oriented programming demands. Core concepts introduced: classes, instances, methods vs. functions, self, constructors, magic methods.

Session 4 - Object-oriented programming Following on from the previous session, we will go over some advanced ideas that are common to most object-oriented programming languages. For each idea we'll discuss the basic

#### October 1, 2016 EvolDir

concept, the scenarios in which it's useful, and the details of how it works in Python. This overview will also allow us to consider the challenges involved in designing object-oriented code. In the practical we will work on a simulation which will involve multiple classes working together. Core concepts introduced: inheritance and class hierarchies, method overriding, superclasses and subclasses, polymorphism, composition, multiple inheritance.

#### Day 3:

Session 5 - Functional programming in Python This session will start with a look at a few different concepts that are important in functional programming, culminating in a discussion of the idea of state and its role in program design. We will see how functional programming is, in many ways, the complement of object-oriented

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# Faro Portugal Phylogenetics Apr24-29

EMBO Practical Course: http://events.embo.org/17phylogenetics Tree building: Advanced concepts and practice of phylogenetic analysis

24 - 29 April 2017, Faro, Portugal

\*About the practical course\*

The use of phylogenetic methods to reconstruct the evolutionary history of molecular sequences is a vital part of biological research. These methods underpin studies on the evolution and epidemiology of plant and animal parasites and disease-causing organisms, and more generally they allow an objective analysis of the patterns and processes generating biological diversity. To carry out phylogenetic analysis properly, it is necessary to have a good understanding of the strengths and weaknesses of the key methods and approaches. This EMBO Practical Course has been designed to provide the theoretical and practical skills needed to carry out state-of-the-art phylogenetic analyses.

The past few years have seen have an explosion in new methods of analysis including the application of Bayesian analysis methods in phylogeny reconstruction, the development of improved non-homogeneous models that much better represent the dynamics of sequence evolution, and the development of methods for highthroughput genome-wide analyses. This EMBO Practical Course has been designed to cater for these newest of methods and for understanding how they relate to the more traditional methods. Our goal is to teach technical sophistication without losing sight of the need for a critical attitude to data and analyses.

#### \*Speakers\*

Martin Embley - University of Newcastle, UK Tal Dagan-University of Kiel, Germany Tom Williams - University of Bristol, UK Peter Foster - Natural History Museum (London), UK Naiara Rodriguez-Ezpeleta - AZTI Tecnalia, Spain Mark Wilkinson - Natural History Museum (London), UK

### \*Selection criteria\*

Participants will be early-career postdoctoral researchers and advanced PhD students who will be chosen on merit, as judged from a motivational letter and a CV. The selection procedure will also consider the need to balance numbers of participants representing different nationalities, to avoid over-representation from the host country (Portugal), to include a majority of participants resident in EMBC countries, and to maintain a reasonable gender balance.

#### \*Abstract guidelines\*

Abstract for a 10 minute PowerPoint presentation that each student will present (200 words)

#### \*Registration fees\*

Student/postdocs 200 euros Academic 300 euros Industry 300 euros

\*Registration includes:\* Accommodation 23rd - 29th April 2017, inclusive (7 nights) Lunch and coffee each day Dinner each day, including Welcome Dinner and Gala Transport to and from UALG campus (Gambelas) Registration administration Course materials

(We will try to accommodate all participants in single rooms but due to availability we have ask for some participants to share.)

\*Payment\*

Payment of the registration fees will be made by interbank transfer after notification of acceptance.

\*Registration deadline\*

30 November 2016

\*Selected participants will be notified by\*

http://events.embo.org/17- Dan Graur 2016 14 November phylogenetics For informal enquires contact: ccmaratt@ualg.pt

Cymon J. Cox

FCT Investigador - Coordinating Researcher Plant Systematics and Bioinformatics Research Group (PSB) Centro de Ciencias do Mar (CCMAR) - CIMAR-Lab. Assoc.

ccmaratt@ualg.pt

# Ferrara Italy NaturalSelection **Dec16-18**

**REGISTRATION IS NOW OPEN for the workshop** "Inferring natural selection from genomic data", which will be held in Ferrara, Italy, December 16-18, 2016.

Invited speakers include Andrea Betancourt, Dan Graur, Rasmus Nielsen, Ludovic Orlando, and Pavlos Pavlidis. The titles of their presentations are available at the site www.sibe2016.it, and reported at the end of this message.

Three round tables are planned with the following themes: ENCODE and the functional fraction of the genome: The most influential (and useful) papers in adaptation genomics; Genomics for non-model organisms: pros and cons.

A few spots are available for the participants to present their data and results.

Please, register at http://www.sibe2016.it/index.php/registration. The maximum number of participants is 70, so register ASAP (first-come, first-served; we encourage participants to submit an abstract and present an oral communication).

Accepted participants will be asked to confirm not later than the end of October.

The workshop is supported by SIBE, the Italian Society of Evolutionary Biology (http://www.sibe-iseb.it/), in collaboration with the University of Ferrara. Registration is free for SIBE members; non-members can easily and cheaply become SIBE fellows (30 EUR for academics and 15 EUR for students/postdocs).

Invited Speakers Presentations (A: Seminar; B: Lecture)

Andrea Betancourt

A: Transposable element evolution in Drosophila

B: Analysing pooled sequencing data

A: Can animal and plant genomes be devoid of junk DNA? An answer based on mutational genetic load, mean fertility, and effective population size.

On December 15, Dan Graur will also give an open lecture at the University of Padova (about 70 km North of Ferrara) with the title: Lies, Damn Lies, and Statistics: Three Misconceptions about Genetics (Determinism, Perfectibility, and Naturalness)

Pavlos Pavlidis

A: Story-telling in genome scans for selective sweeps. Should we believe the results because they make sense?

B: Detecting selective sweeps in full-genomes: what methods to use?

**Rasmus** Nielsen

A: Physiological adaptation in humans

B: Selection scans using Next generation Sequencing data

Ludovic Orlando

A: TBA

B: TBA

Giorgio Bertorelle Department of Life Sciences and **Biotechnology University of Ferrara** 

Bertorelle Giorgio <ggb@unife.it>

# Hinxton ComputationalMolEvol **May8-19**

Dear Community,

The 9th summer school on computational molecular evolution that I am organizing with Ziheng Yang, Nick Goldman, and Cilia Antoniou will take place from May 8 to May 19.

Please visit the course web-site for further details, applications are now open.

https://coursesandconferences.wellcomegenomecampus.org/events/item.aspx?e=628 Alexis

- Alexandros (Alexis) Stamatakis

Research Group Leader, Heidelberg Institute for Theoretical Studies Full Professor, Dept. of Informatics, Karlsruhe Institute of Technology Adjunct Professor, Dept. of Ecology and Evolutionary Biology, University

of Arizona at Tucson

www.exelixis-lab.org Alexandros Stamatakis <alexandros.stamatakis@gmail.com>

# IBENS Paris ExperimentalEvolution Nov7-11

Second Call Experimental Evolution: Theory and Current Practices

The International Graduate Program in Life Sciences and the Interdisciplinary Master in Life Sciences (IMaLis) are now accepting applications for the course "Experimental evolution: theory and current practices", to be held at the Institute of Biology of the Acole Normale Supérieure (IBENS), in Paris, November 7-11, 2016.

The course will introduce Master and PhD students in Evolutionary Biology to the experimental approaches employed to test evolutionary theory. It will bring together world-renowned researchers to lecture on topics including the historical development of experimental evolution approaches, experimental design, the evolution of sexuality, origin of multicellularity and sociality, and the genetic basis of adaptation to changing environments. Lectures will be complemented with computer tutorials on the analysis of experimental population genomics data.

The course will be restricted to a maximum of 10 students. Meal and accommodation costs will be fully covered and there is no registration fee. Upon successful completion of the course, European students will be awarded 6 ECTS credits. Faculty: Charlie Baer (University of Florida); Lutz Becks (Max Planck Institute for Evolutionary Biology); Ivo Chelo (Instituto Gulbenkian de Ciência); Antony Dean (University of Minnesota); Thiago Guzella (IBENS); Steve Proulx (University of California, Santa Barbara); Paul Rainey (ESPCI and New Zealand Institute for Advanced Study); Christian Schlötterer (Institut für Populationsgenetik); Olivier Tenaillon (Université Paris 7); Henrique Teotónio (IBENS); Arjan de Visser (Wageningen UR).

Sponsoring and partner graduate programs: IBENS, Pepiniere interdisciplinaire CNRS-PSL Eco-Evo-Devo, and the Vienna Graduate School of Population Genetics.

We will receive applications until September 30, 2016, and selection results will be available the following week. Applicants should send a letter of motivation and a CV as a single PDF file to: teotonio@biologie.ens.fr.

We also welcome participants at any stage of their careers to attend the lectures. Meals and accommodation costs will not be covered in this case. Registration is required by sending an email to: teotonio@biologie.ens.fr. We will accept applications on a first come first serve basis, to a maximum of 30.

Further information and updates can be found at http://www.gradprog.biologie.ens.fr/ teotonio@biologie.ens.fr/

# KITP SantaBarbara EcoEvolDynamics Jul24-Sep15

\*Eco-Evolutionary Dynamics in Nature and the Lab\* \*Coordinators:\* Michael Desai, Anthony Long, Paul Rainey, and Christian Schlötterer Location: KITP Santa Barbara, California Dates: Jul 24, 2017 - Sep 15, 2017 https://www.kitp.ucsb.edu/activities/ecoevo17 Application deadline Sep 25, 2016 A tentative schedule can be found at: https://docs.google.com/spreadsheets/d/-1xZyH2uHLLRqtlTtua8MLphkdBJqanu2yimCaUr2oL8I/edit?usp=sharing Background:

The diversity of life is shaped by the action of evolutionary forces such as mutation, recombination, and natural selection. While each of these forces is well understood in isolation, it is difficult to predict how they work in combination to shape the evolution of populations and communities. The ecological richness of natural habitats, which typically involve numerous interacting species, present further obstacles to detailed investigations of their evolutionary dynamics. Similar complications are present even in simple laboratory systems, where initially clonal populations often quickly diversify. Ecological feedback is thus an essential element of evolutionary dynamics in both natural and laboratory settings, while interactions within complex communities are themselves substrates of evolutionary change.

Technological advances have made the field ripe for exploring new ways to reconstitute eco-evolutionary dynamics in laboratory models, and for connecting the insights gained from the lab to observations of diversity in natural communities. Most strikingly, inexpensive genome sequencing now makes it possible to characterize evolutionary dynamics and patterns of diversity in unprecedented detail. This has in turn led to new theoretical challenges as we attempt to interpret sequence data in the context of population genetics. The purpose of this program is to bring together perspectives from different disciplines to forge a new understanding of eco-evolutionary dynamics in natural and laboratory communities.

Key questions include:

- How does the interplay between organismic changes and ecological interactions drive evolution of diversity? And how does this diversity scale with the physical and biological complexities of the environment? - How does eco-evolutionary dynamics lead to stable versus unstable and chaotic communities? How repeatable are the dynamics, and predictable the stable patterns, of community assembly across replicate systems? - How does genetic exchange (e.g. horizontal transmission and migration) shape the genomic and ecological structure of a community? And what are the roles of selection acting on genes, organisms, and communities? - How does evolution in sexual organisms (such as \*Drosophila\* and \*C. elegans\*) fueled by standing genetic variation differ from adaptation based on new mutations in largely asexual populations of microbes and viruses?

A closely linked Santa Barbara Advanced School of Quantitative Biology Summer Course will take place from July 24-August 25, 2017.

Christian Schlötterer Institut für Populationsgenetik Vetmeduni Vienna Veterinärplatz 1 1210 Wien Austria/Europe

phone: +43-1-25077-4300 fax: +43-1-25077-4390 http://www.vetmeduni.ac.at/en/population-genetics/ Vienna Graduate School of Population Genetics http://www.popgen-vienna.at Christian Schlötterer <christian.schloetterer@vetmeduni.ac.at>

### Leicester RNAseq Oct26-28

Deadline is approaching for the upcoming BBASH Next Generation Sequencing RNA-seq training workshop.

Course description This course will provide an introduction to next generation sequencing (NGS) platforms, data analysis and tools for data quality control, read alignment (mapping), differential expression, de-novo and referenced based transcriptome assembly, annotation and gene discovery of RNA sequencing (RNA-Seq) data. The course will be delivered using a mixture of lectures and computer based hands on practical sessions using real data. This course is aimed at wet-lab biologists who are involved in research projects that will require the handling and analysis of NGS data. A significant proportion of the course will be computer-based using command line tools in the Unix environment, therefore, in order to gain maximum benefit from the course all attendees will be required to have basic Unix skills.

For additional information: http://www2.le.ac.uk/colleges/medbiopsych/facilities-and-services/cbs/bbash/training/workshop-webpages/RNA-Seq-

workshop-2016 Instructors: Richard Badge (BBASH, University of Leicester, UK) Chiara Batini (University of Leicester, UK) Matthew Blades (BBASH, University of Leicester, UK) Benjamin Hunt (University of Leicester, UK)

Deadline for applications: 30th September 2016 Notification of acceptance: 3rd October 2016 Course dates: 26th-28th October 2016

Venue: University of Leicester - College Court Conference Centre, Leicester, UK (http://collegecourt.co.uk/)

The Organisers Chiara Batini (University of Leicester, UK) Matthew Blades (BBASH, University of Leicester,

UK) Benjamin Hunt (University of Leicester, UK)

"cb334@leicester.ac.uk" <cb334@leicester.ac.uk>

# Manchester IntroToPythonForBiologists Oct3-7 2

'Introduction to Python for biologists - Funding available'

PR STATISTICS ARE PLEASED TO ANNOUNCE THAT THROUGH THEIR FUNDING SCHEME THEY CAN CONTRIBUTE TOWARDS TUITION FEES AND ACCOMMODATION WITH A LIMITED NUMBER OF 'ALL INCLUSIVE PLACES' AVAIL-ABLE AT 450.00 (+ VAT).

Applications should be sent to oliverhooker@prstatistics.com and contain the following. 1. Full name 2. Institute name 3. PhD subject title or Post doc research questions 4. Do you hold a funded position 5. 150 words why this course would be relevant to your research or how it would help.

Application deadline is 22nd September, successful applicants will be notified by the 23rd September.

Full course details are given below

http://prstatistics.com/course/introduction-to-pythonfor-biologists-ipyb-3/ This course is being delivered by Dr Martin Jones, an expert in Python and author of two text books,

Python for Biologists [http://www.amazon.com/-Python-Biologists-complete-programming-beginners/dp/1492346136/] Advanced Python for Biologists [http://www.amazon.com/Advanced-Python-Biologists-Martin-Jones/dp/1495244377/]. Due to high demand a repeat of this course will run from 3rd - 7th October 2016 at Malham tarn field centre, Yorkshire, North of Manchester, England.

Course overview: Python is a dynamic, readable language that is a popular platform for all types of bioinformatics work, from simple one-off scripts to large, complex software projects. This workshop is aimed at complete beginners and assumes no prior programming experience. It gives an overview of the language with an emphasis on practical problem-solving, using examples and exercises drawn from various aspects of bioinformatics work. After completing the workshop, students should be in a position to (1) apply the skills they have learned to tackle problems in their own research and (2) continue their Python education in a self-directed way. Intended audience:

This workshop is aimed at all researchers and technical workers with a background in biology who want to learn programming. The syllabus has been planned with complete beginners in mind; people with previous programming experience are welcome to attend as a refresher but may find the pace a bit slow. Teaching format:

The workshop is delivered over ten half-day sessions (see the detailed curriculum below). Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organizer's discretion. There will also be plenty of time for students to discuss their own problems and data.

Assumed background: Students should have enough biological background to appreciate the examples and exercise problems (i.e. they should know about DNA and protein sequences, what translation is, and what introns and exons are). No previous programming experience or computer skills (beyond the ability to use a text editor) are necessary, but you'll need to have a laptop with Python installed.

Curriculum: Day 1: Module 1 - Introduction Module 2 - Output and text manipulation

Day 2: Module 3 - File IO and user interfaces Module 4

- Flow control 1: loops

Day 3: Module 5 - Flow control 2: conditionals Module 6 - Organizing and structuring code

Day 4: Module 7 - Regular expressions Module 8 - Dictionaries

Day 5: Module 9 - Interaction with the file system Module 10 - Optional free afternoon to cover previous modules and discuss data

Please email any inquiries to oliverhooker@prstatistics.com or visit our website www.prstatistics.com Please feel free to distribute this material anywhere you feel is suitable

Other relevant courses - email for details oliverhooker@prstatistics.com

1. INTRODUCTION TO PYTHON FOR BIOLO-GISTS (October) 2. LANDSCAPE (POPULATION) GENETIC DATA ANALYSIS USING R (October) 3. APPLIED BAYESIAN MODELLING FOR ECOLO-GISTS AND EPIDEMIOLOGISTS (October) 4. PHY-LOGENETIC DATA ANALYSIS USING R (October/November) 5. SPATIAL ANALYSIS OF ECO-LOGIC AL DATA USING R (November) 6. ADVANC-ING IN STATISTICAL MODELLING USING R (December) 7. MODEL BASED MULTIVARIATE ANAL-YSIS OF ECOLOGICAL DATA USING R (January, 2017) 8. ADVANCED PYTHON FOR BIOLOGISTS (February, 2017) 9. NETWORK ANAYLSIS FOR ECOLOGISTS USING R (March, 2017) 10. INTRO-DUCTION TO GEOMETRIC MORPHOMETRICS USING R (June, 2017)

Dates still to be confirmed - email for details oliverhooker@prstatistics.com STABLE ISOTOPE MIXING MODELS USING SIAR, SIBER AND MIXSIAR US-ING R INTRODUCTION TO R AND STATISTICS FOR BIOLOGISTS BIOINFORMATICS FOR GE-NETICISTS AND BIOLOGISTS INTRODUCTION TO BIOINFORMATICS USING LINUX (August)

Oliver Hooker PR Statistics

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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

### Portugal Evolution Nov21-Dec16

Subject: Portugal-cE3c-Course: two advanced courses with deadlines October 2016

cE3c ' Centre for Ecology, Evolution and Environmental Changes is organizing several Advanced Courses: see below the two with closer deadlines.

Additional informations at:

### 

cE3c ' Centre for Ecology, Evolution and Environmental Changes Advanced Course R without fear: an R course in evolutionary ecology by Jordi Moya-Lara $\tilde{A}\hat{A}\pm o|$ November 21-25 2016 @ Lisbon, Portugal

Objectives: This is a five days intensive course aiming to give basic skills in R, with some applications in the field of Evolutionary Ecology

(Tenure Scientist, Functional and Evolutionary Ecology, Estaci $\tilde{A}\hat{A}^{3}n$  Experimental de Zonas  $\tilde{A}$  ridas 'CSIC)

Intended audience

This five days intensive course will be open to a maximum number of 24 participants with a bachelor in Biology or related area.

The course is free for a maximum of 12 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL, UP) and Biology and Ecology of Global Changes (BEAG UL, UA). For information of fees for other participants see the programme details.

Deadline for applications: October 20, 2016

For additional details about the course and to know how to register, click here:

http://ce3c.ciencias.ulisboa.pt/training/ver.php?id& For more information about the course, please contact by email:

Jordi Moya-Lara $\hat{A}\hat{A}\pm o$  (jordi@eeza.csic.es)  $\hat{A}\hat{A}\hat{A}\hat{A}\hat{A}\hat{A}\hat{A}\hat{A}$ . cE3c ' Centre for Ecology, Evolution and Environmental Changes Advanced Course EvoS-2

organized by Filipa Vala| November 21-December 16 2016 @ Lisbon, Portugal

Objectives: Evolutionary theory provides a framework for understanding all living systems. Nevertheless, throughout the 20<sup>th</sup> century, with a few exceptions, evolutionary biologists have "avoided" using evolution to address problems related to our own species. EvoS is a program created by David Sloan Wilson at the University of Binghamton, and later adopted at other faculties that have joined into the EvoS international consortium. EvoS aims at turning evolutionary theory into a common language to areas that pertain to the natural world, including human affairs. This advanced course is part of the EvoS programme at the University of Lisbon.

See the PROGRAMME at: http://ce3c.ciencias.ulisboa.pt/training/ver.php?id3 Course instructor: Filipa Vala (http://ce3c.ciencias.ulisboa.pt/member/filipa-vala)

Post-Doc at the Centre for Ecology, Evolution and Environmental Changes (cE3c), Faculty of Sciences of the University of Lisbon

Intended audience

This course will be open to a maximum number of 16 participants, being directed to PhD or MSc students in Biology, Evolution, Ecology or related areas, and post-docs and other professionals working in related topics.

Minimum formation: Bachelor in Biology or related area.

The course is free for a maximum of 8 1st year PhD students in the Doctoral programme in Biology (FCUL), Biodiversity, Genetics and Evolution (BIODIV UL, UP) and Biology and Ecology of Global Changes (BEAG UL, UA). For information of fees for other participants see the programme details.

Deadline for applications: November 7, 2016

Candidates should send a short CV and motivation letter to Filipa Vala (fdvala@fc.ul.pt)

For additional details about the course and to know how to register, click here:

#### http://ce3c.ciencias.ulisboa.pt/training/ver.php?id3

For more information about the course, please contact by email:

Filipa Vala (fdvala@fc.ul.pt)

Margarida Matos, PhD [logo%20cE3c%20assinaturas-fcul.png] Centro de Ecologia, Evolu $\tilde{A}\hat{A}e$  Al-

tera $\hat{A}\hat{A}\hat{A}\hat{A}\mu$ es Ambientais (cE3c - Centre for Ecology, Evolution and Environmental Changes)

Faculdade de CiÃÂncias da Universidade de Lisboa Campo Grande, Edificio C2 - 5 Âo Piso Phone: +351 217500000 ext. 22141 1749-016 Lisboa Portugal

Margarida Matos <mmmatos@fc.ul.pt>

# The Galaxy Team PS: Please share

PS: Please share this flier (https://wiki.galaxyproject.org/Events/AdminTraining2016/-Publicity) with any individuals or groups who might be interested in this event.

- http://galaxyproject.org/ http://getgalaxy.org/ http:// /usegalaxy.org/ https://wiki.galaxyproject.org/ Dave Clements <clements@galaxyproject.org>

# SaltLakeCity Galaxy Nov7-11

Galaxy Admin Training November 7-11, 2016 Salt Lake City Utah https://wiki.galaxyproject.org/Events/-AdminTraining2016 —-

The first Galaxy Admin Training workshop will be held November 7-11 in Salt Lake City, Utah (the week before Supercomputing'16 also meets in Salt Lake). The workshop offers Basic and Advanced sessions.

Galaxy is an open web based platform for biomedical data integration and analysis. It is deployed at large and small organizations around the world and used in a broad range of biomedical research domains, and across the tree of life. Galaxy enables life science researchers to perform their own data analysis without having to learn command line interfaces or Linux package management. Galaxy transparently records all analysis steps and eases workflow reuse and sharing. If your organization is looking for how to empower your researchers, then please consider attending one or both sessions.

Participants will learn how to install, configure, customize, and extend their own Galaxy servers. Topics include tool configuration, authentication and user management, using heterogeneous storage and compute services, and many other topics that will enable you to get your own Galaxy server up and running, performing well, and used by your community.

Registration is now open, but space is limited. Early registration ends September 19. Participants can register for one or both sessions. Please review each session's prerequisites before registering.

Galaxy Admin Training 2016 is hosted by the University of Utah Center for High Performance Computing (CHPC), USTAR Center for Genetic Discovery (UCGD), the Department of Biomedical Informatics and the Clinical & Translational Science Biomedical Informatics Core (CCTS BMIC) at the University of Utah.

We hope to see you in Salt Lake!

# SanDiego PAG-PopulationConservationGenomics Jan14-18

Call for Abstracts Population and Conservation Genomics Workshop Plant and Animal Genome XXV International Conference http://www.intlpag.org/ January 14-18, 2017 Town and Country Convention Centre, San Diego, California

The annual Population and Conservation Genomics workshop will be held at the Plant and Animal Genome XXV International conference. The workshop is scheduled on Saturday, January 14, 2017. You are invited to attend this Workshop and submit abstracts for oral presentations on any population and conservation genomics aspect of both plants and animals. The topics may include (but not limited to): population genomic diversity and structure; molecular evolution; landscape genomics; seascape genomics; natural selection and local adaptation; population epigenomics; eDNA; application of genomics in breeding, forensics, biogeography, demography inferences, and conservation and management of genetic resources; genomic effects of domestication, management practices, fragmentation, bottlenecks, climate and environment change, and transgenic deployment; and gene conservation; etc.

Due to a large number of high quality abstracts received in the recent years, the workshop time has been extended to two time slots this year. Thus the workshop has a provision for 12 invited speakers. Most of the invited presentations will be selected from the submitted abstracts. Please send your abstract of no more than 250 words by e-mail to Om Rajora (Om.Rajora@unb.ca) as an attached Word file no later than October 17, 2016. You will be notified by October 24, 2016 whether your abstract has been selected for an oral presentation. Thereafter, the selected presenters will need to submit their abstract to the PAG website. Authors whose abstracts are not selected for oral presentations are highly encouraged to present a poster at the conference.

Inquiries and Abstract Submission

For information and questions regarding the Population and Conservation Genomics workshop, please contact Om Rajora at the following coordinates.

Dr. Om P. Rajora, Faculty of Forestry and Environmental Management, University of New Brunswick, Fredericton, NB E3B 5A3, Canada.

E-mail: Om.Rajora@unb.ca Tel: (506) 458-7477 Fax: (506) 453-3538

Om Rajora <om.rajora@unb.ca>

SaoPaulo Brazil ComparativeEmbryology Nov27-Dec11

#### Dear Colleagues,

It is my pleasure to announce the third Comparative Embryology of Marine Invertebrates (CEMI) Course that will take at CEBIMAR (Centro de Biologia Marinha da Universidade de São Paulo) in São Sebastião, Brazil from Nov 27th - Dec 11th, 2016. It is a two-week intensive course exploring some exciting local species. Registration is 16 USD (free for USP students) and covers accomodation costs (food and board) during the course, as well as bus transportation from São Paulo to São Sebastião before and after the course. Please, forward the link below to any graduate students interested. Application deadline is September 12th!

CEMI Course Info: http://zoologia.ib.usp.br/evodevo2/index.php/biz5765/ Cheers, Federico

Federico D. Brown Professor Doutor Departamento de Zoologia Instituto Biociencias Universidade de Sao Paulo Ramal direto: +55 11 3091.0950 http://www.ib.usp.br/zoologia/evodevo fdbrown@usp.br

# Scotland LandscapeGenetic Oct17-21 AccommodationScholarships

"Landscape (population) genetic data analysis using R"

## FREE ACCOMMODATION AND MEALS

Accommodation scholarships available; through our funding project we are offering a limited number of places with FREE ACCOMMODATION AND MEALS for the duration of the course (arrival Sunday 16th October depart Friday 21st October).

Total all inclusive 5 day course fee 475(+VAT).

Applications should be sent to oliverhooker@prstatistics.com and contain the following. 1. Full name 2. Institute name 3. PhD subject title or Post doc research questions 4. Do you hold a funded position 5. 150 words why this course would be relevant to your research or how it would help.

Application deadline is 6th October, successful applicants will be notified by the 7th October.

Full course details are given below

Delivered by Dr. Rodney Dyer

http://prstatistics.com/course/landscape-genetic-dataanalysis-using-r-lndg/ This course will run from 17th - 21st October 2016 at SCENE Field Station, Loch Lomond, Glasgow, Scotland The term 'landscape genetics' has been applied studies that integrate ecological context and intervening landscape into population genetic analyses of contemporary processes such as gene flow and migration. This course will cover the basics of both quantitative landscape ecology and population genetics, focusing on how we develop and evaluate spatial/genetic analyses using the R platform

Course content is as follows Day 1 - Spatial & Ecological Data - Installation & configuring R & RStudio -Acquiring spatial data, projections, and visualization -Vector and raster data

Day 2 - Genetic markers and basic analyses - Genetic markers and sampling - Genetic distance, diversity, and structure - Ordination techniques based upon genetic markers

Day 3 - Integrating spatial and genetic data - Barrier detection & population division - Resistance Modeling

- Mantel and distance regressions - Remote sensing - LiDAR and Hyperspectral data

Day 4 - Integrating spatial and genetic data - Spatial autocorrelation - Network Approaches - PCMN & Redundancy

Day 5 - Adaptive Genetic Variance - Outliers & gradients - Quantitative genetics, why we should care. -Chromosome walking

Please email any inquiries to oliverhooker@prstatistics.com or visit our website www.prstatistics.com Please feel free to distribute this material anywhere you feel is suitable

Upcoming courses - email for details oliverhooker@prstatistics.com

1. INTRODUCTION TO PYTHON FOR BIOLO-GISTS (October) 2. APPLIED BAYESIAN MOD-ELLING FOR ECOLOGISTS AND EPIDEMIOLO-GISTS (October) 3. PHYLOGENETIC DATA ANALY-SIS USING R (October/November) 4. SPATIAL ANAL-YSIS OF ECOLOGIC AL DATA USING R (November) 5. ADVANCING IN STATISTICAL MODELLING US-ING R (December) 6. MODEL BASED MULTIVARI-ATE ANALYSIS OF ECOLOGICAL DATA USING R (January) 7. ADVANCED PYTHON FOR BIOL-OGISTS (February) 8. STABLE ISOTOPE MIXING MODELS USING SIAR, SIBER AND MIXSIAR US-ING R (Feb/March) 9. NETWORK ANALYSIS FOR ECOLOGISTS USING R (March) 10. INTRODUC-TION TO GEOMETRIC MORPHOMETRICS USING R (June)

Dates still to be confirmed - email for details oliverhooker@prstatistics.com

ADVANCES IN SPATIAL ANALYSIS OF MULTI-VARIATE ECOLOGICAL DATA INTRODUCTION TO BIOINFORMATICS USING LINUX GENETIC DATA ANALYSIS / EXPLORATION USING R IN-TRODUCTION TO BAYESIAN HIERARCHICAL MODELLING INTRODUCTION TO R AND STATIS-TICS FOR BIOLOGISTS BIOINFORMATICS FOR GENETICISTS AND BIOLOGISTS

Oliver Hooker PhD. PR statistics

3/1 128 Brunswick Street Glasgow G1 1TF

+44(0)7966500340

www.prstatistics.com/organiser/oliver-hooker/ Oliver Hooker <oliverhooker@prstatistics.com>

# TropicalStudies ArachnidEvol Jan3-17 BeetleEvol Jun5-24

Hello all,

(Apologies for cross-posting)

I wanted to let you about the course we are offering this academic year.

Graduate Courses 2016-2017:

Field Ecology: Skills for Science and Beyond (4 weeks, 29 Dec 2016 - 24 Jan 2017) Deadline: October 10, 2017 Website link: http://bitly.com/FieldEcology Tropical Biology: An Ecological Approach (6 weeks, 22 May -2 July 2017) Deadline: February 3, 2017 Website link: http://bit.ly/TropBio The above two courses are our hallmark field ecology courses that immerse graduate students in hypothesis-driven research learning. The 4weekField Ecology in late December and January allows students to fit in the course while still attending fall and spring terms at their home campus. The 6-weekTropical Biology, scheduled this year during Summer Session 1, will provide more time during and after the course to hone research skills. Both courses include a science communication workshop to share research through the production of podcasts and videos. Please take a moment to view a video about these courses (click here< https://youtu.be/WF2MBL31lag >).

Graduate Short Courses 2017:

Ecology and Evolution of Arachnids (2 weeks, 3 - 17 January 2017) Deadline: October 10, 2017 Website link: bit.ly/arachid

Tropical Ferns and Lycophytes (2 weeks, 6 - 22 January 2017) Deadline: October 10, 2017 Website link: bit.ly/2c5dzyk

Biology of Neotropical Social Insects (2 weeks, 12 - 24 March 2017) Deadline: November 15, 2017 Website link: http://bit.ly/soc\_ins Tropical Butterfly Ecology (2 weeks, 28 May - 10 June 2017) Deadline: March 1, 2017 Website link: bit.ly/Tbe2016

Ecology and Evolution of Coleoptera (Beetles) (3 weeks, 5 - 24 June 2017) Deadline: March 1, 2017 Website link: bit.ly/eec2017

Best,

Andrés Santana, M.Sc. Graduate Program Coordinator Organization for Tropical Studies San Pedro, Costa Rica. 676-2050 (506) 2524-0607 ext. 1511 Skype: andres.santana\_otscro // twitter: @ots\_tropicaledu< https://twitter.com/ots\_tropicaledu > www.tropicalstudies.org Andrés Santana Mora <andres.santana@tropicalstudies.org>

# UEdinburgh 4 DataAnalysis Nov-Dec

Four Workshops at the University of Edinburgh

INTRODUCTION TO PYTHON FOR BIOLOGISTS DATE: Monday 12 - Friday 16 December 2016

INTRODUCTION TO RAD-SEQ DATA ANALYSIS DATE: Tuesday 29 - Wednesday 30 November 2016

INTRODUCTION TO CHIP-SEQ DATA ANALYSIS AND VISUALISATION USING ENSEMBL DATE Tuesday 22 - Wednesday 23 November 2016

OXFORD NANOPORE MINION SEQUENCING -DATA HANDLING, ANALYSIS AND APPLICA-TIONS DATE: Tuesday 1 November 2016

### INTRODUCTION TO PYTHON FOR BIOLOGISTS

DATE: Monday 12 - Friday 16 December 2016 VENUE: The King's Buildings, The University of Edinburgh, Edinburgh, Scotland, UK REGISTRATION DEADLINE: Monday 28 November 2016 noon CANCELLATION DEADLINE: Monday 5 December 2016 noon PLACES: 20 (first come, first served) REGISTRATION FEE: pounds 500 (includes coffee/tea, but no lunch) INFOR-MATION: Bert Overduin (bert.overduin@ed.ac.uk), Martin Jones (martin@pythonforbiologists.com)

TO REGISTER: http://genomics.ed.ac.uk/services/introduction-python-biologists Python is a dynamic, readable language that is a popular platform for all types of bioinformatics work, from simple one-off scripts to large, complex software projects. This workshop is aimed at complete beginners and assumes no prior programming experience. It gives an overview of the language with an emphasis on practical problem-solving, using examples and exercises drawn from various aspects of bioinformatics work. The workshop is structured so that the parts of the language most useful for bioinformatics are introduced as early as possible, and that students can start writing plausibly-useful programs after the first few sessions. After completing the workshop, students should be in a position to (1) apply the skills they have learned to tackling problems in their own research and (2) continue their Python education in a self-directed way.

"Great learning from someone with a biology background rather than computer science - meant we were on the same wavelength." (February 2016) "Brilliantly wellrun. From the book; to the USB stick with all the files we need; to the topics covered; to the system of helping us one-on-one, I cannot fault this course." (February 2016)

### INSTRUCTORS

Dr. Martin Jones (Founder, Python for Biologists) Dr. Bert Overduin (Training and Outreach Bioinformatician, Edinburgh Genomics)

### WORKSHOP FORMAT

The workshop is delivered over ten half-day sessions. Each session consists of roughly a one hour lecture followed by two hours of practical exercises, with breaks at the organiser's discretion. Each session uses examples and exercises that build on material from the previous one, so it's important that students attend all sessions. A description of the sessions can be found at the bottom of this page.

### WHO SHOULD ATTEND

This workshop is aimed at researchers and technical workers with a background in biology who want to learn programming. The syllabus has been planned with complete beginners in mind; people with previous programming experience are welcome to attend as a refresher but may find the pace a bit slow. If in doubt, take a look at the detailed session content below or drop Martin Jones or Bert Overduinan email.

### REQUIREMENTS

Students should have enough biological/bioinformatics background to appreciate the examples and exercise problems (i.e. they should know what a protein accession number, BLAST report, and FASTA sequence is). No previous programming experience or computer skills (beyond the ability to use a text editor) are necessary.

### SESSION CONTENT

#### 1. Introduction

In this session I introduce the students to Python and explain what we expect them to get out of it and how learning to program can benefit their research. I explain the format of the course and take care of any housekeeping details (like coffee breaks and catering arrangements). I outline the edit-run-fix cycle of software development and talk about how to avoid common text editing errors. In this session, we also check that the computing infrastructure for the rest of the course is in place (e.g. making sure that everybody has an appropriate version of Python installed). Core concepts introduced: source code, text editors, whitespace, syntax and syntax errors, Python versions

2. Manipulating text

In this session students learn to write very simple programs that produce output to the terminal, and in doing so become comfortable with editing and running Python code. This session also introduces many of the technical terms that we'll rely on in future sessions. I run through some examples of tools for working with text and show how they work in the context of biological sequence manipulation. We also cover different types of errors and error messages, and learn how to go about fixing them methodically. Core concepts introduced: terminals, standard output, variables and naming,

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

# UGothenburg BioinformaticPipelines Nov7-11

#### Dear all,

Please find below the preliminary schedule and general aims of the course, "An introduction to bioinformatic tools for population genomic and metagenetic data analysis", offered November 7-11 2016 at the Sven Loven Centre for Marine Sciences on the island of Tjärnö outside of Strömstad on the Swedish West Coast (http://loven.gu.se/english/about\_the\_loven\_centre/tjarno).

There is no course fee. Accommodation and meals for students are provided by the Royal Academy of Sciences of Sweden. Students will need to provide their own means of transportation to and from the course, however.

The course will be open to a maximum of 18 students, as large parts of the course will consist of hands-on exercises. The aim is a broad mix of students both from the University of Gothenburg and from the outside, mainly PhD students but postdocs are also welcome to apply.

Knowledge of general molecular biology and genetics is necessary, as is some previous experience with commandline interfaces. Previous experience working on a remote server will also be beneficial. No previous bioinformatics skills are needed, however.

For more information and registration, please visit the course web site at: https://sites.google.com/site/bioinformaticpipelines2016/ Deadline for registration is September 15th 2016.

Please note that ALL students must bring their own computers.

Best wishes, Pierre De Wit Sarah Bourlat — An introduction to bioinformatic tools for population genomic and metagenetic data analysis, 2.5 higher education credits Third Cycle Faculty of Science; Department of Marine Sciences The Swedish Royal Academy of Sciences

1 Confirmation The syllabus was confirmed by the Steering Committee of the Department of Marine Sciences 200X-XX-XX, 200X-XX-XX.

Discipline: Natural Science Responsible department: Department of Marine Sciences Main fields of study: Bioinformatics

2. Position in the educational system Elective course; third-cycle education.

3. Entry requirements Admitted to third cycle education.

4. Course content This course aims at detailed understanding and hands-on experience of using state of the art bioinformatics pipelines for one"s own biological research questions. An important aspect of the course is to show how genomic data can be applied to address and answer research questions in the fields of genetics, ecology, population biology, biodiversity monitoring and conservation. The students will be trained in the latest bioinformatic methods to analyze high throughput sequencing data, which is present in many research projects. The course will cover basic computing tools required to run command line applications, processing high throughput sequencing data of the CO1 gene from environmental samples to reveal biodiversity and analysis of sequencing data from whole genome scans for population genomic studies.

The first part of the course introduces general computing tools for beginners such as the UNIX command line environment, bash commands, data formatting using regular expressions and basic scripting in the unix shell with a series of examples and exercises. The course introduces bioinformatics software for analysis of sequence data from metagenetics (The high-throughput sequencing of a molecular marker from an ecosystem or a community of organisms, used for large-scale analyses of biodiversity), through a series of live demonstrations (AmpliconNoise, TaxAssign, QIIME). The course also introduces basic and advanced concepts of population genomics data analysis such as genome/transcriptome assembly, annotation (BLAST), alignment/mapping, differential Gene expression, functional enrichment tests, SNP genotyping, PCA, outlier tests.

The course corresponds to 1 week of full time studies and and is composed of lectures, demonstrations and computer labs.

5. Outcomes 1. Knowledge and understanding 1a. Demonstrate advanced knowledge of experimental strategies, applications and tools of DNA barcoding/metabarcoding and population genomics.

1b. Demonstrate advanced knowledge of the potential of genomics approaches to answer ecosystem-wide questions, in particular for biodiversity monitoring.

2. Skills and abilities 2a. Ability to use basic commands in the Unix command line environment (reformatting data with regular expressions, basic scripting, running python scripts from the unix shell) 2b. Ability to use metagenetics software tools to analyse sequence data from environmental samples (data cleaning steps, clustering of reads into operational taxonomic units (OTUs) and taxonomic assignment through hidden markov models and database matching (BLAST, barcode of life database).

2c. Ability to use population genomics software tools to assemble and annotate a genome/transcriptome, and perform gene alignment/mapping,

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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

# UManchester Morphometrics Nov7-Dec16 Online

### Dear colleagues

This is a reminder that the registration for this year's morphometrics course from the University of Manchester is open (deadline: 21 October 2016).

This year's course will run via the web in the six weeks from 7 November to 16 December 2016. Course content: \* Data acquisition: the kinds of data and the equipment used to collect them. \* Definitions of size and shape \* Geometric methods to characterise shape from a configuration of landmark points (Procrustes superimposition) \* Statistics of variation, scatter plots, basic multivariate statistics \* Principal component analysis \* Measurement error and outliers \* Shape transformations and 'warping' – the thin plate spline \* Analysis of outline shapes \* Distinguishing between groups (taxonomy, clinical diagnosis, etc.) ' Allometry and size correction \* Influence of external factors on shape (ecomorphology, dose-response studies) \* Symmetric forms and measurement of asymmetry. \* Morphometric inferences on developmental processes \* Morphological integration and modularity \* Genetics of shape: analyses of resemblance between relatives, QTL analyses. \* Phylogeny: examining the history of evolutionary changes of shape

Practice examples: As far as possible, practical exercises are provided to accompany the course content. These practice exercises consist of data sets and explanations on how to run the respective analyses using the MorphoJ software (http://www.flywings.org.uk/-MorphoJ\_page.htm). Participants who already have their own data are encouraged to use those and to discuss them as part of the course. I hope there will be a bit of a 'workshop' feel to the course unit.

Group work: Participants will work in small groups to prepare web presentations of possible morphometric studies (wikis prepared by the groups). This activity stimulates discussion and provides a broad overview of the broad range of questions that can be addressed with morphometric methods.

Further information on the course and a link to the registration page can be found on the following we site: http://www.flywings.org.uk/MorphoCourse Registration uses the university's e-store, which can process automatic \*payments by credit card or debit card\*. The deadline for registration via this site is the \*21 October 2016\*.

The direct link to the e-store is this: http://estore.manchester.ac.uk/browse/product.asp?compid=-1&modid=5&catid=164 The fee for the course is GBP 340.00.

If you cannot pay by credit or debit card, or \*if you require a formal invoice\* (e.g. for reimbursement by your institution), you need to contact the Short Course Office in our faculty via this E-mail: FLSshortcourses@manchester.ac.uk If you need to use this option, please do so as soon as possible, but definitely \*well before October\*. Best wishes, Chris

Christian Peter Klingenberg Faculty of Life Sciences The University of Manchester Michael Smith Building Oxford Road Manchester M13 9PT United Kingdom

Telephone: +44 161 275 3899 Fax: +44 161 275 5082 E-mail: cpk@manchester.ac.uk Web: http://-www.flywings.org.uk Skype: chris\_klingenberg

Chris Klingenberg <cpk@manchester.ac.uk>

# UNdMisiones Argentina ConservationGenetics Jan29-Feb12

### \*\*\*\*\*VERSIÃN EN CASTELLANO ABAJO\*\*\*\*\*

ACCEPTING APPLICATIONS for the XI Workshop on Conservation Genetics: Genes, ecology and society of the Red de Genética para la Conservación (ReGeneC): January 29th to February 12th 2017.

Application deadline: October 31st, 2016. See "Requisitos para la Pre-Inscripción" http://regenec.org/taller/ene2017/noticias/ for application process details.

This 13-day intensive graduate course, directed primarily at Latin American postgraduate students and young professionals, will be offered in Spanish and Portuguese at the Universidad Nacional de Misiones, Posadas - Argentina. Instructors confirmed to date are faculty representing five Latin American countries (Argentina, Brazil, Chile, Colombia, and Venezuela), and also from USA and Canada, with a wide array of scientific perspectives within Conservation Genetics.

The course combines discussion sessions, hands-on data analysis, and in-depth review and presentation of ongoing research by participating students, with formal lectures in project design, marker choice, statistical analysis, phylogenetics, phylogeography, and population genetics. Throughout the course, we emphasize practical applications to the real-world process of conservation.

Organized by the Universidad Nacional de Misiones in collaboration with ReGeneC, this year's course is supported (until now) by The American Genetic Association (AGA), Instituto de Ecología y Biodiversidad (IEB), Instituto Luísa Pinho Sartori.

For more information, please visit our website http://regenec.org/taller/ ene2017/ or send an email to asistenciaregenec@gmail.com or regenec@gmail.com 159

ABIERTO PERÃODO DE POSTULACIONES para el décimo primer curso intensivo de la Red de Genética de la Conservación (ReGeneC): "Genes, ecología y sociedad" 29 de enero - 12 de febrero de 2017.

Fecha límite: 31 de octubre de 2016. Ver la sección "Requisitos para la Pre-Inscripción" http://regenec.org/-taller/ene2017/noticias/ para detalles del proceso de postulación.

Este curso intensivo de 13 días, dirigido principalmente a estudiantes de posgrado y jóvenes profesionales latinoamericanos, se ofrecerá en Castellano y Portugués en la Universidad Nacional de Misiones, Posadas, Argentina. En el curso participarán como Instructores profesores investigadores de cinco países latinoamericanos (Argentina, Brasil, Chile, Colombia y Venezuela), así como de USA y Canadá, con una amplia gama de enfoques dentro la genética para la conservación.

El curso combinará sesiones de discusión, clases prácticas de análisis de datos y revisión profunda y presentaciones de investigación activa por los estudiantes, con ponencias formales en diseño de proyectos, selección de marcadores, análisis estadísticos, filogénia, filogeografía y genética de poblaciones. A través del curso, se enfatizarán aplicaciones prácticas al proceso de conservación en el mundo real.

Organizado por la Universidad Nacional de Misiones, en colaboración con ReGeneC, esta versión del curso recibe apoyo financiero (hasta la fecha) de The American Genetic Association (AGA), el Instituto de Ecología y Biodiversidad (IEB), y el Instituto Luísa Pinho Sartori.

Para más información, visite nuestro sitio web http://regenec.org/taller/ ene2017/ o contáctenos por correo electrónico en las siguientes direcciones: asistenciaregenec@gmail.com y regenec@gmail.com

Dr. Elie POULIN Laboratorio de Ecología Molecular (LEM) Instituto de Ecología y Biodiversidad (IEB) Departamento de Ciencias Ecológicas Facultad de Ciencias, Universidad de Chile Las Palmeras 3425 CP 7800003, Áuñoa, Santiago, Chile

\*http://cursos.ciencias.uchile.cl/cienciasecologicas/index.html < http://cursos.ciencias.uchile.cl/cienciasecologicas/index.html >\* \*https://www.researchgate.net/profile/Elie\_Poulin < http://www.researchgate.net/profile/Elie\_Poulin >\* < http://www.ciencias.uchile.cl/ecologia/jml/ >http://www.iebchile.cl/

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# Waiheke NewZealand Taming the BEAST Feb5-10

ACCEPTING REGISTRATIONS for Taming the BEAST in the South Pacific

February 5th to February 10th 2017.

Application deadline: October 25th, 2016. See "Taming the BEAST in the South Pacific" https://www.compevol.auckland.ac.nz/en/events.html for registration and scholarship process details. 3 partial scholarships are available for postgraduate students.

This 5-day comprehensive summer school will focus on the BEAST2 software and is aimed at postgraduate students and early career researchers in the life sciences. Speakers and tutorial instructors are leading experts in the field and come from New Zealand, Australia and the UK. The location of the summer school is on the beautiful Waiheke Island, a short ferry ride from Auckland city centre, New Zealand.

The course combines lecture sessions, guided tutorials, and opportunities to discuss the analysis of your own data with experts. The programme is divided into daily themes which cover 1) Bayesian phylogenetics and relaxed clocks; 2) phylodynamics: macroevolution and infectious disease; 3) species tree and gene trees; 4) plylogenetic model comparison, model selection and model averaging and 5) phylogeography and trait evolution.

Taming the BEAST in the South Pacific is organised by the Centre for Computational Evolution at the University of Auckland, and follows the successful inaugural Taming the BEAST workshop in the Swiss Alps run by ETH Zurich earlier this year.

For more information, please visit our website http://www.compevol.auckland.ac.nz/ or send an email to compevol@auckland.ac.nz

"alexei@cs.auckland.ac.nz" <alexei@cs.auckland.ac.nz>

# Weggis Switzerland CoevolutionaryInteractions Jan8-13

-WHERE? Alexander & Gerbi Hotel, Weggis, Switzerland

-WHEN ? January 8th - January 13<sup>rd</sup> 2017

See -APPLICATION DEADLINE ? 17th October 2016

### -ORGANISERS

-Dr. Amandine Cornille, ETH Zurich, Switzerland (amandine.cornille@gmail.com): main organiser, contact her for any questions.

-Dr. Daniel Croll, University of Zurich, Switzerland (daniel.croll@usys.ethz.ch)

-Prof. Dr. Alex Widmer, ETH Zurich, Switzerland (alex.widmer@env.ethz.ch)

### -AIMS and OBJECTIVES

The goal of our 5-days workshop is to bring together an outstanding group of experts that develop conceptual, theoretical and experimental approaches to study the ecological genomics of coevolutionary interactions. These instructors will introduce workshop participants to modern concepts, models and methods that are widely being used or are currently being developed. The first four days of the workshop will consist of lectures and practical demonstrations given by the instructors, followed by hands-on exercises performed by the participants under guided supervision. The lectures will focus on current topics and latest developments relevant for investigating ecogenomics of coevolutionary interactions (see program: inferring co-demographic histories and testing for co-adaptation). Participants will focus on datasets provided by the instructors in the light of new developments. On the fifth day, thematic talk sessions with presentations from invited speakers and selected participants will illustrate current research on the ecological genomics of coevolution. In order to enhance discussions during the five-day workshop, we will also ask participants to present a poster of their own work on the first day to introduce themselves and their research topic.

### -PROVISIONAL PROGRAM

Day 1: Computational methods to infer co-demographic histories using genomic data, Dr. Aurelien Tellier (Center of Life and Food Sciences, Technische Universitat Munchen, Munich, Germany).

Day 2 : Computational methods to infer histories of co-divergences using genomic data, Prof. Dr. Alexei Drummond and Dr. Alexandra Gacryushkina (Department of Computer Science, University of Auckland, New Zealand).

Day 3 : Testing co-adaptation using genomic data, Prof. Dr. Eva Stukenbrock (Max Planck Institute, Plon, Germany).

Day 4: Testing co-local adaptation using genomic data, Prof. Dr. Peter Tiffin (College of Biological Sciences, University of Minessota, Falcon Heights, US)

Day 5: Oral presentations on the application of methods and theory for investigating the ecological genomics of coevolution (main invited speaker: Prof. Dr. Dieter Ebert, Zoologisches Institut, Univ. of Basel, Basel, Switzerland + selected oral presentations).

-INFO & REGISTRATION : http://www.adaptation.ethz.ch/education/gen-ecolcoevol.html -FUNDING

The workshop is co-funded by \* Center for Adaptation to a Changing Environment (ACE), ETH Zurich, Switzerland \* Swiss National Science Fundation (SNSF), Switzerland

- Post-doc Adaptation to a Changing Environment (ACE) ETH Zurich Institut f. Integrative Biologie Universitatstrasse 16 8092 Zurich Switzerland and from February 2017 Chargee de Recherche CNRS CR2 Genetique Quantitative et Evolution - Le Moulon Ferme du Moulon 91190 Gif-sur-Yvette France

Amandine Cornille <amandine.cornille@gmail.com>

# Instructions

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

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

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

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the

filters (e.g. a subject header is not correctly formated) the message will be send to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

# Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformating is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by LATEX do not try to embed LATEX or TEX in your message (or other formats) since my program will strip these from the message.