
E v o l D i r

September 1, 2018

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

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.

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



Foreword	1
Conferences	2
GradStudentPositions	11
Jobs	35
Other	72
PostDocs	82
WorkshopsCourses	136
Instructions	151
Afterword	151

Conferences

Bialowieza Natl Park Poland Woodpecker Conservation Mar16-20	2	Milner Centre UBath Evolution Sep18-21	6
Edinburgh Fisher Centennial Oct9	3	Philadelphia EPiC Sep8	7
Exeter EvoGenetics Nov22-23	3	Potsdam BioMove Sep26-28	7
Finland 3MEE Oct10-12 Registration	4	RCS Edinburgh Fisher Centennial Oct9	8
Finland ExptEvolCommunityDynamics Sep10-12 ...	4	Royal Botanic Gardens Kew Fungal Evolution Sep13-14	8
Gottingen EvolutionOfSensation Sep27-28	4	Royal Society Single Cell Evolution Dec10-11	9
Kew Gardens UK Fungal Evolution Sep13-14	4	San Diego Avian Genomics PAG Jan12-16	9
Leicester UK Insect Genomics Sep14	5	Sherbrooke RECOMB-CG Oct9-12	10
Lisbon Evolutionary Biol Oct11-12	6	St Paul MN MidWest PopGen Aug24-25	10
Marseilles 22nd Evolutionary Biology Sep25-28	6	UCambridge Evolution Apr1-4	11

Bialowieza Natl Park Poland Woodpecker Conservation Mar16-20

Białowieża. Int Woodpecker Conference. 16-20 Mar 2019

The 8th International Woodpecker Conference will be held in Białowieża National Park (BNP) from 16 to 20 March 2019. The conference will focus on the conservation and ecology of woodpeckers and will be jointly organized by Siedlce University, Museum and Institute of Zoology PAS Warsaw, Opole University, Adam Mickiewicz University Poznań, Warsaw University of Life Sciences (all Poland) and the Special Interest Group (SIG) Woodpeckers of the German Ornithological Society (DO-G). The conference aims to bring together woodpecker researchers from across the globe and to provide an international forum for discussion on how woodpecker research may improve our understanding of behavior, ecology and conservation sciences. The tentative schedule is as follows: 16 March - arrival, 17 March - talks/posters, 18 March - excursion to the BNP, talks/posters, 19 March - talks/posters, dinner. Departure or post-conference

excursions will start on 20 March. There will be four plenary talks presented by Kristina Cockle (IBIGEO-CONICET, Argentina), Jérôme Fuchs (Muséum National d'Histoire Naturelle, Paris, France), Victoria A. Saab (Rocky Mountain Research Station, U.S. Forest Service, Bozeman, USA) and Tomasz Wesolowski (Laboratory of Forest Biology, Wrocław University, Poland). Keep updated by pre-registering on the conference website (<https://www.woodpeckers2019.com/>), where further information (venue, deadlines, program, etc.) will be made available continuously. Please note that this pre-registration is not a binding registration yet, but allows us to directly inform you about the conference. For inquiries, please contact Dorota Czeszczewik (dorota.czeszczewik@uph.edu.pl), head of the local organizing committee, or Gilberto Pasinelli (gilberto.pasinelli@vogelwarte.ch), chair of the scientific committee. Looking forward to seeing you in Białowieża!

Thanks for posting,

Gilberto

PD Dr. Gilberto Pasinelli Stellvertretender Wissenschaftlicher Leiter | Deputy Scientific Director
Tel. +41 41 462 97 58 gilberto.pasinelli@vogelwarte.ch
www.vogelwarte.ch/gilberto-pasinelli.html
www.vogelwarte.ch Schweizerische Vogelwarte |

Seerose 1 | CH-6204 Sempach | Schweiz Station
ornithologique suisse | Seerose 1 | CH-6204 Sempach
| Suisse Stazione ornitologica svizzera | Seerose 1 |
CH-6204 Sempach | Svizzera Swiss Ornithological
Institute | Seerose 1 | CH-6204 Sempach | Switzerland

Willkommen im neuen Besuchszentrum in Sempach!
<http://www.vogelwarte.ch/de/besuch/> Bienvenue au nouveau centre de visite à Sempach!
<http://www.vogelwarte.ch/fr/visite/> Pasinelli Gilberto
<gilberto.pasinelli@vogelwarte.ch>

Edinburgh FisherCentennial Oct9

Meeting to celebrate the centennial of R.A. Fisher's famous 1918 paper on the theory of quantitative trait inheritance: 100 years of quantitative genetics theory and its applications: celebrating the centenary of Fisher 1918

The meeting will take place on Tuesday October 9, 2018, at the Royal College of Surgeons, Edinburgh (<https://www.rcsed.ac.uk/>). The meeting is sponsored by the Fisher Memorial Trust, the Genetics Society, the Galton Institute, the London Mathematical Society and the Royal Statistical Society. There are 8 invited speakers, with the Fisher Memorial Lecture by Michael Goddard at 5pm, followed by a reception. Lunch will be provided. In addition, 4 early career speakers and up to 30 posters will be selected from submitted abstracts by the organising committee (Kay Boulton, Brian Charlesworth, Bill Hill and Sylvia Richardson). Please note that abstracts should be submitted by Friday August 10, and registration closes on Friday September 21, or when all slots are filled.

Registration is through a website provided by the Royal Statistical Society (https://events.rss.org.uk/rss/-frontend/reg/thome.csp?pageID=71232&ef_sel_menu=1389&eventID=230).

The registration fee is 5 for students and 15 for others. A bursary of 250 will be available to the early career speakers.

CHARLESWORTH
<Brian.Charlesworth@ed.ac.uk>

Exeter EvoGenetics Nov22-23

Second announcement - abstracts due August 31st

Dear all,

On behalf of the Genetics Society of the UK we are pleased to extend a very warm invitation to the 2018 autumn meeting - Genotype to Phenotype to Fitness. The meeting will be held on 22-23 November 2018 at Reed Hall, Exeter University, UK.

Registration and abstract submission is now OPEN at <https://my.genetics.org.uk/item.php?eventid=1014>

The meeting will bring together researchers working with diverse genetic techniques across a multitude of systems, but who are nonetheless connected by a shared passion for understanding adaptive evolution. The meeting will have four themed open sessions over the two days, each session featuring 2-3 of our invited speakers together with contributed talks and posters selected from abstracts submitted. The four themed sessions are titled Genotype to Phenotype, Constraint and Conflict, Genes in Environments and Micro to Macro. We encourage everyone to interpret these themes broadly - they are intended to help identify common ground for discussion, not to limit scientific scope! In addition to the open sessions there will be an Early Career Researcher symposium offering opportunities for early career researchers to present in an especially supportive environment.

Confirmed Speakers: Matthew Webster (Uppsala), Nina Wedell (Exeter), Patrik Nosil (Sheffield), Susan Johnston (Edinburgh), Edze Westra (Exeter), Chris Jiggins (Cambridge), Anne Charmantier (Montpellier), Miltos Tsiantis (Max Planck, Cologne), Katrina McGuigan (Queensland), Walter Salzburger (Basel)

Abstract deadline: 31st August 2018

For further information: <http://www.genetics.org.uk/-events/genotype-to-phenotype-to-fitness/> Best wishes,

Alastair Wilson, Ben Longdon, Kay Boulton, Frank Hailer, Helena

Autumn Meeting Organising Committee

“Wilson, Alastair” <A.Wilson@exeter.ac.uk>

Finland 3MEE Oct10-12 Registration

Dear colleagues,

We are excited to announce that the registration to 3rd Finnish Symposium for Molecular Ecology and Evolution is now open! Please follow the link to register and submit your abstract <https://www.jyu.fi/science/en/bioenv/research/-biosciences/bioscience-conference/registration> . The registration deadline is 10th September, 2018.

This year the symposium will take place 10-12 October at the lovely campus of University of Jyväskylä, in Central Finland. Our confirmed invited speakers are Dr. Siobhan O'Brien (ETH Zurich) and Dr.

Susan Johnston (University of Edinburgh). For more information visit our website www.jyu.fi/3mee .

Looking forward to meet you in Finland! On behalf of organizing committee, Venera Tyukmaeva

Dr. Venera Tyukmaeva Dept. Biological & Environmental Science University of Jyväskylä Ambiotica, YAC424.1 Survantie 9, P.O.Box-35 Jyväskylä, FI-40014, Finland e-mail: vtjukmaeva@gmail.com or venera.v.tyukmaeva@jyu.fi

Venera Tyukmaeva <vtjukmaeva@gmail.com>

Finland ExptEvolCommunityDynamics Sep10-12

Dear colleagues,

This is just a short reminder that there is still some time to register to EECD 2018.

More information here: <https://-eeed2018.wordpress.com> Best wishes,

Teppo Hiltunen

“Hiltunen, Teppo” <teppo.hiltunen@helsinki.fi>

Gottingen EvolutionOfSensation Sep27-28

Dear colleagues and students,

Last chance to register for our 6th meeting “#Sensation @GOEEvolution 2018” about the evolution of sensation taking place in Goettingen from September 27th to 28th 2018.

The registration deadline is August 15th 2018: <http://goevol.uni-goettingen.de/index.php?id=addgroup0>
Costs to register are 10 EUR for students, 20 EUR for Postdocs and PIs. Party with Live Band included!

For more details see email below or visit our website at <http://goevol.uni-goettingen.de/index.php?id=meeting20180> Looking forward to meeting you!

The GOEvol Team

<https://goevol.uni-goettingen.de/> Twitter: @GOEEvolution

—
Nico Posnien

Georg-August-University Göttingen Johann-Friedrich-Blumenbach Institute for Zoology and Anthropology Department of Developmental Biology Ernst-Caspari-Haus (GZMB) Justus-von-Liebig-Weg 11 37077 Göttingen Germany

Phone: +49 (0) 55139 20817

E-mail: nposnie@gwdg.de

Website: <http://www.posnien-lab.net> Twitter: @PosnienLab

Nico Posnien <nico.posnien@gmail.com>

KewGardens UK FungalEvolution Sep13-14

Dear colleagues,

I'd like to remind you of two important State of the World's Fungi Symposium dates coming up:

Deadline for poster abstracts: Thursday 9 August 2018

Deadline for symposium registration: Monday 13 August 2018

Building on the success of our State of The World's Plants project, the Royal Botanic Gardens, Kew is pleased to announce the first international State of the World's Fungi Symposium. We would be extremely grateful if you could please share details of this event with relevant colleagues/networks and display copies of the attached poster in your department.

State of the World's Fungi Symposium

13-14 September 2018

Royal Botanic Gardens, Kew

The State of the World's Fungi Symposium coincides with the launch of a cutting-edge new report highlighting our current state of knowledge and the major issues affecting fungal diversity and abundance. Also featured are fungal-plant interactions, conservation and uses of fungi, and the fungal tree of life.

The two-day symposium brings together plant and fungal scientists, ecologists, conservationists and industry and policy experts from around the world, to discuss issues raised in the report.

The event is based around seven topical questions, with each session comprising talks from invited experts followed by a panel Q&A to discuss the emerging issues:

1. Conservation of fungi: what, why, where and how?
2. Does all plant life depend on fungi?
3. And have you forgotten the lichens?
4. Do fungi provide a greater ecosystem service or disservice?
5. Fungal networking 'who benefits?'
6. Panning for gold in the mould: where do we find commercial value in fungi?
7. Exploring the dark taxa: when does a molecular signature become a species?

View the programme

Call for abstracts

We are inviting abstract submissions from delegates wishing to present a poster accompanied by a one-minute oral presentation. Prizes will be awarded for the best student and early career researcher posters.

We welcome abstract submissions from mycologists, plant scientists, ecologists, conservationists, policy specialists, industry professionals and others 'on any of the following subjects:

- * Conservation of fungi
- * Useful fungi
- * Newly discovered fungi
- * Climate change and impact on fungal communities
- * Fungal pathogens
- * Positive fungal-plant interactions
- * Fungal genomes
- * China (country focus)
- * Fungal tree of life
- * Definition and diversity
- * Lichens

* Ecosystem services * Dark taxa * Policy

Deadline for abstracts: Thursday 9 August 2018

Registration

Symposium ticket: 160 + VAT (192 including VAT) 'available until 13 August

The registration fee includes attendance, lunch and refreshments on both days, and a drinks reception during the poster session on 13 September.

For more information, to submit an abstract or to register for the meeting, please visit: www.kew.org/fungi-symposium. If you no longer wish to hear from us about our State of the World's Fungi and State of the World's Plants projects, please email sotwf@kew.org stating 'please unsubscribe' in the subject line.

Please take some time to read our privacy policy which explains what data we collect and why, how we use it and other information relevant to the privacy of your data.'

Very best wishes,

Alastair Lamb

Project Manager

Royal Botanic Gardens, Kew

Richmond, Surrey, TW9 3AE, UK

sotwf@kew.org

www.kew.org/fungi-symposium

Alastair Lamb

<A.Lamb@kew.org>

Leicester UK InsectGenomics Sep14

ABSTRACT DEADLINE THIS WEEK! Friday August 31st.

See below information.

Dear All,

We are excited to announce the next Royal Entomological Society Genomics Special Interest Group meeting! This is a one day meeting to be held in Leicester, UK on 14th September 2018.

The aim of this meeting is to bring together researchers working on any aspect of insect genomics. The day will consist of a series of contributed talks and a keynote lecture by Dr. Yannick Wurm from Queen Mary University of London. There will also be a poster session

and subsequent wine reception. Additionally this year we have very generous prizes for best student talk and poster provided by the NERC CENTA doctoral training partnership, as such we particularly encourage students of all stages to submit an abstract.

You can register at:

<https://www.royensoc.co.uk/meeting/insect-genomics>

Registration costs just 15 pounds for the day and is reduced further for members of the Royal Entomological Society.

Please send abstracts to:

resgenomics2018@gmail.com

(250 word limit, indicate talk/poster preference)

Abstract deadline: 5pm on Friday August 31st.

Follow #EntoGenomics2018 on Twitter for regular updates and news.

Best Wishes,

Hollie Marshall and Katherine Beadle

(2018 Organising Committee)

Hollie Marshall (159031793) Postgraduate Researcher and Study Group Biology Tutor Department of Genetics and Genome Biology University of Leicester Tel: +44 (0)7527719009 Alt Email: hm257@le.ac.uk Twitter: @MooHoll

Hollie Marshall <hollie_marshall@hotmail.co.uk>

Lisbon Evolutionary Biol Oct11-12

Dear all,

We are pleased to announce that the 14th edition of the Portuguese Evolutionary Biology meeting (ENBE) will take place on the 11th (afternoon) and 12th (all day) of October of 2018 at Museu de Historia Natural e da Ciênciã in Lisbon.

This year's invited speakers are Dr. Ester Serrao from the University of Algarve and Dr. Yannis Michalakis from the CNRS (Montpellier, France).

Abstract submission closes on the 5th of September and registration closes on the 10th of September.

All information can be found at: <https://xivenbe2018.weboeste.pt> Best regards,

The Organizing Committee

Maud Charlery de la Masselière

Inês Fragata

Ana Sofia Rodrigues

Leonor R Rodrigues

Sofia Seabra

Pedro Simões

Flore Zele

XIV ENBE <xivenbe@gmail.com>

Marseilles 22nd Evolutionary Biology Sep25-28

Dear All

The program of the 22nd evolutionary biology meeting at Marseilles (September 25-28 2018) is on line (see aeb.fr)

we have still few spots for poster presentations

best regards

Pierre

Pierre Pontarotti DR CNRS

1 Aix Marseille Univ, IRD, APHM, Microbe , Evolution, PHylogénie, Infection IHU Méditerranée Infection, Marseille France Evolutionary Biology team. 2 CNRS tel 33 (0) 4 13 7 32425 <http://aeb.fr/?page.id=1013> we are organizing the 22nd evolutionary biology meeting at Marseilles September 25-28 2018 aeb.fr

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

MilnerCentre UBath Evolution Sep18-21

Only a few days left to register (closes 28th August)

The Milner Centre for Evolution at the University of Bath, UK is delighted to announce the details of its inaugural conference, "Evolution in the 21st Century".

To mark the opening of a new centre for evolution, the inaugural conference of the Milner Centre provides a fo-

rum to consider the current state of evolutionary science and where the field is going. Speakers will address the future challenges facing the field and explore the cutting edge and future challenges within diverse subfields: from paleobiology to evolutionary genomics, from evolutionary theory to evolution applied to medicine. At the end of the conference there will be a round table discussion, chaired by evolutionary science writer and New York Times correspondent, Carl Zimmer. On the panel will be three Presidents of Evolutionary/Genetical Societies, the chief editor of Nature Ecology and Evolution and the Dean of Sciences at NYU. The winner of the 2018 Milner Prize will present her award lecture.

Details and registration here:

<http://www.milnercentre.org/> The conference runs from Tuesday 18th-Thursday 20th September 2018, although people might like to stay on for the official opening on 21st and public lecture that evening.

Keynote speakers are Neil Shubin, Peter and Roemary Grant, Hanna Kokko and Gil McVean. The public lecture will be delivered by Alice Roberts. Additional speakers include Phil Donoghue, Martin Lercher, Inigo Martinocera, Jason Wolf, Selene Valverde, Tracy Chapman, Toby Warnecke and Danny Wilson.

The Milner Prize lecture is sponsored by The Genetics Society, the poster Prize is sponsored by The Biochemical Society and the reception is sponsored by Public Library of Science.

For further enquiries please contact Laurence Hurst (l.d.hurst@bath.c.uk) or Katie Ward (klw62@bath.ac.uk)

“Laurence D. Hurst” <laurence@ldhurst.plus.com>

Philadelphia EPiC Sep8

Oral and poster abstract submissions and FREE registration for the Evolution in Philadelphia Conference (2018) will close on *August 8th at midnight*. EPiC 2018 will be hosted at the Academy of Natural Sciences on Saturday, September 8th from 9:00 am - 5:30 pm and will feature student awards, ASN (American Society of Naturalists) and GSA (Genetics Society of America) plenary speakers, and dozens of amazing evolution talks and posters. We are also excited to announce our closing plenary speaker will be Dr. Paul Turner from Yale University.

For more conference details, and to register for EPiC 2018, go to: <https://philadelphiaevolut.wixsite.com/epic> If you have any questions, please contact the EPiC organizing committee at PhiladelphiaEvolution-Group@gmail.com. After August 8, paid registration slots will be available on a first-come-first-serve basis, until August 28th.

EPiC 2018 Organizing Committee
meghan.barrett21@gmail.com

Potsdam BioMove Sep26-28

Dear colleagues, this is one last reminder that the registration for our BioMove Symposium 2018, held from 26th to 28th September in Potsdam / Germany, is closing in one week. You can register for one of the last slots at <https://biomove2018.org/registration/> We are looking forward to meeting you soon!

All the best, The BioMove Symposium Team
biomove2018 <biomove2018@uni-potsdam.de>

RCS Edinburgh Fisher Centennial Oct9

Meeting to celebrate the centennial of R.A. Fisher's famous 1918 paper on the theory of quantitative trait inheritance:

100 years of quantitative genetics theory and its applications: celebrating the centenary of Fisher 1918

The meeting will take place on Tuesday October 9, 2018, at the Royal College of Surgeons, Edinburgh (<https://www.rcsed.ac.uk/>). There will be 8 invited speakers, with the Fisher Memorial Lecture at 5pm, followed by a reception.

In addition, 4 early career speakers and up to 30 posters will be selected from submitted abstracts by the organising committee.

Registration is through a website provided by the Royal Statistical Society (https://events.rss.org.uk/rss/frontend/reg/-thome.csp?pageIDq232&ef_sel_menu89&eventID#0).

THE REGISTRATION DEADLINE FOR ABSTRACTS FOR TALKS AND POSTERS HAS BEEN EXTENDED TO AUGUST 24.

CHARLESWORTH
<Brian.Charlesworth@ed.ac.uk>

Brian

Royal Botanic Gardens Kew Fungal Evolution Sep13-14

Building on the success of our State of The World's Plants project, the Royal Botanic Gardens, Kew is pleased to announce the first international State of the World's Fungi Symposium. We would be extremely grateful if you could please share details of this event with relevant colleagues/networks and display copies of the attached poster in your department. State of the World's Fungi Symposium 13-14 September 2018 Royal Botanic Gardens, Kew

The State of the World's Fungi Symposium coincides with the launch of a cutting-edge new report highlighting

our current state of knowledge and the major issues affecting fungal diversity and abundance. Also featured are fungal-plant interactions, conservation and uses of fungi, and the fungal tree of life. The two-day symposium brings together plant and fungal scientists, ecologists, conservationists and industry and policy experts from around the world, to discuss issues raised in the report. The event is based around seven topical questions, with each session comprising talks from invited experts followed by a panel Q&A to discuss the emerging issues:

Conservation of fungi: what, why, where and how?

Does all plant life depend on fungi?

And have you forgotten the lichens?

Do fungi provide a greater ecosystem service or disservice?

Fungal networking - who benefits?

Panning for gold in the mould: where do we find commercial value in fungi?

Exploring the dark taxa: when does a molecular signature become a species?

View the programme Call for abstracts We are inviting abstract submissions from delegates wishing to present a poster accompanied by a one-minute oral presentation. Prizes will be awarded for the best student and early career researcher posters. We welcome abstract submissions from mycologists, plant scientists, ecologists, conservationists, policy specialists, industry professionals and others - on any of the following subjects:

Conservation of fungi

Useful fungi

Newly discovered fungi

Climate change and impact on fungal communities

Fungal pathogens

Positive fungal-plant interactions

Fungal genomes

China (country focus)

Fungal tree of life

Definition and diversity

Lichens

Ecosystem services

Dark taxa

Policy

Deadline for abstracts: Thursday 9 August 2018

Registration Symposium ticket: £160 + VAT

(£192 including VAT) - available until Monday 13 August 2018 The registration fee includes attendance, lunch and refreshments on both days, and a drinks reception during the poster session on 13 September.

For more information, to submit an abstract or to register for the meeting, please visit: www.kew.org/fungi-symposium

Please take some time to read our privacy policy which explains what data we collect and why, how we use it and other information relevant to the privacy of your data.â€

Many thanks and very best wishes, Isabel

Isabel Carty Intern 077125 40420 i.carty@kew.org

Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS

The Royal Botanic Gardens, Kew is a non-departmental public body with exempt charitable status, whose principal place of business is at Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom.

The information contained in this email and any attachments is intended solely for the addressee(s) and may contain confidential or legally privileged information. If you have received this message in error, please return it immediately and permanently delete it. Do not use, copy or disclose the information contained in this email or in any attachment.

Any views expressed in this email do not necessarily reflect the opinions of RBG Kew.

Any files attached to this email have been inspected with virus detection software by RBG Kew before transmission, however you should carry out your own virus checks before opening any attachments. RBG Kew accepts no liability for any loss or damage which may be caused by software viruses.

Isabel Carty <I.Carty@kew.org>

RoyalSociety SingleCellEvolution Dec10-11

I'm organising a 2 day meeting here at the Royal Society on 10-11 December 2018, entitled Single cell ecology.

This will be an exciting meeting that explores the use of single cell technologies to understand the function, diversity and interactions of microbes. The meeting will draw on expertise from physicists who manipulate cells,

geochemists, molecular biologists, evolutionary biologists, genome biologists and microbial ecologists. The meeting aims to discuss how different approaches and datasets can be combined to make new and powerful observations about natural microbial ecosystems. More information including the draft programme can be found on the meeting website here: <https://royalsociety.org/science-events-and-lectures/2018/12/single-cell/>

Registration is free, and participants can opt to pay for catering during the registration process.

I think this meeting will be of great interest to researchers in the evodir community. I would be grateful if you could add this event to your notice and highlight this event to your contacts in any upcoming newsletters.

“Ho, Anh” <Anh.Ho@royalsociety.org>

SanDiego AvianGenomicsPAG Jan12-16

Dear colleagues,

There will be an “Avian Genomics” workshop at the international PAG conference in January in San Diego <http://www.intlpag.org/>. I will host it for the 4th time: “Avian Genomics - Gone Wild!”. PAG 2019 will be from Jan 12th to Jan 16th.

“PAG brings together over 3,000 leading genetic scientists and researchers in plant and animal research, and over 130 exhibits, 150 workshops, 1100— posters and over 1800 abstracts.”

To get an overview of the last “Avian Genomics - Gone Wild!” session of 2018 here is the link:

<https://pag.confex.com/pag/xxvi/meetingapp.cgi/Session/4741> 1st and 2nd editions were in:

2016 - <https://pag.confex.com/pag/xxiv/meetingapp.cgi/Session/3531> 2017 - <https://pag.confex.com/pag/xxv/meetingapp.cgi/Session/4169>

If your work falls within the area of avian genomics, especially of birds in the wild, please send your abstract (200-300 words, no special format) to me by October 15th. Do not hesitate to ask any questions.

Best wishes, Robert

rkraus@orn.mpg.de

Robert Kraus <rkraus@orn.mpg.de>

Sherbrooke RECOMB-CG Oct9-12

RECOMB-CG 2018, CALL FOR POSTERS AND PARTICIPATION

16th RECOMB Satellite Conference on Comparative Genomics, RECOMB-CG 2018

Magog-Orford (Sherbrooke), Quebec, Canada - October 9-12, 2018

<https://recombcg2018.usherbrooke.ca/> SCOPE

The annual RECOMB Comparative Genomics Satellite Conference (RECOMB-CG) brings together leading researchers in the mathematical, computational and life sciences to discuss cutting edge research in comparative genomics, with an emphasis on computational approaches and the analysis of novel experimental results. The program of the conference will include six invited keynote speakers, 18 contributed talks and two poster sessions.

CONFIRMED KEYNOTE SPEAKERS

- Belinda Chang (Department of Ecology and Evolutionary Biology, University of Toronto, Canada) - Dannie Durand (Department of Biological Sciences, Carnegie Mellon University, USA) - Daniel Durocher (The Lunenfeld-Tanenbaum Research Institute, Mount Sinai Hospital, University of Toronto, Canada) - Christian Landry (Institute for Integrative Systems Biology, Laval University, Canada) - Gwenaël Piganeau (Banyuls Oceanographic Observatory and National Centre for Scientific Research, France) - Xavier Roucou (Department of Biochemistry, University of Sherbrooke, Canada)

CALL FOR POSTERS

We solicit high-quality poster abstracts on novel computational or experimental results that fall within the general scope of the conference.

Submissions must be sent to: recombcg2018@easychair.org

- Abstract Submission Deadline: August 24, 2018 - Author Notification: September 3, 2018

The topics include (but are not restricted to):

- genome evolution - population genomics - genome rearrangements - genome variation, diversity and dynamics - phylogenomics - comparative tools for genome assembly - comparison of functional networks - gene identification and/or annotation - cancer evolutionary genomics -

comparative epigenomics - paleogenomics - epidemiology

Submitted abstracts must be within 2 pages including references and figures, in PDF format according to the LNBI guidelines.

<http://www.springer.com/us/computer-science/lncs/-conference-proceedings-guidelines/> The abstract of each accepted poster will be included into the Conference Program booklet. The poster sessions are scheduled to the afternoons of Wednesday October 10 and Thursday October 11, but posters will be on display for the entire duration of the conference. The poster board dimensions are 100cm (39.3") width x 100cm (39.3") height. At least one author of each accepted poster will be expected to attend the conference and present the poster.

CALL FOR PARTICIPATION

We invite all members of the computational and applied comparative genomics communities to participate in RECOMB-CG 2018. Information about registration to the conference and all other organizational matters can be found on the conference web page.

- Early registration Deadline: Friday September 7, 2018.

CONTACT

<https://recombcg2018.usherbrooke.ca>

blanchem@cs.mcgill.ca aida.ouangraoua@usherbrooke.ca

Aida Ouangraoua <Aida.Ouangraoua@USherbrooke.ca>

StPaul MN MidWestPopGen Aug24-25

REMINDER Midwest Population Genetics Meeting 2018 Aug 24th-25th at the University of Minnesota Register for free by aug 10 <https://docs.google.com/forms/d/1aRmrzw3cyjKAVWrQyATUPXxbQZyPo7PVZZNmRaakMD8>

The field of population genetics has a remarkable tradition of being a tight-knit and nurturing community. In order to continue to foster that sense of community for popgen groups in the Midwest, we are organizing the fifth annual Midwest PopGen conference. The meeting will begin Friday at noon and continue to Saturday evening with a BBQ on Friday evening, and an opportunity to check out the state fair on Saturday night!

Information and a tentative Schedule is available

here: <https://mwpg2018.wordpress.com/> Registration is free, but please register by AUG 10 and posters are still accepted <https://docs.google.com/forms/d/1aRmrzw3cjkAVWrQyATUPXxbQZyPo7PVZZNmRaakMEds>

Additional notes 'V The meeting overlaps with the state fair. This should be very fun (and was part of the reason that we chose this date) but adds a degree of difficulty to meeting logistics. Look for a place to stay soon (we are soliciting twin cities folks interested to put people up), and plan on taking public transport. 'V The meeting follows a symposium on machine learning on august 23rd (in the same location) with speakers including Casey Greene, Katie Polard, and Dan Schrider. Come early for the fun! We also have one open speaker slot for that meeting so contact Yaniv if you would like to present at that meeting. We hope to pair people up with a place to stay, so locals should let us know how many people they can host, and out-of-towners should let us know if they are looking for a place.

Additional info / details / schedule etc available on <https://mwpg2018.wordpress.com/> yaniv

Yaniv Brandvain <ybrandva@umn.edu>

UCambridge Evolution Apr1-4

Conference announcement:

Evolution Evolving: Process, Mechanism and Theory
Churchill College, University of Cambridge, UK 1-4
April 2019

Evolutionary biology is a vibrant field with a theoretical

framework that itself evolves. The Evolution Evolving conference will focus on some emerging themes in the relationship between development and evolution. Topics include the evolutionary causes and consequences of developmental bias, plasticity, niche construction and extra-genetic inheritance - all of which contribute to an understanding of evolvability. The conference will feature a balanced program of talks and poster sessions spanning three days, and be a mix of empirical and theoretical work, as well as contributions to the history and philosophy of evolutionary biology.

Invited speakers < <https://evolutionevolving.org/-program/> > include Alex Badyaev, Renee Duckworth, Laurel Fogarty, Jukka Jernvall, Alan C Love, Joanna Masel, Armin Moczek, Angela Potochnik, Sean Rice and Jessica Riskin.

Abstract submission < <https://evolutionevolving.org/-abstracts/> > closes 1 December 2018 Early bird registration < <https://evolutionevolving.org/registration/> > closes 4 January 2019

Conference website: <https://evolutionevolving.org/> Conference twitter: @EvoEvolving < <https://twitter.com/-EvoEvolving?lang=en-gb> >

Dr Katrina Falkenberg Science Communication and Outreach Officer

University of St Andrews School of Biology Harold Mitchell Building St Andrews Fife, UK, KY16 9TH Ph: 01334 463377 E: kjf5@st-andrews.ac.uk T: @EES_update F: EES Update EES: extendedevolutionarysynthesis.com Conference: evolutionevolving.org Laland Lab: lalandlab.st-andrews.ac.uk

The University of St Andrews is a charity registered in Scotland : No SC013532

Katrina Falkenberg <kjf5@st-andrews.ac.uk>

AustralianNatIU BirdEvolutionaryEcol	12	UAlabama 2 MusselBiodiversity	24
DTU Denmark MicrobialEvolution	13	UCentralFlorida PlantEvolution	25
GeorgeWashingtonU Evolution	13	UCL Belgium GlobalChangeBiodiversity	26
HarvardU MaxPlanckJena HumanHistory	14	UGraz Austria 3 EvolutionaryBiology	26
HongKong MarineAcclimationtoClimateChange ...	15	UGuelph Iceland EvolEcolGeneticFish	27
Jena GenomicsHybridization SpeciationColoration .	15	UIceland EvolGenomicsHighlyFecundGadids	28
JYU Finland EvolutionaryModelling	16	ULausanne InsectComputationalEvolBiol	29
Karlsruhe MelanesianBiogeography	17	UMaryland EvolPollinationInteractions	29
Liverpool AncientDNA	17	UMontreal EvolBiol Bioinformatics	30
MasseyU ConservationGenetics	18	UOldenburg PlantFungiEvolution	31
Munster AntEvolutionaryGenomics	19	UOtago FishEpigenetics	31
MurrayStateU EvolutionAnimalCommunication ...	20	USunshineCoast EvolutionBiomechanics	32
OregonStateU EvolutionOfMateChoice	20	UVermont EvolGenomicsPhysiology	33
PortlandStateU MitonuclearEvolution	21	Vienna FrogSexualSelection	33
StockholmU ButterflyEvolution	22	WashingtonStateU PlantMicrobe EcoEvo	34
StockholmU ButterflyGeneDuplications	23		

AustralianNatIU BirdEvolutionaryEcol

We are seeking applications from highly-motivated candidates for a PhD at the Australian National University's Division of Evolution and Ecology, in the Research School of Biology, supervised by Prof. Loeske Kruuk, Prof. Andrew Cockburn and Dr Kara Youngentob.

Project: Testing environmental causes of population decline in an Australian song-bird. Many wild animal populations have recently declined in numbers, but determining the exact causes of these declines and the mechanisms by which environmental change affects individual fitness is difficult. The aim of this project is to test the extent to which fine-scale biotic and abiotic environmental variation can explain a decline in a population of a common, cooperatively-breeding wild bird in south-east Australia. Our detailed long-term study of superb fairy-wrens (*Malurus cyaneus*) has revealed a dramatic ~50% decline in population size over the past three decades. The project will combine the extensive life-history data on the bird population with long-term remote sensing data, terrestrial laser-sensing measures (LiDAR) and ground surveys to assess the contribution of spatial and temporal variation in vegetation structure to population dynamics. It will aim to test the interactive effects of a changing climate and ecological conditions on bird population life-history, including a marked decline in the extent of cooperative breeding. There is also the potential to use new high-density genomic data to assess changes in spatial genetic structure

over time, or to extend the project in other directions particularly suited to the interests of the student.

Eligibility: Applicants should have an Honours degree or MSc in a related discipline, relevant research experience, strong interests in animal ecology or evolution, and good quantitative skills. The project will involve a combination of analysis of long-term superb fairy-wren and remote-sensing data with fieldwork at the study site of the Australian National Botanic Gardens. Experience of remote sensing data and GIS techniques would be a strong advantage but is not a prerequisite.

Funding: Scholarships are available from the Australian National University at a rate of \$27,082 per annum tax-free for up to 3.5 years. The project would start in early 2019.

Applications: If interested, please first contact Loeske.kruuk@anu.edu.au directly. Please send a single pdf file which includes your CV (including your nationality), a brief outline of your past research experience and reasons for applying for this studentship (max. 600 words), and contact details of two academic referees. Candidates will need to apply to the ANU's Research School of Biology programme for PhD stipend and scholarship.

Deadlines for full applications to ANU (see links below) are 31 August 2018 for international students and 31 Oct 2018 for Australian students.

Further details about the funding are available here:
 International students <http://www.anu.edu.au/-students/scholarships/research-school-of-biology-international-phd-scholarship>
<http://www.anu.edu.au/-students/scholarships/australian-government-research-training-program-agrtp-international-fee-offset>
 Australian students : <http://www.anu.edu.au/->

[students/scholarships/australian-government-research-training-program-agrtp-stipend-scholarship](#) Professor Loeske Kruuk Division of Ecology & Evolution Research School of Biology The Australian National University Canberra, ACT 2601 Australia Loeske.Kruuk@anu.edu.au www.biology.anu.edu.au/~Loeske_Kruuk loeske.kruuk@anu.edu.au

DTU Denmark MicrobialEvolution

PhD scholarship in “Microbial Ecology and Evolution” at the Center for Microbial Secondary Metabolites, CeMiSt, Denmark

We offer a PhD fellowship at Department of Biotechnology and Biomedicine (DTU Bioengineering) at the Technical University of Denmark. The PhD project is part of the Center for Microbial Secondary Metabolites, CeMiSt and will be executed at the Bacterial Interactions and Evolution group in the Section for Microbial and Chemical Ecology.

CeMiSt is one of 10 new Centers of Excellence funded by the Danish National Research Foundation. The Center started 1st of January 2018 and will run for six years with an option for a four-year extension. The Center is based at the Technical University of Denmark and hosted by Department of Biotechnology and Biomedicine (DTU Bioengineering). The purpose of CeMiSt is to unravel the biological role of microbial secondary metabolites in natural microbiological communities. The Center is led by Professor Lone Gram.

We are seeking a candidate to study the secondary metabolites of Bacilli using molecular and population biology tools in the research field of microbial ecology and evolution. You will be involved in a fun PhD project on microbial natural products, with strong international connections, productive scientific environment, and work-life balance.

Responsibilities and tasks Your PhD project will contribute to our understanding of the role of secondary metabolites on microbial interactions and evolution including bacterial biofilms. You will explore the impact of secondary metabolites on microbial community assembly in the soil and use among others transposon sequencing to understand the function of natural products on bacterial physiology and development.

Your experience within the following areas of microbiology will be an advantage - microbial secondary

metabolites - microbial ecology and evolution, population biology - molecular bacteriology - Transposon sequencing - fluorescence microscopy Expected starting date: January 2019.

Further information Further information may be obtained from Professor Ákos T. Kovács, tel.: +45 4525 2527, atkovacs@dtu.dk.

Please do not send applications to this e-mail address; follow the electronic application and submission procedure. Please provide contact details for two referees in your motivation letter.

Application Please submit your online application no later than 8th September 2018 (Local time). 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), including contact details for 2 referees - Curriculum vitae - grade transcripts and BSc/MSc diploma - excel sheet with translation of grades to the Danish grading system (see application site)

Apply online at <http://www.dtu.dk/english/About/-JOB-and-CAREER/vacant-positions//job?id=1dfcf756-4841-4f4e-9a47-78d6c67002d5> “Ákos T. Kovács” <atkovacs@dtu.dk>

GeorgeWashingtonU Evolution

The lab of Dr. Mollie Manier at the George Washington University is conducting a search for motivated candidates for master’s or PhD dissertation research in a number of areas related to reproduction, evolution, genetics, and cell biology. Potential projects are many and varied, but several research avenues are ongoing. These include understanding male-female coevolution of traits under postcopulatory sexual selection, mapping the genetic basis of giant sperm and sperm storage organs in *Drosophila*, metabolomics within the female sperm storage organs, transgenerational effects of alcohol, and the role of the gut microbiome on learning. We are also interested in genetic and cellular mechanisms of spermatogenesis, genomics and transcriptomics, gene x environment effects on fitness-related traits, and structure-function relationships in morphologically variable reproductive traits. Tools commonly used include QTL mapping, gene knockdown, transcriptomics, bioin-

formatics, behavioral assays, comparative phylogenetic approaches, transgenics, microscopy, and R.

Dr. Manier is available to mentor promising candidates through developing an NSF GRFP proposal (deadline Oct. 22). Applicants for this NSF funding opportunity must be US citizens or permanent residents, but anyone can apply to the lab. University funding for graduate students is available through teaching assistantships and departmental fellowships. Please contact Dr. Manier at manier@gwu.edu for more details.

For more information on Dr. Manier and our research, see <https://manierlab.com> You can also find her on twitter (@maniermk) and Facebook (<https://www.facebook.com/groups/901636606540302/?ref=bookmarks>). If interested, please send CV, summary of research interests and experience (if applicable), and contact information for 3 references to manier@gwu.edu.

Dr. Mollie K. Manier Assistant Professor The George Washington University Dept. of Biological Sciences Office: SEH 6680 800 22nd St. NW, Suite 6000 Washington, D.C. 20052 USA (202) 994-0126 <http://manierlab.com> @maniermk

Mollie Manier <maniermk@gmail.com>

HarvardU MaxPlanckJena HumanHistory

SEEKING STUDENTS INTERESTED IN GRADUATE STUDY IN THE SCIENCE OF THE HUMAN PAST: AT HARVARD UNIVERSITY AND IN JENA, GERMANY

The Max Planck-Harvard Research Center for the Archaeoscience of the Ancient Mediterranean (MHAAM) < <https://www.archaeoscience.org/> >, a collaboration between The Initiative for the Science of the Human Past at Harvard (SoHP) < <https://sohp.fas.harvard.edu/> > and the Max Planck Institute for the Science of Human History in Jena, Germany (MPISHH) < <https://www.shh.mpg.de/en> >, announces an opportunity for recent and graduating seniors and Master's students to participate in a Young Investigator Symposium scheduled at Harvard University on Friday, November 2nd, 2018. Students will have an opportunity to present cross-disciplinary research which utilizes modern scientific tools and knowledge to illuminate the history of humanity, and to network with other students and

faculty members similarly engaged. An interest in the Ancient Mediterranean is desirable but not indispensable.

For students coming from outside the Boston/Cambridge area for the November 2nd Symposium, a limited number of awards of up to \$500 to defray lodging and travel costs are available. Students interested in applying for the Symposium should arrange to send a letter of application, along with an abstract of research to be presented, a CV, an academic transcript, and a letter of recommendation, to be submitted by October 18th at the latest to sohpchair@fas.harvard.edu

MHAAM is also offering a new PhD Fellowship opportunity for the 2019-2020 academic year and beyond. This 5-year fully-funded PhD fellowship for study and research on the science of the human past is an opportunity for interdisciplinary study at Harvard and in Jena, Germany. An interest in the Ancient Mediterranean and in ancient DNA is useful but not required. PhD degrees will be awarded through Harvard University, notably in the following departments:

* The Archaeology Program within the Anthropology Department (Deadline: December 15, 2018) * History (Deadline: December 15, 2018) * Human Evolutionary Biology (Deadline: December 1, 2018) * Organismic and Evolutionary Biology (Deadline: December 1, 2018) * Additional Departments Forthcoming

Candidates for the Fellowship will apply for admission to one of these Harvard University PhD Programs to be considered eligible for this full funding opportunity through the Max Planck-Harvard collaboration. Applicants must specify their interest in the MHAAM Fellowship Program within the application, and must additionally send a copy of the application to sohpchair@fas.harvard.edu, or via mail to:

Lisa Ransom Lubarr

Harvard University

Robinson Hall M-03

35 Quincy Street

Cambridge, MA 02138

Further information on MHAAM (including highlights on current fellowship recipients, and interdisciplinary research) can be found at: archaeoscience.org < <https://www.archaeoscience.org/> >, and inquiries can be sent to: sohpchair@fas.harvard.edu

With many thanks for your kind support!

Lisa

Lisa Ransom Lubarr Coordinator Max Planck-Harvard Research Center for the Archaeoscience of the Ancient Mediterranean <https://archaeoscience.org/> Initiative for the Science of the Human Past at Harvard <https://sohp.fas.harvard.edu/> Harvard University Robinson Hall M-03 35 Quincy Street Cambridge, MA 02138 617-496-3905 llubarr@fas.harvard.edu

“Lubarr, Lisa R.” <llubarr@fas.harvard.edu>

HongKong MarineAcclimationtoClimateChange

Acclimation and Adaptation to Climate Change in Marine Organisms

Applications are invited for a funded Ph.D. position in Molecular Ecology in the School of Biological Sciences at the University of Hong Kong (<https://www.hku.hk/>), to commence any time after October 2018. The University is a long-standing English-speaking institution and counts as one of the top Universities in Asia.

We are looking for curious, ambitious and enthusiastic Ph.D. student to be part of establishing a new lab under Dr. Celia Schunter to work on marine acclimation to climate change. Research topics reach from molecular, neuronal and behavioural impacts of climate change to parental effects and transgenerational acclimation in fishes and other marine organisms. The lab is associated with the Swire Institute of Marine Science also known as SWIMS (<http://www.swims.hku.hk/>), a beautiful research station in a remote area of the Island of Hong Kong.

The lab combines several disciplines from marine biology, behavior/physiology, molecular biology and computational biology. Prospective students should be interested in working in a cross-disciplinary lab. Generally, projects start with field work or aquarium experiments, with measurements of e.g. behavior or other physiological traits, followed by molecular lab work to extract molecules of interest (e.g. RNA or proteins). Most projects are then based on next-generation sequencing and the subsequent bioinformatic analyses and writeup into scientific articles. The lab has long-standing international collaborations and travel might be required.

Applicants need to be eligible to start a Ph.D. position. Please find the guidelines here: <https://www.gradsch.hku.hk/gradsch/prospective-students/why-choose-hku>

Additional requirements:

- Willingness to work in a highly international and collaborative environment - If no previous experience, the student must be eager to learn bioinformatics/ computational skills
- Willingness to work in aquarium systems and/or field work in the marine environment.

A Postgraduate Scholarship (PGS) will be offered, in addition to annual leave and medical benefits (<https://www.gradsch.hku.hk/gradsch/prospective-students/scholarship-funding-and-fees#3>). Applicants who have a good Bachelor's degree with honours and/or a taught Master's degree will be considered for admission to a 4-year Ph.D. programme, whereas those who already hold a research Master's degree (e.g. MPhil) will only be considered for admission to a 3-year Ph.D. programme. Coursework requirements can be found here: <https://www.gradsch.hku.hk/gradsch/current-students/courses-workshops-dialogues-career-preparation/coursework-enrolment> Interested candidates should send their CV, a cover letter summarizing research interests, career goals and contact information for three references to Dr. Celia Schunter (celiaschunter@gmail.com). Review of applications will begin immediately and continue until the position is filled. The start date is flexible.

Celia Schunter <celiaschunter@gmail.com>

Jena GenomicsHybridization SpeciationColoration

****PhD position on Genomics of Hybridization, Speciation, and Plumage Coloration****

A PhD position on the genomics of hybridization, speciation, and plumage color evolution in a color-polymorphic songbird radiation is available in Reto Burri's lab in the Population Ecology Group at Friedrich-Schiller-University Jena, Germany (<https://www.popecol.uni-jena.de/burri.html>). The position is funded by the German Research Foundation (DFG) for 3 years, and offers a salary according to German remuneration level 13 (65%). The position is available from January 1st 2019 or according to agreement.

We are looking for a highly motivated PhD student with a background in population genomics and/or bioinformatics, who is eager to work on questions related to

hybridization, speciation, and phenotypic adaptation.

The project will make use of replicated hybrid zones in a versatile system of pervasively hybridizing, color-polymorphic songbirds and of phenotypes replicated across the genus' phylogeny to infer genomic regions involved in reproductive isolation and in the parallel evolution of color phenotypes. The successful candidate will apply population genomic and phylogenomic approaches to analyze whole-genome re-sequencing data from several hundred birds, backed up with a high-quality reference genome. Furthermore, she/he will be involved in fieldwork in destinations including southern Europe, the Balkans, the Caucasus, and the Middle East.

We offer an interesting job in a young, dynamic, and supportive research group and department, with close interactions both within the group as well as internationally. You will work with cutting-edge genomic resources and data, and have rich opportunities to get proficient with bioinformatics, and population genomic and phylogenomic analyses of large-scale genomic data. You will be involved in all major steps of the research project, from fieldwork in fantastic locations, over data preparation and analysis, to writing publications.

Your profile: - You hold an MSc degree or equivalent in evolutionary biology, bioinformatics or related fields before starting the position. - You have a background in population genetic and phylogenetic analysis, ideally of genome-scale data. - You have experience with bioinformatics and scripting, ideally in relation to genome analyses. - You collaborate well with local and international team members. - You are proficient in English, both spoken and written - Experience with bird identification, and especially catching and handling birds is a plus. - Experience in the wet lab (especially with the isolation of high-molecular weight DNA) is a plus.

The lab is located in Jena, a lively student city of about 100'000 inhabitants in the heart of beautiful Thuringia. FSU Jena is one of the oldest universities in Germany. Several external research institutes (including three Max Planck Institutes) illustrate the strength of the scientific environment and possibilities for collaboration. Our research group is also part of the Integrative Center for Biodiversity Research (iDiv) Halle-Jena-Leipzig, a worldwide leading consortium in biodiversity research.

Please send your application, including (i) a letter of motivation highlighting your research interests and how you meet the required qualifications, (ii) your CV, and (iii) contact information (e-mail and telephone number) for two to three references, all merged in a single PDF document to Reto Burri (reto.burri@uni-jena.de). The evaluation of applications starts on October 1st 2018

and will continue until the position is filled.

Reto Burri <reto.burri@uni-jena.de>

JYU Finland EvolutionaryModelling

PhD opportunity in evolutionary modelling at the University of Jyväskylä, Finland

A fundamental question in evolutionary biology is why anisogamy, the difference in gamete size that defines the sexes, has repeatedly led to large differences in behaviours such as mate searching, mating competition, and parental care. Recent theory has made progress in this area based on mathematical models of the feedback loops linking sex-specific selection pressures with the current state of a population (including current sex differences). The objective of the project is to develop mathematical and simulation models to study this topic further.

The successful candidate should hold an MSc degree in a relevant area (e.g. behavioural ecology, evolutionary biology, economics with focus on game theory, physics, mathematics, computer science), with some mathematical and computing skills and a keen interest in evolutionary biology.

Funding is provided by the Department of Biological and Environmental Science to fill positions in four out of eight competing projects, of which the above project is one. The application deadline is August 31, 2018. For further information, please contact: Dr. Lutz Fromhage (lutz.fromhage@jyu.fi).

The application should include (as pdf files):

- 1) A 1-page cover letter, outlining the motivation for applying for the doctoral student position; describing the competence for the job; and including a list of 1-2 references and their contact information.
- 2) Curriculum Vitae (CV)
- 3) Degree certificates

Please submit your application by August 31, 2018 using the online application form.

“Fromhage, Lutz” <lutz.fromhage@jyu.fi>

Karlsruhe MelanesianBiogeography

We invite applications for a PhD-position at “State Museum of Natural History Karlsruhe” (SMNK), Germany www.smnk.de beginning 1. November 2018.

Subject: Biogeography and Evolution in the Melanesian Archipelago * within the DFG-funded project “An integrative approach to systematics and evolution of *Trigonopterus*, a hyperdiverse genus of flightless weevils from Southeast Asia and the West Pacific (Coleoptera: Curculionidae)”. * This is a collaborative project between Alexander Riedel (SMNK, Karlsruhe) and the Balke lab at SNSB-ZSM. Our model system is a genus of Melanesian weevils for which we have a large data foundation already, which we will build on, as well as expand further.

Responsibilities include, among others: * independent processing of sequence data * independent work in the DNA lab (i.e. processing of samples, DNA extraction, Sanger-sequencing, sample storage). * comparative analyses, together with other team members * collaborative work on joint manuscripts

Employment qualifications: * Diploma in biology or MSc degree in a relevant subject, e.g. evolutionary biology, entomology, ecology etc. * excellent command of English, preferably also German * profound knowledge of molecular systematics * ability to collaborate within and outside our research group * high motivation and ability to work under pressure

The following qualifications would be desirable: * knowledge of Linux computer systems * basic command of R * basic knowledge of NGS sequencing and bioinformatics

What we are offering: * Salary is according to paygrade TV-L E13 (65%) in the German Public Service scheme granted the presence of employment qualifications. * opportunity to obtain a PhD. * The SMNK is among the larger natural history research museums in Germany and offers a friendly research environment.

More information: www.smnk.de This position is limited to a two-year period. The SMNK advocates gender equality. Women are therefore encouraged to apply. Disabled people with largely equal qualifications will be favored. Please send your (preferably electronic) application with the relevant documents (motivation letter, CV, two reference letters, copies of certificates, up to five relevant reprints) to Staatliches Museum für Naturkunde,

Dr. Alexander Riedel, Erbprinzenstr. 21, D-76133 Karlsruhe Or (preferably) by Email: riedel@smnk.de

Application deadline: 15. September 2018. Only applications arriving until this date will be considered. Notice: Application documents can only be returned if desired and expressly requested. Otherwise, all documents will be destroyed with the conclusion of the selection procedure. Unfortunately, costs arising from the application process cannot be reimbursed.

Riedel A <riedel@smnk.de>

Liverpool AncientDNA

“A fully funded 3-year PhD position available in the School of Natural

Sciences and Psychology at Liverpool John Moores University, Liverpool, UK

Project Title: Ancient DNA analysis of ancient North Africans as a means to provide new insights to population history and health

Supervisory Team: Dr. Linus Girdland Flink, Prof. Joel Irish, Dr. Gareth Weedall

Deadline: August 27th, 2018

Project Description: A RCUK funded PhD position is available for 36 months, working with Dr. Linus Girdland Flink, Professor Joel Irish and Dr. Gareth Weedall at Liverpool John Moores University (LJMU) on ancient DNA from prehistoric North Africans. The project is aimed at increasing our knowledge of African population history and health by analysing genomic data from different archaeological contexts in Egypt, Nubia, Morocco and the Canary Islands. The project also forms part of ongoing national and international research collaborations.

We are seeking a highly motivated candidate with a strong background in molecular biology, genetics and bioinformatics. Preference will be given to candidates with experience with analysing population genomic data in a Linux environment. General programming skills (e.g. in R and/or Python) is also highly advantageous. An interest in African prehistory and archaeology is also strongly desired.

The successful candidate should spend approximately one year generating data in a dedicated ancient DNA laboratory at LJMU, one year analysing data on Linux servers, and one year writing their thesis. The prospec-

tive candidates must hold an MSc (or equivalent) in Archaeology, Biology, Evolutionary Genetics, or similar scientific areas. The candidate must have proficiency in written and spoken English.

Funding Notes

Only UK & EU citizens can apply for this studentship. Funding will consist of full tuition fees for three years and the award of a living stipend at UK Research Council rates (2018/19 figure - pounds 14,777). Funding will also consist of up to pounds 1500 per annum towards project costs (bench fees). Funding will be subject to satisfactory progress.

References

For an informal discussion or if you have further questions about this opportunity please email Dr. Linus Girdland Flink (E.L.GirdlandFlink@ljmu.ac.uk) or Prof. Joel Irish (J.D.Irish@ljmu.ac.uk) for more information.

Applicants should email a CV, covering letter detailing their suitability for the project and contact details of two referees to Dr. Linus Girdland Flink (E.L.GirdlandFlink@ljmu.ac.uk tel: +44 (0)151 231 2614)

Applicants must be available for interview during the first two weeks of September. Please note that the University introduced fixed enrolment windows in the 2018/19 academic year, and scholarship students should be in position to complete enrolment between 24th September 2018 - 5th October 2018."

Best wishes,

Liverpool John Moores University

Dr. Linus Girdland Flink MA, PhD

Lecturer/Senior Lecturer, Natural Sciences and Psychology

Room 207, Life Sciences Building, Byrom Street, Liverpool, L3 3AF t: +44 (0)151 231 2614 e: E.L.GirdlandFlink@ljmu.ac.uk

"Girdland Flink,
<E.L.GirdlandFlink@ljmu.ac.uk>

Linus"

MasseyU ConservationGenetics

Landscape genetics and adaption in a marsupial pest Project Description New Zealand is recognised as a biodiversity hotspot but many native plants, animals

and ecosystems are threatened by introduced mammal species including a marsupial from Australia. The same species has also been identified as a carrier of bovine tuberculosis impacting on agriculture. Brush tail possums (*Trichosurus vulpecula*) reached high density throughout New Zealand after being introduced in the 19th century to establish a fur trade. A nationwide management programme includes widespread use of a synthetic toxin (fluoroacetate) called 1080. This chemical is naturally produced by some plants within the natural range of some brush tail possum populations in Australia, resulting in regional toxin resistance.

We are offering a 3 year PhD scholarship based at Massey University, New Zealand, that will inform on the evolutionary genetics and molecular ecology of brush tail possums. The project will examine the genetic basis of fluoroacetate resistance and adaptive responses of pest possums in New Zealand, as part of a wider programme exploring landscape genetics, ecology and disease transmission in this species.

The research will likely involve : Application of Next Generation Sequencing tools, bioinformatics and ecological modelling, population genetic analysis, phylogenetics, GIS, screening for Bovine TB and other microbial diseases. You will explore the evolutionary ecology of pesticide resistance within the context of an exceptional, unintended, nationwide experiment.

Candidates who are able to demonstrate enthusiasm for biological science and creativity in problem solving will be at an advantage. The ideal applicant will have a GPA of 7.0 (A-) or higher, a four-year bachelor degree with honours or a Master's degree in an evolution, zoology, genetics, ecology or a related field.

The scholarship (including tuition fees) is available from early 2019 (start date negotiable). Review of applications will begin immediately and continue until the position is filled.

Applications must include:

• A full Curriculum Vitae, INCLUDING your University transcript (i.e. list of grades and topics).

• The names of at least two people who can act as referees.

• A statement of your research interests and when you could begin your PhD research.

• Evidence of English language proficiency. If English is not your first language, international applicants must meet the University's English language requirements (e.g. IELTS 6.5; TOEFL 90). See: <http://www.massey.ac.nz/-massey/international/study-with-massey/entry->

requirements/entry-requirements_home.cfm for details. Massey University is conveniently situated in southern North Island, New Zealand. The campus is adjacent to Palmerston North with excellent cycle access and bus service. The capital city, Wellington is ~ 2 hours drive south, and mountain ranges and beaches are 30 ÅC 60 minutes away.

Send application details direct to: Professor Steve Trewick Ecology & Wildlife Massey University New Zealand

S.Trewick@massey.ac.nz

Munster AntEvolutionaryGenomics

Dr Lukas Schrader assistant researcher

Institute for Evolution and Biodiversity University of Münster Germany +49(251)8321648 Lukas.Schrader@wwu.de

Centre for Social Evolution Department of Biology, University of Copenhagen Denmark Lukas.Schrader@bio.ku.dk

GAGA: antgenomics.dk google scholar: goo.gl/k6cRaV

The Institute for Evolution and Biodiversity at the University Münster, Germany, and the Institute for Evolution at the University of Regensburg, Germany, are jointly seeking to fill a

*** PhD Position (salary level TV-L E13, 65%) *** to study evolutionary genomics in invasive ants, specifically rapid adaptive change in *Cardiocondyla obscurior*

The fixed-term position is available for three years and will begin on 1 November 2018 or as soon as possible.

The available PhD position is integrated into the recently funded DFG Priority Programme (Schwerpunktprogramm) "Rapid Evolutionary Adaptation: Potential and Constraints" (SPP1819). This research program brings together research groups from different backgrounds in biology to advance our understanding of the mechanisms and the evolutionary significance of rapid adaptive changes.

The ecological success of ants is a prime example for the role of innovation in adaptation and evolution. Intriguingly, ants and other social Hymenoptera have the highest rates of recombination and genomic rearrangements in all animals studied so far. This PhD project aims to explore the evolutionary significance of these

processes in ants. The project is focused on the invasive ant *Cardiocondyla obscurior*, and the successful candidate will study the genome evolutionary and population genetic mechanisms underlying rapid adaptation to novel habitats in this species.

Cardiocondyla obscurior has successfully established populations across the tropics despite expected low genetic diversity in incipient populations. The goal of the PhD project is to understand to what extent non-homologous recombination and transposable elements contribute to genetic diversification by generating structural variants - the largest source of inter-individual genetic variation, which can have substantial phenotypic consequences.

To this end, the successful candidate will collect ant colonies in the field, maintain live colonies in the lab, conduct behavioral and wet lab experiments, and, most prominently, generate and analyze population genomic data. Thus, this PhD thesis involves field work, wet lab work, and computational work, with a strong emphasis on the generation and analysis of high-throughput sequencing data.

The successful candidate will be supervised by Lukas Schrader (University of Münster) and Jan Oettler (University of Regensburg) and will thus work in collaboration with other members of the research group in the Institute for Evolution and Biodiversity at the University Münster (www.de/evolution/molevolsoebio) and in the Institute for Evolution at the University Regensburg (janoettler.wordpress.com). Both groups have a long history of research collaboration, focusing on the study of evolution of social insects. Regular visits between both groups and meetings within the scope of the DFG Priority Program will provide the framework for a successful PhD project.

The PhD student will join in the Münster Graduate School of Evolution (MGSE, www.de/evolution/mgse/), one of the largest graduate programs in evolutionary biology in Germany. The student will also be expected to spend extended periods at the research group in Regensburg to conduct part of the research.

Requirements Applicants are required to have an outstanding master's degree or equivalent degree in biology or a related field. Applicants must also show a strong interest in evolutionary and computational biology and show motivation to be trained in the analysis of high-throughput genomic data. Other requirements are the capacity to formulate and solve research problems and effectively interpret research results, as well as motivation to conduct research at both research groups - at the University of Münster and at the University of Regensburg. Finally, fluency in written and spoken English is

required.

The University of Münster is an equal opportunity employer and is committed to increasing the proportion of women academics. Consequently, we actively encourage applications by women. Female candidates with equivalent qualifications and academic achievements will be preferentially considered within the framework of the legal possibilities. We also welcome applications from candidates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered.

How to apply The application should be compiled into a single PDF file (max. 5 MB), which should include (1) a CV including information about former academic education and degrees, professional experience, publications, fellowships/awards, conference contributions, languages,

— / —

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>

MurrayStateU EvolutionAnimalCommunication

Masters position - Evolution of animal communication

The Beckers' Lab at Murray State University is looking for a Masters student who is interested in the evolution of animal communication starting in the spring semester of 2019.

We study katydids and crickets to address questions pertaining the evolution of animal behavior, or more specifically, animal communication. Our research focuses on the effects of the environment (i.e., phenotypic plasticity) on mating songs and song preferences. In our main study species, *Neoconocephalus triops*, day length induces two substantially different mating songs. These differences in the songs are comparable to species differences within the genus. In a collaboration with two other labs (Missouri and West Virginia), we study the genetic underpinnings of this behavioral plasticity and how the involved genes possibly relate to speciation within the genus.

In addition, we are currently exploring the effect and evolutionary consequences of the seasonal environment

on the communication system of a local cricket species, *Gryllus rubens*. In this species, the songs change in response to its rearing temperature. This cricket and *N. triops* are two of the very few described Orthopterans that display this kind of phenotypic plasticity in their reproductive communication systems. Studying this environmentally-induced variation provides important insights in the evolutionary potential of plasticity.

I seek driven, enthusiastic, and focused students to join my lab at Murray State University. Successful applicants have a B.S. in biology, ecology, or related discipline and are interested in studying animal behavior and evolution. If you are interested in this opportunity and/or have any questions, please email Dr. Beckers at obeckers@murraystate.edu. For your application, make sure to address in an attached document (1) your research interests, (2) how they relate to the Beckers' lab research, and your (3) GPA.

Funding for tuition and a summer stipend are available for research related to *N. triops* song plasticity. In addition, MSU offers a TAship (\$8,000/year) and a biodiversity stipend (\$10,000 per year + research supplies and meeting expenses) that the applicant is encouraged to apply. Please get in touch with me if you have any questions. Once you indicated interest in the position, an interview will be set up shortly after (i.e., skype). Please apply/get in touch with me by October 1, 2018.

More information on Dr. Beckers' research here:

<https://www.murraystate.edu/-academics/CollegesDepartments/-CollegeOfScienceEngineeringandTechnology/-CollegeOfSciencePrograms/biologyDept/faculty/-oliver-beckers/index.aspx> Information about the Department of Biological Sciences at MSU:

<https://www.murraystate.edu/-academics/CollegesDepartments/-CollegeOfScienceEngineeringandTechnology/-CollegeOfSciencePrograms/biologyDept/faculty/>
Oliver Beckers <obeckers@murraystate.edu>

OregonStateU EvolutionOfMateChoice

OSU's Coastal Oregon Marine Experiment Station at HMSC is currently seeking a Master's student to work on one of two projects: (1) vision in hatchery and wild salmonids (2) evolution of mate choice in salmonids.

Either project would primarily include behavioral assays conducted at the Oregon Hatchery Research Center (OHRC) (<https://www.dfw.state.or.us/fish/-ohrc/>) and genetic analyses conducted in Michael Banks' Marine Fisheries Genetics Laboratory at OSU's Hatfield Marine Science Center (HMSC) (<https://hmsc.oregonstate.edu/>). Fulfillment of graduate course requirements necessitates students to spend part of their time on main campus in Corvallis (<https://fw.oregonstate.edu/>). Development of project specifics would be done in collaboration with Prof. Banks and Heather Auld, a postdoctoral researcher in the lab. Additional support for the project includes access to resources available at OSU's Center for Genome Research and Biocomputing (CGRB <https://cgrb.oregonstate.edu>). Funding for one of these projects is available through a collaboration between Oregon Department of Fish and Wildlife (ODFW), the OHRC, and OSU, but applicants would be encouraged to seek additional sources of funding to support their research. Candidate:

Eligible candidates require a Bachelor's degree in Biology or related field. Candidates should have a strong interest in biology, behavior and genetics.

Location:

OSU main campus is located in the town of Corvallis, Oregon (pop. ~50 000). HMSC in the coastal town of Newport, Oregon (approximately 50 miles from Corvallis). HMSC is a satellite campus of OSU and in addition to OSU students, and faculty, has an active community of researchers from the Environmental Protection Agency, ODFW, and National Oceanic and Atmospheric Administration. The OHRC is located at Fall Creek in Alsea, Oregon. OHRC facilities include outdoor simulated stream channels, indoor lab space, and overnight accommodations.

Expression of Interest:

Interested students should contact Michael Banks (michael.banks@oregonstate.edu) with a letter of interest, CV, a sample of you technical scientific writing, and contact details for three references.

Closing date: ASAP, Fisheries and Wildlife winter quarter registration closes Oct 1st, 2018.

Start date: January 2019

Michael A. Banks

Director, CIMRS

Professor, Marine Fisheries Genetics & Conservation
Coastal Oregon Marine Experiment Station, HMSC
Department of Fisheries and Wildlife, OSU

2030 SE Marine Science Drive, Newport, Oregon 97365

Landline: 541-867-0420 Cell 541:272-7057

<http://hmsc.oregonstate.edu/cimrs> "Banks, Michael"
<michael.banks@oregonstate.edu>

PortlandStateU MitonuclearEvolution

Available at Portland State University, Portland, Oregon: We are seeking a highly motivated and enthusiastic MS or PhD student to work on a National Science Foundation-funded project that uses experimental genomics in *C. elegans* nematodes to study mitonuclear evolution and the impact of sexual system on mitonuclear adaptation.

Planned start date: September 2019. Earlier, off-cycle admission will be considered.

Project Description: Energy metabolism in nearly all eukaryotic life forms relies on coordinated interactions among gene products encoded by both mitochondrial and nuclear genomes, and thus depends upon inter-genomic coevolution. Neither the processes maintaining this coevolution nor its downstream evolutionary consequences are well understood. These consequences were recently hypothesized to include the evolution and maintenance of sexual reproduction. This project leverages the expertise and resources of three research groups to provide the direct, non-retrospective tests of major hypotheses to explain mitonuclear genome coevolution. These hypotheses predict that integration of the two genomes is achieved primarily by fixation of nuclear mutations that compensate for the deleterious effects of previously acquired mitochondrial mutations, and that this process will favor sexual recombination among nuclear chromosomes. We will apply experimental genomics with *Caenorhabditis elegans* nematodes to study evolutionary process within the context of the mitochondrial electron transport chain (ETC), the proper functioning of which relies on the maintenance of favorable mitonuclear epistatic interactions. The project will take full advantage of the powerful *C. elegans* system to: 1) Determine the impact of sexual system on the tempo and patterns of mitonuclear adaptation. *C. elegans* strains containing deleterious mitochondrial- and nuclear-encoded ETC mutations will undergo laboratory adaptation in replicate populations experiencing obligate selfing, facultative outcrossing, or obligate outcrossing. This design also permits examination of how

rates of sexual outcrossing evolve in response to these conditions. 2) Determine the evolutionary dynamics, functional characteristics and sex-specific effects of individual mitonuclear mutations. Genomic, bioinformatic and phenotypic analyses will determine the molecular bases and functional underpinnings of mitochondrial and nuclear mutations available to mask the effects of deleterious ETC mutations, and reveal the relationship between rates of outcrossing and mitonuclear adaptation.

Location: This project will be conducted under the direct supervision of Dr. Suzanne Estes with co-supervision from Drs. Vaishali Katju and Ulfar Bergthorsson (Texas A&M University) and based at the Department of Biology at Portland State University, located in the heart of downtown Portland, Oregon. The PSU Biology Department, which houses the Center for Life in Extreme Environments (CLEE), has 21 research faculty and over 65 graduate students. Our faculty strive to take an integrative approach to biology, encompassing all levels of biological organization from molecules to ecosystems. We collaborate and share facilities with other science departments and with research faculty at Oregon Health & Science University, a medical school and teaching hospital located adjacent to PSU. This close proximity helps to foster interdisciplinary research and creates a vibrant research culture that ensures support and training for the next generation of evolutionary biologist.

Requirements: We are looking for a biology graduate who has a strong interest in evolutionary and molecular biology. Some practical experience in molecular, bioinformatic and/or *C. elegans* husbandry techniques is highly desired, but additional training will be provided. The successful candidate will be enthusiastic, highly motivated, independent, and have a relevant bachelor's degree. The applicant must meet standard Portland State University graduate admissions and language requirements, details of which can be found here: <https://www.pdx.edu/graduate-admissions/apply>. Note: ONLY US citizen or permanent resident applicants are eligible for this studentship.

Funding Notes: The successful candidate will receive a full studentship including tuition, fees and an annual living stipend of \$24,000 for up to 4 years for PhD students. Funds will also be available for research expenses and conference travel. Support beyond this time period may be available through a PSU departmental Teaching Assistantship.

Deadlines and Contact: The deadline for application is *February 1, 2019*; however, earlier admission may be possible. Please contact Dr. Suzanne Estes at est-

ess@pdx.edu with informal enquiries.

Suzanne Estes, PhD LSAMP Program Director Associate Professor of Biology Portland State University Portland, OR 97201 LSAMP phone: 503.725.2422 Biology phone: 503.725.8782

— / —

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>

StockholmU Butterfly Evolution

The Lab of Christopher Wheat is seeing a PhD student in the project 'The evolution of female limited alternative life history strategies'.

Alternative life history strategies (ALHS) exist across diverse species, wherein different strategies of resource investment couples with the tradeoffs that result in divergent phenotypes with differential consequences in Darwinian fitness. While male-limited ALHS are well known and their study has significantly advanced our understanding of the selection dynamics acting in the wild, comparatively few examples of female-limited ALHS are known, either due to biological rarity or our lack of understanding of how ALHS manifest in females. Thus there is a need for mechanistic insights, as none exist for female ALHS. In this project, the student will continue investigations into the genetic basis a female-limited ALHS in the butterfly *Colias*, working to understand the mechanisms giving rise to tradeoffs in investment to reproduction vs. pigment synthesis.

In this project we will combine several approaches: (i) genome wide association studies across diverse species to find the genetic switch for the ALHS, (ii) multiple-level "omic" investigation of key functional physiological layers and (iii) direct manipulations of the ALHS switch, using CRISPR-Cas9 gene knockouts, (iv) field and lab based studies to determine the abiotic and biotic factors maintaining the variation in the wild. By integrating these data we will build models of how the ALHS has evolved and is maintained across species. The project therefore offers the PhD-candidate a chance to learn a variety of modern methods in organismal biology and can be tailored in several directions according to the skills, aptitude and interests of the PhD-candidate.

The Department of Zoology is a vibrant international community, consisting of five interactive and collaborative divisions: Ecology, Ethology, Functional Morphology, Population Genetics, and Systematics and Evolution. The advertised PhD will be part of the division of Population Genetics.

Project description The Department of Zoology invites applications for a four-year PhD position as part of the project 'The evolution of female limited alternative life history strategies'.

for more details, please follow this link

<https://www.su.se/english/about/working-at-su/-phd?rmpage=3Djob&rmjob=3D6326&rmlang=UK>
Christopher W. Wheat, Ph. D.

Associate Professor, Senior Lecturer Population Genetics Department of Zoology Svante Arrheniusväg 18 B, Room D 551 Stockholm University S-10691 Stockholm Sweden

chris.wheat@zoologi.su.se

Office: +46 816 4020 Mobile: + 46 721958586

<http://www.zoologi.su.se/en/about/staff/-person.php?suuid=3Dcwhea> “The lag time in understanding the impact of one’s actions is the greatest threat to the fulfillment of individual and collective potential”

“chris.wheat@zoologi.su.se”
<chris.wheat@zoologi.su.se>

StockholmU ButterflyGeneDuplications

The Lab of Christopher Wheat is seeing a PhD student in the project 'Investigating the role of gene duplications in coevolutionary interactions'.

Coevolutionary interactions are thought to have spurred the evolution of key innovations and driven the diversification of much of life on Earth. However, the genetic and evolutionary basis of the innovations that facilitate such interactions remains poorly understood. We have recently found that while gradual changes in trait complexity appear to have been facilitated by allelic turnover, key innovations are associated with gene duplication events. Here we will focus upon investigating the tempo and mode of such duplication events in association with coevolutionary interactions between Pieridae

and their Brassicales hostplants. In this project, the student will continue investigations into the role of gene duplications in several butterfly species, working to understand the mechanisms giving rise to the ability to detoxify hostplant secondary chemicals.

In this project we will combine several approaches: (i) comparative genomic studies across butterflies to identify genes undergoing duplication dynamics associated with changes in hostplant usage, (ii) multiple-level “omic” investigation of physiological performance (iii) direct manipulations of the identified detoxification genes using CRISPR-Cas9 gene knockouts. These projects will be performed in collaboration with Prof. Lars Arvestad at the Department of Mathematics, who is also hiring a PhD student to develop and use novel methods for detecting gene duplications in comparative genomic analyses. The goal is to have both PhD students work together and share insights between their two fields. The project therefore offers the PhD-candidate a chance to learn a variety of modern methods in organismal and genome biology and can be tailored in several directions according to the skills, aptitude and interests of the PhD-candidate.

The Department of Zoology is a vibrant international community, consisting of five interactive and collaborative divisions: Ecology, Ethology, Functional Morphology, Population Genetics, and Systematics and Evolution. The advertised PhD will be part of the division of Population Genetics.

Project description The Department of Zoology invites applications for a four-year PhD position as part of for more details, please follow this link.

<https://www.su.se/english/about/working-at-su/-phd?rmpage=3Djob&rmjob=3D6351&rmlang=UK>
Christopher W. Wheat, Ph. D.

Associate Professor, Senior Lecturer Population Genetics Department of Zoology Svante Arrheniusväg 18 B, Room D 551 Stockholm University S-10691 Stockholm Sweden

chris.wheat@zoologi.su.se

Office: +46 816 4020 Mobile: + 46 721958586

<http://www.zoologi.su.se/en/about/staff/-person.php?suuid=3Dcwhea> “The lag time in understanding the impact of one’s actions is the greatest threat to the fulfillment of individual and collective potential”

“chris.wheat@zoologi.su.se”
<chris.wheat@zoologi.su.se>

UAlabama 2 MusselBiodiversity

A PhD position in comparative population genomics of southeastern freshwater mussels is available in Jeff Lozier's lab (<http://lozierlab.ua.edu/>) at the University of Alabama Department of Biological Sciences (<https://bsc.ua.edu/>) as part of a recently funded NSF Dimensions of Biodiversity project. We are looking to recruit a highly motivated PhD student to examine comparative population genetics of freshwater mussel communities in streams of the Mobile and Tennessee River basins, which is a major biodiversity hotspot for mussels and several other freshwater taxa. The project will involve extensive high throughput sequencing of numerous populations and species (including whole genome and reduced representation sequencing), with the goal of understanding how population and species level processes relate to broader eco-evolutionary processes. More details relating to the study objectives can be found at the project website (<http://mussels.ua.edu/>). The student will be expected to develop specific research questions relating to population, conservation, and landscape genetics within the context of these broader project objectives.

Applicants must have a strong academic record (GPA > 3.0), strong written and verbal communication skills, and a desire to build strong quantitative and data management skills. Experience in laboratory and computational analysis of modern genetic data is preferred. The student will work closely with a postdoc and another PhD student being simultaneously recruited by Carla Atkinson's lab (<http://atkinsonlab.ua.edu/>) at UA and with collaborators at the University of Mississippi, so an interest in working as part of a collaborative team is a must.

Interested applicants should send a (1) cover letter describing research experience and goals, (2) curriculum vitae, (3) unofficial transcripts and GRE scores, (4) a writing example, and (5) contact information of 2-3 individuals familiar with research/academic performance to Jeff Lozier (jlozier@ua.edu). Start date is negotiable for Spring, Summer, or Fall 2019 semesters. Review of materials will start immediately.

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

A PhD Position in Functional Trait Diversity of South-

eastern Freshwater Mussels is available in Carla Atkinson's lab (<http://atkinsonlab.ua.edu/>) at the University of Alabama as part of a recently funded NSF Dimensions of Biodiversity project (<http://mussels.ua.edu/>). We are looking to recruit a highly motivated PhD student to examine the functional traits of a diverse group of animals, the unionid mussels, in several streams in the Mobile and Tennessee River basins, the diversity hotspot for freshwater mussels and several other freshwater taxa. The project will involve using ecological stoichiometry and other organismal traits to examine trait diversity within and across communities in the focal watersheds with the goal of understanding how functional diversity patterns relate to overall habitat diversity and population-level and species-level diversity. The student is also anticipated to formulate their own research questions related to the project that could span topics such as trophic ecology, distribution modeling, nutrient uptake and transformations, and ecosystem metabolism within this broader project objective.

Applicants must have a strong academic record (GPA > 3.0), strong written and verbal communication skills, possess prior experience working in streams, a desire to build strong quantitative skills, SCUBA certified (or willingness to get certified), and an interest in working as part of a large collaborative team. In addition, preference will be given to applicants with prior experience conducting water chemistry analyses, familiarity with R, using ArcGIS software, and with a demonstrated publication record. The student will work closely with a postdoc in Atkinson's lab and another PhD student being recruited by Jeff Lozier's lab (<http://lozierlab.ua.edu/>) in the Dept. of Biological Sciences at UA and with collaborators at the University of Mississippi, so an interest in working as part of a collaborative team is a must.

Interested applicants should send a (1) cover letter describing research experience and goals, (2) curriculum vitae, (3) unofficial transcripts and GRE scores, (4) a writing example, and (5) contact information of 2-3 individuals familiar with research/academic performance to Carla Atkinson (clatkinson@ua.edu). Start date is negotiable, with the position available starting in Spring or Summer 2019.

Carla L. Atkinson Assistant Professor Dept. of Biological Sciences University of Alabama

— / —

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>

UCentralFlorida PlantEvolution

PhD positions in Plant Evolutionary Ecophysiology, Genomics, and Biochemistry

The Mason and Goolsby labs in the Department of Biology at the University of Central Florida are currently recruiting motivated, curious, and enthusiastic PhD students to start in Fall 2019. Our labs work closely together and research a wide variety of topics in plant physiology, ecology, evolution, genetics, and biochemistry.

The Goolsby Lab is a plant evolutionary genomics and biochemistry lab. We are interested in exploring the evolution of complex traits using a combination of empirical and theoretical systems. I am interested in recruiting graduate students for Fall 2019 who are interested in any of the following areas:

(1) the evolution of heavy metal hyperaccumulation in plants, especially wild sunflowers (*Helianthus*), which naturally accumulate extremely high levels of normally toxic metals (nickel, cadmium, zinc, etc). Metal accumulation and tolerance are both complex traits that can be represented by dose-response curves known as function-valued traits. I am particularly interested in the evolutionary history and genomics of metal hyperaccumulation and tolerance as independent function-valued traits.

(2) C4 and CAM are two photosynthetic pathways that confer elevated resistance to heat and drought stress, respectively. Both pathways have evolved from C3 ancestors independently several times in the evolutionary history of plants. These pathways involve multiple complex biochemical and anatomical adaptations that are generally thought to be incompatible with one another. However, the *Portulaca* lineage consists of plants which are capable of performing both C4 and CAM photosynthesis within the same leaf. Our research in *Portulaca* is concerned with mapping the evolutionary history of distinct anatomical and biochemical changes associated with these two pathways within the genus, as well as uncovering the genetic mechanisms responsible for maintaining two functional co-occurring photosynthetic pathways.

(3) the development and improvement of phylogenetic comparative methods and algorithms for studying these

complex traits. In particular, we are interested in developing methods for studying the evolution of environmental and developmental plasticity, high-dimensional complex traits, multivariate datasets with missing data and multiple within-species observations, and comparative methods for mixing continuous and discrete traits.

The Mason Lab is a plant evolutionary ecophysiology lab. We are especially interested in the physiological and genetic mechanisms underlying plant adaptation to diverse environmental pressures, including abiotic factors like climate and soil fertility, and biotic factors like herbivory and disease. All plants face physiological trade-offs between growth, defense, and reproduction, and we seek to understand the coordinated evolution of the traits that govern these three core functions. Our research addresses a variety of questions across multiple scales, from macroevolution to population differentiation to within-individual plasticity, as well as in multiple systems, from crops to wild herbs and woody plants. In particular, for students interested in joining the lab for Fall 2019, I am especially interested in recruiting students who are interested in any of the following topics (listed in no particular order):

(1) core plant ecophysiology, especially the evolution of gas exchange physiology and water/nutrient relations, especially in the context of function-valued trait evolution and adaptation to diverse environments. Wild sunflower (*Helianthus*) would be a highly suitable system for this, but I am open to other systems as well.

(2) the evolution, ecology, genetic architecture, and applied utility of mycorrhizal symbiosis, especially in crop and wild sunflowers (*Helianthus*) given ongoing work in the lab, but open to expanding into other systems as well.

(3) the physiological and metabolomic impacts of polyploidy in sunflowers (*Helianthus*) and the broader Asteraceae using both comparative and manipulative approaches.

(4) the genetic architecture of chemical defense inducibility under attack from insects and fungal pathogens. This would be highly suitable to wild and crop sunflower (*Helianthus*), but I'm open to expanding into other systems as well.

(5) the role of floral morphological and chemical variation in determining pollinator visitation and/or pest and pathogen resistance, in both crop and wild sunflowers (*Helianthus*).

(6) the evolution of leaf chemical defenses in relation to the leaf economics spectrum in temperate woody trees and shrubs.

(7) plant phytochemistry, broadly defined. I find variation in plant secondary metabolism fascinating and would be interested in questions in a wide variety of systems and.

Interested students should contact either Chase Mason or Eric Goolsby (or both) to discuss research interests before applying to the Department of Biology graduate program

— / —

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>

UCL Belgium GlobalChangeBiodiversity

Intraspecific variability is the basic ingredient for biological evolution. Although it is expected that it will impact how species react to global change, few experimental tests have been done. This is the objective of the DIVERCE project, a collaboration between two Belgian Universities: Does Intraspecific Variability modulate the impact of EnviRonmental Change on biodiversity and Ecosystem function?

In this framework, we offer a full-time 4-year PhD position in ecology at the Université catholique de Louvain (UCL, Belgium), Earth and Life Institute, Biodiversity Research Centre, in the Quantitative Conservation Biology team led by Prof. Nicolas Schtickzelle, starting 01/10/2018.

The PhD candidate will combine microcosm experiments with (statistical and mechanistic) modelling to examine if and how the level of intraspecific variability modulates the effects of global change (temperature and pollution) on population and community dynamics, and coexistence in competitive protist (freshwater ciliates) communities.

Two other PhD students will perform experiments with the exact same design on phytoplankton and on arbuscular mycorrhizal fungi, in the aim to reach a higher level of generality. A close collaboration among the three teams is expected, supported by a dedicated postdoc for DIVERCE during the last 2 yr of the position, offering opportunities for networking and international collaboration.

Details: <https://euraxess.ec.europa.eu/jobs/325237> .
nicolas.schtickzelle@uclouvain.be

UGraz Austria 3 EvolutionaryBiology

The Doctoral Academy of the Natural Science Faculty at the University of Graz, Austria is offering 3 PhD positions to be filled by ca. October 1st 2018.

All three positions will be housed at the Institute of Biology in Graz (formerly Institute of Zoology and Institute of Botany, now fused into one Institute).

The positions are for 3 years and offer a minimum gross salary of EUR 2096/monthly. All three positions require a completed master's degree in a relevant biological field, excellent English communication skills, and the ability to work independently. The exact research topics will be adjusted to the candidate and planned with the advisor (see below).

The first position is in the area of molecular ecology or population genetics with freshwater fishes and will be advised by Assoc. Prof. Dr. Steven Weiss. The candidate's profile should include working knowledge of genetic methods, NGS and linux-based approaches to data analysis. Reference Number MB/121/99 ex 2017/18.

The second position is in the area of molecular ecology and genomics with symbiosis and will be advised by Univ. Prof. Dr. Martin Grube. The candidate's profile should include knowledge of molecular biology methods, bioinformatics, NGS and linux-based approaches to data analysis. Reference Number MB/123/99 ex 2017/18.

The third position is in the area of chemical ecology or ecology/systematics of soil arthropods and will be advised by Dr. Günter Raspotnig. The candidate's profile should include knowledge of analytical chemistry techniques such as gas chromatography/mass spectrometry (GC-MS), and practical knowledge with the collection and determination of soil arthropods. Reference Number MB/122/99 ex 2017/18.

The application deadline is August 31, 2018. A CV, MS graduate certificate and letter of intent should be sent by e-mail to bewerbung@uni-graz.at. The reference number (see above) for the relevant position should be placed in both your letter of intent and the subject heading of the e-mail. Please note that these are the same positions posted July 26, but the deadline has been

extended to August 31. This extension is no reflection on the quality of the applications thus far received, as they have not yet been reviewed.

With its 4,300 employees and 32,500 students, the University of Graz provides an exciting and varied work environment. The Doctoral Academy Graz offers an institutional roof for a structured doctoral education and in so doing places the University at the forefront of current international developments in doctoral studies. The University of Graz strives to increase the proportion of women in science and thus encourages women to apply.

Assoc. Prof. Dr. Steven Weiss Karl-Franzens Universität Graz Institute f. Zoologie Universitätsplatz 2 A-8010 Graz Tel: +43-316-380-5599

“Weiss, Steven (steven.weiss@uni-graz.at)”
<steven.weiss@uni-graz.at>

UGuelph Iceland EvoEcolGeneticFish

MSc IN EVOLUTIONARY ECOLOGY AND GENETICS OF ICELANDIC ARCTIC CHARR

Location: University of Guelph and H?lar University College, Iceland. Field work occurs in the lava caves around Lake Myvatn northern Iceland.

Advisors: Dr. Moira Ferguson, University of Guelph, Guelph, ON Canada and Dr. Camille Leblanc, H?lar University College, Iceland.

Numerous ecological and evolutionary processes contribute to the generation of biodiversity, and the complexity of their interactions has presented a challenge to our understanding of nature. Our knowledge of the roles of development, natural selection, genetic drift, and gene flow in shaping biodiversity is complicated by the spatial and temporal variability inherent in natural systems. A powerful approach to better understand such processes involves monitoring wild populations over generations and obtaining data including pedigrees, phenotype, and fitness, so that we can directly infer evolutionary parameters, particularly those describing selection and genetic variation. We are seeking a talented MSc student to apply such an approach to wild populations of Icelandic Arctic charr, in order to further our understanding of the complex interplay among genes, phenotypes, and ecology, in natural environments.

The successful MSc student will test important microevolutionary theories with individual-based phenotypic records, molecular genetic (SNP) data, and ecological data from 19 populations of Arctic charr residing in a spatially replicated system of lava caves in the Myvatn area of northern Iceland. The monitoring of these populations began in 2012 and provides an impressive long-term dataset for novel insights. Advanced analytical techniques will be used to understand spatial and temporal patterns of genetic variation, natural selection, and ecological covariates. The student will be based at the University of Guelph with Prof. Moira Ferguson but will spend time at H?lar University College with Dr. Camille Leblanc (including annual fieldwork). Our ideal candidate will have interests in evolution, ecology, and genetics, and will have strong quantitative skills - necessary for the advanced analytical techniques used in this field. The student will be able to work independently and as part of a larger team, both in the laboratory and in the field.

The project is part of a long term collaboration between the University of Guelph, Canada (Prof. Moira Ferguson), H?lar University College (Prof. Bjarni K. Kristj?nsson, Prof. Sk?li Sk?lason and Dr. Camille Leblanc), the University of Iceland (Prof. Sigur?ur S. Snorrason, and Prof. Arni Einarsson), EAWAG, Switzerland (Dr. Katja R?s?nen), and the University of St Andrews (Dr. Michael Morrissey). The project is funded by The Icelandic Science Foundation ? Rann?s and NSERC (Canada). The position will be filled as soon as a good candidate is found (target date 1. May 2018). The funding for the graduate student positions is sufficient to cover living costs and University of Guelph tuition fees for Canadian citizens or permanent residents.

Applicants should send an application letter with a max. 1 page statement of research interests and relevant experience, curriculum vitae, copies of academic qualifications including copies of unofficial transcripts and the names and e-mail addresses of three referees, as a single pdf file to Dr. Moira Ferguson (mmfergus@uoguelph.ca).

For further information contact Dr. Moira Ferguson, Professor at the University of Guelph.

– Dr. Moira M. Ferguson Professor Department of Integrative Biology University of Guelph Guelph, Ontario Canada N1G 2W1 Tel: (519) 824-4120 x52726 Fax: (519) 767-1656 Email: mmfergus@uoguelph.ca

Moira Ferguson <mmfergus@uoguelph.ca>

Uiceland

EvolGenomicsHighlyFecundGadids

Graduate Position: Uiceland. Evol Genomics Highly Fecund Gadids

PhD student position at the Institute of Life- and Environmental Sciences, University of Iceland

The evolutionary and population genomics group of Einar Arnason at the Institute of Life- and Environmental Sciences (ILES) at University of Iceland invites applications for a PhD position in evolutionary genomics for the research topic: Analysis of time-series of whole-genome data from highly fecund gadids.

Field of work

Our research focus is on understanding evolutionary processes in highly fecund organisms. We use highly fecund gadids as study organisms. With a recently awarded Icelandic Research Fund Grant of Excellence we will obtain unparalleled amount of whole-genome sequence data from various gadid populations. Whole-genome sequence data holds huge promise in furthering our understanding of the mechanisms of selection, speciation and adaptation in natural populations. This collaborative project is joint with Katrin Halldorsdottir at ILES, Alison Etheridge at the Department of Statistics in University of Oxford, and Wolfgang Stephan and Bjarki Eldon at the Leibniz Institute for Evolution and Biodiversity Science in Berlin. Among our collaborators are Montgomery Slatkin and Rasmus Nielsen at University of Berkeley in California, Fernando Racimo Centre for GeoGenetics Copenhagen University and Tim Sackton Director of Bioinformatics at Harvard University.

The student will be based at University of Iceland and work under the supervision of Einar Arnason, Katrin Halldórsdóttir, and Bjarki Eldon in Berlin. This is a highly interdisciplinary project combining latest molecular technology, and advanced statistical and bioinformatic analysis. We will maintain good communication between all participants. The position therefore comes with possibilities to visit participating labs and groups in Berlin, Berkeley, Copenhagen, Oxford, and Cambridge (MA).

Analysis of time-series of samples using whole-genome sequencing promises to be a powerful way of understanding evolutionary history, in particular, for detecting selection. The PhD project is about the time-series part

of the overall project.

We are looking for a highly motivated individual with a strong interest in evolutionary and population genomics. The University of Iceland expects PhD candidates to complete their studies and write and defend a dissertation within a time period of 3 years after a master's degree according to the Bologna process.

Qualification requirements

- M.Sc. (or equivalent) in biology, statistics, mathematics, or computer science;
- experience in some kind of data analysis;
- the ability to work both independently and in a team;
- proficiency in written and spoken English
- experience in analysing genomic data is an asset;
- strong interest in evolutionary biology and genomics is an asset;
- experience in working with UNIX/Linux is an asset

How to apply

Please include the following in the application:

- i) 1-2 page motivation letter, which should state interest in the project, expectations for your Ph.D. studies and what makes you qualified for the position,
- ii) CV and publication list (if any),
- iii) transcripts from B.Sc. and M.Sc. studies, and a list of courses during postgraduate studies,
- iv) contact information for 2 letters of reference

The successful applicant could anticipate to start work as early as July 2018, or later upon agreement, with funding guaranteed for three years.

Salary will be according to the current collective wage and salary agreement between the Union of University Teachers and the Minister of Finance.

All applications will be answered and applicants will be notified of the employment decision when a decision has been made. Applications will be valid for six months from the end of the application deadline.

APPLY by filling out form for vacancy nr. 354 <https://ugla.hi.is/radningar/umsokn.php?sid=2449&starf=354>

Some relevant publications

Einar Árnason and Katrín Halldórsdóttir. 2015. Nucleotide variation and balancing selection at the Ckma gene in Atlantic cod: analysis with multiple merger coalescent models. PeerJ e786. doi:10.7717/peerj.786

Bjarki Eldon and John Wakeley 2006. Coalescent processes when the distribution of offspring number among

individuals is highly skewed. *Genetics* 172:2621-2633. doi:10.1534/genetics.105.052175

Bjarki Eldon, Matthias Birkner, Jochen Blath and Fabian Freund 2015. Can the site-frequency spectrum distinguish exponential population growth from multiple-merger coalescents? *Genetics* 199: 841-856. doi:10.1534/genetics.114.173807

Fernando Racimo 2015. Testing for ancient selection using cross-population allele frequency differentiation. *Genetics* 202:733-750.

Joshua G. Schraiber and Steven N. Evans and Montgomery Slatkin

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

(www.rmwaterhouse.org), also a Group Leader at the SIB Swiss Institute of Bioinformatics (<https://www.sib.swiss/waterhouse-robert>). The aims of the doctoral thesis will include the design and development of cross-species comparisons to quantify patterns of evolutionary change with a focus on characterising constraint and selection. Understanding of and confidence with genomics analyses, evolutionary concepts, and statistics will help with the design and implementation of computational biology approaches to delineate conservation patterns and link them to biological functions, and are therefore desirable.

Deadline: 31.08.18 Further information: <https://tinyurl.com/yautzwb9> Applications must be made exclusively through the UNIL recruitment platform.

\\ Robert M. Waterhouse O0o- www.rmwaterhouse.org “”

“robert.waterhouse@unil.ch”

ULausanne InsectComputationalEvolBiol

The Department of Ecology and Evolution of the University of Lausanne invites applications for the position of a doctoral student in insect computational evolutionary biology and genomics.

The incredible diversity of insects makes them fascinating to study, with important applications in the characterisation of animal biology, the control of disease vectors and pests, and the conservation of threatened insects. Falling sequencing costs are improving genomic species sampling and enriching sources of functional data, challenging researchers to find innovative approaches to best exploit these data to bring new levels of depth and detail to our understanding of biology. Overcoming these challenges requires substantial methodological advances in data integration and interrogation, supported by robust computational infrastructures. With an initial focus on disease-vector mosquitoes, this Swiss National Science Foundation funded research project aims to exploit genomic evolutionary signatures to enhance the understanding of putative functions of thousands of currently uncharacterised genes from hundreds of organisms.

The successful candidate will be based at the Department of Ecology and Evolution of the University of Lausanne (<https://www.unil.ch/dee/en/home.html>), under the supervision of Prof. Robert Waterhouse

UMaryland EvolPollinationInteractions

Graduate Assistant Position at the University of Maryland, College Park

The Esp^ÂndoLab has an opening for a Graduate Assistant position, with a potential start date in the Fall semester 2019. The lab is interested in understanding the effect of the environment on inter-species interactions and communities. To do so, we combine geospatial, phylogenetic and phylogeographic, and ecological approaches. One of the current foci in our work is seeking to understand how changes in the biotic and abiotic environments affect and have affected through historical and geological times the gain, loss, and maintenance of specialized pollination interactions, and the structure of communities. Work in our lab has spanned many taxa (from plants, to insects, to snails, and millipedes) and large spatial scales (with field sites in South America, Europe, and North America).

The Department of Entomology at the University of Maryland, College Park (www.entomology.umd.edu) is housed in the Colleges of Computer, Mathematical, and Natural Sciences (CMNS) and Agriculture and Natural Resources (AGNR). The Department stands out for its state-of-the-art science, its collegiality, diversity, and inclusiveness. The Department is in suburban Maryland, in the Washington D.C. area, offering opportunities of

collaborations with many of the research and teaching institutions present in the region. The location gives unique access to cultural and recreational activities available both in the city and the surrounding region. The University of Maryland, College Park is considered a “Public Ivy-League”, ranked among the 50 top Universities in the world, and offers an excellent educational, cultural, and recreational environment to work, study, and live.

We are seeking a motivated, independent, and creative Graduate Assistant to join our lab. The ideal candidate holds a Master’s degree (or equivalent), has experience in independent research, and is interested in joining a dynamic and collaborative working environment. Women and members of minority groups are encouraged to apply. If interested, email a motivation letter, your CV, and contact information of two references to Prof. Anahí Espíndola (anahiesp[at]umd.edu). Applications received before September 28th, 2018 will be fully considered, and the selected candidates will be invited to apply to the Department’s Graduate program. Application and acceptance by the University of Maryland Graduate program is required. For questions, email Prof. Espíndola (anahiesp[at]umd.edu).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Learn about the lab: www.anahiespindola.github.io
Contact: Prof. Anahí Espíndola,
anahiesp[at]umd.edu

Anahi Espindola <anahiesp@umd.edu>

UMontreal EvolBiol Bioinformatics

PhD POSITION : EVOLUTIONARY BIOLOGY/BIO-INFORMATICS

The position : The Breton lab (University of Montreal) is looking for an ambitious and highly motivated PhD student interested in understanding the genetic and epigenetic mechanisms of sex determination in the marine mussel *Mytilus edulis*.

PROJECT : The blue mussel *Mytilus edulis* is the most important cultured mollusc and therefore a major economic driver in the Gulf of St. Lawrence (Fisheries and Oceans Canada), and one of the most important in the world. Once successful in southern North Carolina, *M. edulis* has undergone a worrying decline in recent years in the Atlantic Provinces and the United States. Different hypotheses have been proposed to explain the reasons for this decline: overexploitation, ocean acidification, pollution, diseases, increased predators and global warming. Notably, global warming has been used as a hypothesis in several other studies to explain the decline of blue mussel populations, a result that could be attributable, among other things, to a drastic change in the sex ratio (i.e. the ratio of males and females), which could jeopardize the viability of certain populations. Indeed, marine mussels and oysters are known to have a sex ratio regulated by the environment (temperature and/or food). However, unlike oysters, very few studies have focused on sex determination mechanisms in marine mussels. A major reason for studying sexual determinism in mussels relates to their economic and nutritional importance. It is widely accepted that the success of livestock operations is largely related to the characteristics of the breeding populations (natural or captive), and in particular the need to control sex ratios, reproduction periods, fecundity and fertility.

This FRQNT-funded project aims to better understand the genetic and epigenetic mechanisms of sex determination in *Mytilus edulis*. Therefore, the successful applicant should have experience or a strong interest in bioinformatics, evolutionary biology and molecular biology.

Funding (17K/yr) is available to support the successful candidate for three years in addition to a limited travel budget. Expected start date is May 2019 or September 2019. The Université de Montréal is a French language institution where graduate work may be undertaken in

English or French.

Interested students should contact s.breton@umontreal.ca and attach a CV, academic transcript, contact details of two academic referees, and a brief description of their research interests.

The position will remain open until a suitable candidate is found.

Please note that only those selected for an interview (Skype or telephone) will be contacted. Preference will be given to Canadian citizens and permanent residents.

[sophie.breton <breton.sophie@gmail.com>](mailto:sophie.breton@gmail.com)

UOldenburg PlantFungiEvolution

PhD student position

E 13 TV-L, 65 %

at the Plant Biodiversity and Evolution Group (AG Prof. D. Albach), Univ. of Oldenburg

We invite applications for a 3-year PhD position in a DFG-funded project as part of the research unit DynaCom. In this research unit we will investigate biodiversity dynamics in the Wadden Sea using theoretical and experimental approaches (<http://www.uni-oldenburg.de/news/art/inseeln-der-vielfalt-3621/>).

In our project we will establish the relationship between root traits, polyploidy and fungal colonization to understand processes facilitating establishment of plants in this highly dynamic environment. Methods to be employed comprise High-throughput sequencing of fungal root communities, greenhouse experiments, flow cytometry and plant anatomy. The project will be co-supervised by Prof. Dirk Albach (<http://www.plant-evol.uni-oldenburg.de>), Dr. Rodica Pena (<https://www.uni-goettingen.de/de/474320.html>) and Prof. Gerhard Zotz (<https://www.uni-oldenburg.de/fun-eco>).

Required education/skills: - Academic university degree (Master or equivalent) Master in the field of Plant Ecology or Microbial molecular ecology or equivalent in Biology or a related discipline - Skills in molecular methods (PCR, DNA sequencing) and bioinformatics - Strong interest in field and greenhouse work and multidisciplinary approaches - Scientific precision and reasoning, motivation and enthusiasm. - Strong capacity of initiative and practical sense in the work - Organizational skills and team spirit because of close cooperation

in the research group - Fluency in written and spoken English

The Carl von Ossietzky University of Oldenburg is dedicated to increasing the percentage of women in science. Therefore, female candidates are particularly encouraged to apply. In accordance with Lower Saxony legal regulations (NHG Å§21), equally qualified female candidates will be given preferences. Applicants with disabilities will be given preference in case of equal qualification.

Application

Applications should be sent with all the usual documents (included in a single pdf file) no later than September, 20th, 2018 to dirk.albach@uni-oldenburg.de. Starting date is January, 1st, 2019. For further information, please contact dirk.albach@uni-oldenburg.de

“Prof. Dr. Dirk Carl Albach” <dirk.albach@uni-oldenburg.de>

UOtago FishEpigenetics

PhD position: Environmental epigenetics in zebrafish

Are you interested in a PhD in Genetics? Do you want to become an expert in bioinformatics? Do you want to join the largest collection of genetics researchers in New Zealand?

We seek a highly motivated and enthusiastic student to investigate how environmental challenges and experiences affect transgenerational epigenetic inheritance, analyzing both the methylome and transcriptome of subsequent generations. This work uses the vertebrate model, the zebrafish (*Danio rerio*), extensive experimental work manipulating environmental exposures, quantitative phenotyping to assess the behaviour and life-history of multiple generations, and next-generation sequencing to identify key candidate genes for transgenerational effects. The student can focus solely on bioinformatics or can undertake research that incorporates both bioinformatics and experimental laboratory work.

The student will join the Behavioural & Evolutionary Ecology Group, led by Dr. Sheri Johnson, in the Zoology Department at the University of Otago in Dunedin, New Zealand. This project also involves a multidisciplinary team of collaborators: Prof Neil Gemmill (U. Otago), Dr Tim Hore (U. Otago), A/Prof Shinichi Nakagawa (U. New South Wales), and A/Prof Simone Immler

(Uppsala University).

Selection criteria: We seek a student with an exceptional academic record, a keen interest in behavioural ecology and/or evolutionary biology, experience with bioinformatics analyses, and a demonstrated ability in written and oral communication. The ideal candidate is expected to hold a relevant Hons / MSc degree and must be eligible to enroll in the University of Otago's PhD (3 year) programme.

Application details: If you are interested in joining our exciting project at Otago, please send an e-mail with an expression of interest, your CV and academic transcript to Sheri Johnson (sheri.johnson@otago.ac.nz). High quality applicants will need to apply for an Otago PhD scholarship, which covers tuition and provides a stipend (\$25000 NZD/year). International (i.e. non-New Zealand resident) students are welcome and encouraged to apply.

For information on PhD study at the University of Otago, including entry requirements, see: <http://www.otago.ac.nz/postgraduate/-index.html> For information on Genetics @ Otago, see: <https://www.otago.ac.nz/genetics/-postgraduate/index.html> For information on the Department of Zoology, see: <http://www.otago.ac.nz/zoology/> "sheri.johnson@otago.ac.nz" <sheri.johnson@otago.ac.nz>

USunshineCoast EvolutionBiomechanics

PhD Position in Musculo-skeletal modelling in lizards, University of the Sunshine Coast, Australia.

The Clemente Lab at the University of the Sunshine Coast, Australia is seeking outstanding applicants for funded PhD scholarships.

Our research focuses on the relationship between form, function and ecology of living and extinct animals. One fundamental goal in evolutionary biology is to understand how size can constrain the evolution of morphological traits and limit the ability to exploit ecological niches. Size influences all

biological functions from cellular respiration, up to how fast an animals can run or climb. Yet to completely understand the influence of size on performance, we require information on the integration of multiple systems, including the nervous, muscular and skeletal systems.

The PhD project will contribute to research that investigates the neuromuscular and biomechanical mechanisms associated with changes in body size using varanid lizards as a model. We have collected an extensive morphological dataset for this group including the muscle architecture of varanid lizards ranging from the smallest (7.6 g *Varanus brevicauda*) to the largest extant species (40 kg *Varanus komodoensis*), as well as their maximum speeds. We will use musculoskeletal models of varanid lizards in OpenSim to predict higher level biological parameters (e.g. running speed) in both living and extinct species. We will be able to scale our model up or down, exploring size, or change its shape (e.g. limb length). This will allow us to understand what the limitations to size are, in biological systems, and at what size certain structures no longer work. This research will have direct implications for understanding evolution as a process of optimisation.

Essential qualities for candidates include:

- strong computational and analytical skills in biomechanics
- experience using biomechanical assessment tools (e.g. high speed video, force plates)

Preferred qualities for candidates include:

- interpersonal skills to work effectively with patients, research subjects, team members, and project collaborators.
- excellent critical thinking skills, ability to work independently
- research experience and practical knowledge of research principles is required whether through previous internship, work experience, or coursework.
- interest or previous experience in musculo-skeletal modelling, e.g. SIMM/ OpenSim.
- interest in evolutionary theory

The Clemente Laboratory (<https://www.usc.edu.au/-explore/structure/faculty-of-science-health-education-and-engineering/staff/dr-christofer-clemente>) is part of the Animal Ecology Lab within the University of Sunshine Coast. We are located on the Sunshine Coast, approximately an hour north of Brisbane Queensland on the Sippy Downs campus.

Course fees and a living stipend (currently \$26,300 AUD per annum, tax free) will be included as part of the scholarship for up to two years.

The opportunity is open to both Australian/New Zealand nationals and international candidates, however exceptional international candidates will be considered (with top-up scholarships available to cover international tuition fees).

For queries or if you are interested in applying please contact

Christofer Clemente, PhD, School of Science and Engineering,

cclement@usc.edu.au with your CV.

To apply see the link below

<https://www.usc.edu.au/learn/what-will-i-pay/-scholarships/research-scholarships/understanding-evolution-in-natural-systems-using-models> **Un-**
derstanding Evolution in Natural Systems Using Models ... < <https://www.usc.edu.au/learn/what-will-i-pay/scholarships/research-scholarships/understanding-evolution-in-natural-systems-using-models> > www.usc.edu.au Our research focuses on the relationship between form, function and ecology of living and extinct animals. One fundamental goal in evolutionary biology is to understand how size can constrain the evolution of morphological traits and limit the ability to exploit ecological niches.

USC, Locked Bag 4, Maroochydore DC, Queensland, 4558 Australia. CRICOS Provider No: 01595D Please consider the environment before printing this email. This email is confidential. If received in error, please delete it from your system.

cclement@usc.edu.au

UVermont **EvoGenomicsPhysiology**

PhD Positions in Evolutionary Genomics and Physiology

The Lockwood Lab at the University of Vermont invites applications for two PhD positions in evolutionary genomics and physiology. Students will participate in a set of NSF-funded projects to examine the genomics and physiology of thermal adaptation in *Drosophila melanogaster*. The goal of this work is to integrate genomic mapping, transcriptomics, protein biochemistry, and confocal fluorescence microscopy to identify the genetic and physiological bases of divergence in embryonic thermal tolerance among temperate and tropical populations. See our recent work in the *Journal of Evolutionary Biology* (Lockwood et al. 2018, doi: 10.1111/jeb.13234).

Successful candidates will have strong academic records, meaningful previous research experience, and strong interests in evolutionary genetics, genomics, and ecological physiology. Experience working with *Drosophila* is

a plus, but not required.

Applicants are also encouraged to apply for acceptance into the QuEST program at the University of Vermont. QuEST is an NSF-funded National Research Training grant in Quantitative and Evolutionary STEM training (QuEST). The QuEST program provides doctoral students with foundational training in quantitative data analysis and modeling, fellowship support, and internship placements to apply evolutionary principles toward solving real-world problems.

For more information about the QuEST program: <https://www.uvm.edu/quest> The University of Vermont offers a stimulating academic environment, with a diverse set of faculty in the life sciences and a collaborative atmosphere that bridges multiple departments. Burlington and the surrounding area offer a high quality of life, thriving on local food, music, international culture, and outdoor activities year-round.

Please email inquiries to Brent.Lockwood@uvm.edu. Please include a CV, description of your background, and why you are excited about this project.

Applications are currently being accepted. The application to the graduate program at University of Vermont can be found here: <https://www.applyweb.com/uvmg/-index.ftl>. The application to the QuEST program can be found here: <https://www.uvm.edu/quest/forms/-quest-application>. The deadline to apply for Fall 2019 is December 15, 2018.

Brent L. Lockwood Assistant Professor Department of Biology University of Vermont

website: <http://www.uvm.edu/~bblockwo/> email: Brent.Lockwood@uvm.edu

“Brent L. Lockwood” <Brent.Lockwood@uvm.edu>

Vienna FrogSexualSelection

Fully-funded PhD position: Animal personality and sexual selection

In the recently funded project “The interplay between animal personality and sexual selection” we will investigate how personality differences are reflected in behaviours such as male-male competition and space use, mate choice, and parental care; and how these differences ultimately affect an individual’s survival and reproductive performance. The project will focus on the model species *Allobates femoralis*, a Neotropical poison

frog with a prolonged breeding season, pronounced male territoriality, and male parental care. The study will be carried out in an experimental island population in French Guiana. Complimentary experiments can be carried out in the laboratory frog population at the University of Vienna. One unique feature of this project is our ability to monitor, assay, and track an entire animal population in its natural habitat in an island setup over several generations. By identifying respective costs and benefits of specific personality profiles, the proposed project will help us to better understand how behavioural variation can persist over evolutionary time.

We are looking for a highly motivated PhD student, who will be responsible for conducting the field experiments (typically from end of January to end of April each year), molecular analyses (parentage, relatedness), and/or hormonal and bioacoustics analyses. Particular focus of the PhD thesis will be negotiated depending on the candidate's specific interests and/or skills. However, priority will be given to applicants with previous experience working in tropical environments, frogs, animal personality, molecular analyses, hormonal analyses, and/or bioacoustics.

Our lab welcomes applications from outstanding students with a passion for research and field work. The candidate must be willing and capable to spend up to 3-4 months each year in a tropical research station under relatively simple living conditions (sleeping in hammock, restricted privacy, simple sanitary facilities). Fieldwork can get physically challenging and the river island can only be reached via a zipline or paddling boat.

Salary: according to the rates of the Austrian Science Fund (FWF) for PhD students: 30 hours/week, Å 2.112,40 gross salary per month, incl. health care.

Our lab is based at the Messerli Research Institute (Unit of Comparative Cognition), from the University of Veterinary Medicine Vienna. Other research groups in this unit focus on canines (dogs and wolves), farm animals (pig, horse, pigeon, chicken) and also other wildlife (kea, Goffin cockatoo), to employ a highly comparative and integrative approach in studying animal behaviour and cognition.

See following links for further information:

PI website: <https://www.evaringler.info/> Project website: <https://www.femoralisproject.info/> Austrian Science Fund: <https://www.fwf.ac.at> Field site: <http://www.nouragues.cnrs.fr/> Messerli Research Institute: <https://www.vetmeduni.ac.at/en/messerli-science/cognition/> Contact: Eva Ringler, Messerli Research Institute, University of Veterinary Medicine Vi-

enna, Vienna, Austria. [eva.ringler\[at\]vetmeduni.ac.at](mailto:eva.ringler[at]vetmeduni.ac.at)

Please send a CV, master certificate (taken courses and grades), and short (1 page) motivation letter until 24.08.2018 to [eva.ringler\[at\]vetmeduni.ac.at](mailto:eva.ringler[at]vetmeduni.ac.at)

Expected starting date: 01.10.2018

Eva Ringler <eva.ringler@univie.ac.at>

WashingtonStateU PlantMicrobe EcoEvo

The Friesen lab at Washington State University (<https://plantpath.wsu.edu/people/faculty/maren-friesen/>) pursues research at the intersection of genomics, evolution, and ecology using plant-diazotroph interactions as a model system. PhD positions are available with the possibility of contributing to ongoing projects in legume-rhizobia and grass-associative nitrogen fixer interactions, with the expectation that applicants will simultaneously develop independent lines of inquiry and apply for independent funding. We are seeking candidates with demonstrated facility in quantitative methods and written communication, as well as interest in interdisciplinary research and excitement for contributing to a collaborative and inspiring lab environment.

The lab has access to excellent facilities at WSU for plant growth, phenomics, and genomics. We are part of the vibrant intellectual community spanning WSU and U Idaho (7 miles away with a bike path). The Palouse is a stunning landscape with local hiking and outdoor adventures in WA, ID, and OR within a 2-3h radius of Pullman/Moscow.

Please contact me (maren.l.friesen@gmail.com) with CV and brief statement of interest and include "Friesen Lab" in the subject of your email; I will be at Evolution 2018 if you'd like to meet up to chat about opportunities in person.

Maren L. Friesen Assistant Professor, Departments of Plant Pathology & Crop and Soil Sciences Molecular Plant Sciences Graduate Program Washington State University 345 Johnson Hall, Pullman, WA USA 99164 <https://maren.github.io/friesenlab-website/> <https://plantpath.wsu.edu/people/faculty/maren-friesen/> Adjunct Assistant Professor, Department of Plant Biology Michigan State University phone: +1 (323) 454-3023 maren.l.friesen@gmail.com

Jobs

AHRI Ethiopia Bioinformatics	35	Okinawa 2ResTech AntBiodiversity	55
ArizonaStateU BiodiversityInformatician	36	PrincetonU Tech DrosophilaMicro	56
ArizonaStateU CryoCollectionsManager	37	RoslinInst Edinburgh EvolutionaryProgammer ...	56
BerkeleyMuseum ResidentDirector	37	RoyalBotanicGardens Kew Bioinformatician	57
CalPoly SanLuisObispo VertebrateSpatialEvolEcol	38	RZSS Edinburgh AppliedConservationGenetics ...	57
CarnegieM Pittsburgh CollectionsManager	39	SanFranciscoStateU EvolutionaryBiologist	58
ClemsonU 3 EvolutionaryBiologists	40	SGN Frankfurt BiodiversityGenomics	58
ClemsonU DrosophilaResTech	41	SmithCollege Massachusetts GeneticistGenomicist	59
ColbyCollege EvolutionaryEcol	42	StMarysCollegeMD EvolutionaryNeurobiol	60
CornellU LabTech Drosophlla GSC evolution	42	UCentralFlorida GenomicsBioinformatics	60
CSIRO Canberra GenomicSelection	43	UIdaho HerbariumCollectionsManager	61
EastCarolinaU ChairDeptBiol	44	UIllinois EvolutionaryPhysiology	63
EckerdCollege MolecularAdaptations	45	UMarylandCollegePark LabManager MolecularGe-	63
FredHutchinson ViralDiseases	46	nomics	63
GulbenkianInst Portugal EvolutionaryBiology	47	UMassachusetts Lowell EvolutionaryEcology	64
Harvard EvolutionMarineAnimals	47	UMichigan FishCollectionManager DeadlineExt ...	65
HarvardU EarthHistory	48	UMichiganHerbarium CollectionManager	66
IntegralGenomics 2-4mnth Bioinformatician	48	UMichigan microCT Morphology	66
LehighU Biostatistics	49	UNorthTexas Biostatistics	67
MaxPlanck Ploen 2GroupLeaders EvolutionaryBiol	49	USouthCarolina EvolutionaryBiology	67
MPI Konstanz ResCoordinator EvolutionBehaviour	50	UtahStateU EvoDevo	68
MuseumFuerNaturkunde Berlin BiodiversityOfLepi-	51	UTexasArlington EvolDevo	69
doptera	51	UWaikato AnimalBehaviour	70
NatlMuseumsScotland 30mnths VertebrateBiobank	52	UWashington EvolutionaryPhysiology	70
NIAB Cambridge QuantitativeGeneticist	53	WichitaStateU AquaticVertebrateEvolBiol	71
NorthernArizonaU Flagstaff ViralEvolution	54	YaleU EvolutionAnimalBehaviour	71
OhioStateU CollectionsManager	54		

AHRI Ethiopia Bioinformatics

Senior Bioinformatics scientist

The Armauer Hansen Research Institute (AHRI) has a position open for a senior bioinformatics scientist holding a Ph.D. in Bioinformatics /Computer science/ computational biology/Mathematics, with proven experience in biomedical research and who is passionate about making a difference in human health and pathogen genomics. This new post offers an exciting opportunity to do cutting edge research whilst building bioinformatics capacity in Africa. TBGEN Africa is part of the Human Heredity and Health in Africa (H3Africa) Initiative funded by the Alliance for Accelerating Excellence in

Science in Africa (AESA) working in partnership with the Wellcome Trust. The project will investigate host-pathogen interactions in tuberculosis in Ethiopia, Sudan, Eritrea and Cameroon. The Wellcome Trust Sanger Institute and H3ABioNet are TBGENAfrica collaborators. The candidate is expected to have expert level competence in developing computational algorithms, performing data-mining, applying machine-learning and statistical modeling in genetic data. The post-holder will, amongst other things, participate in designing analytical and NGS lab studies, perform data analysis in support of R&D activities and also play a wider role in developing the newly-established Regional Bioinformatics Training Centre at AHRI. The Bioinformatics Scientist will have an opportunity to work on human and pathogen NGS data, in a collaborative and multi-disciplinary research environment. The candidate will engage in developing quality research in translational

genomics and engage in high level regional capacity building in bioinformatics in Africa.

Essential Duties & Responsibilities:

- Apply machine-learning techniques and statistical modeling to learn patterns, select features, and classify genetic data from Next Generation Sequencing and SNP Bead Array. Ability to develop new algorithms to address complex data analysis questions is an asset
- Work independently, lead problem-solving efforts, and mentor junior team members.
- Participate (at the senior level lead) in designing analytical and NGS lab studies.
- Performing data analysis in support of R&D activities.
- Communicating effectively with laboratory researchers to define required solutions.
- Identify and formulate quality control metrics and participate in related development activities.

Requirements:

- Ph.D. in a quantitative field of science (Bioinformatics, Computational biology, or equivalent).
- Ph.D. with a minimum of 3+ years of experience (this is a non-entry-level position and relevant research experience is essential).
- Background knowledge in any of the life sciences (molecular and cellular biology, chemistry, genetics, immunology, epidemiology)
- Skills in text mining, ontology, data integration, machine learning, information architecture. Solid background/training in algorithm development, machine-learning, and software development an asset.
- Solid understanding of high-throughput sequencing, bioinformatics pipeline design and genetic information.
- Proficient in working with High-Performance Computing (HPC).
- Excellent communication and interpersonal skills

Location: The post-holder will be based in Addis Ababa but is expected to travel between partner countries to support training and research. Close interaction with advanced Genomics and Bioinformatics laboratories in Africa and elsewhere is encouraged.

Salary and benefits: Negotiable according to the qualifications of the applicant. We offer an international salary commensurate with the responsibilities of the post. The Institute will provide a well-furnished and equipped staff

house in a large private garden located in a pleasant environment. Staff houses are linked with a 24-hour broadband wireless internet connectivity. Education allowance is offered for children. Several international schools are available in the city. Living expenses in Ethiopia are modest.

Duration of employment: three years, renewable.

Contacts: Interested applicants are invited to submit their CV and 2 letters of reference by email to Human Resources Department, Armauer Hansen Research Institute at wochemulat@gmail.com with a copy to Dr Taye Tolera, Director General, email: tayetolera@yahoo.com and Dr Abraham Aseffa, aseffaa@gmail.com or alternatively at aseffaa@ahri.gov.et.

Application deadline: 6 September 2018.

Abraham Aseffa, MD, PhD Acting Deputy Director General Research and Innovation AHRI Kolfe Keranyo, Jimma Road, ALERT Compound Tel: +251 11 348 3752 Mobile: +251 911 247525 Office email: SDirector@ahri.gov.et alternate email: aseffaa@ahri.gov.et

Abraham <aseffaa@gmail.com>

ArizonaStateU BiodiversityInformatician

E-mail inquiries are encouraged!

—
Biodiversity Informatician (Database Analyst)

The Arizona State University (ASU) School of Life Sciences and Biodiversity Knowledge Integration Center (BioKIC) is seeking a Biodiversity Informatician for the National Ecological Observatory Network (NEON) Biorepository. NEON (<https://www.neonscience.org/>) is a continental-scale ecological observation facility, sponsored by the National Science Foundation and operated by Battelle. The project is expected to run for 30 years. For each project year, the NEON Biorepository at ASU will receive, process, store, and make available an average of 100,000 biodiversity occurrences sampled at more than 80 sites across the United States. The diverse samples include DNA extractions, frozen soil samples, bulk and pinned insect collections, herbarium vouchers, and partial or entire vertebrate specimens, among others. A high rate of sample use for NEON-related research projects is expected. The NEON Biorepository will facilitate this by creating a data portal - sustained by the

open source Symbiota software platform - to support occurrence discovery, tracking of sample transactions, integration of collections data and usage statistics (publications, etc.), and by maintaining high-quality biodiversity data in compliance with international standards. The biodiversity informatician will play a critical role in providing and refining these services to benefit the greater NEON research community.

Envisioned start date: November 1st, 2018.

For more position details and to apply,

1. Go to: <https://cfo.asu.edu/applicant> 2. Click on “External Staff”, and 3. Search for “44904BR”.

Nico M. Franz, Ph.D. School of Life Sciences, PO Box 874108 Arizona State University, Tempe, AZ 85287-4108

E-mail: nico.franz@asu.edu Web: <https://isearch.asu.edu/profile/1804402> “nico.franz@asu.edu” <nico.franz@asu.edu>

tegration of collections data and usage statistics, and by maintaining or linking to high-quality biodiversity and molecular data, in compliance with international standards. The cryo-collections manager will play a central role in coordinating these tasks, with particular focus on designing and maintaining the molecular/genomic collections.

Envisioned start date: November 1st, 2018.

For more position details and instruction to apply,

1. Go to: <https://cfo.asu.edu/applicant> 2. Click on “External Staff”, and 3. Search for “44719BR”.

Nico M. Franz, Ph.D.

School of Life Sciences, PO Box 874108

Arizona State University, Tempe, AZ 85287-4108

E-mail: nico.franz@asu.edu

Web: <https://isearch.asu.edu/profile/1804402> “nico.franz@asu.edu” <nico.franz@asu.edu>

ArizonaStateU CryoCollectionsManager

Cryo-Collections Manager / Research Specialist Senior

The Arizona State University (ASU) School of Life Sciences and Biodiversity Knowledge Integration Center (BioKIC) are seeking a Cryo-Collections Manager for the National Ecological Observatory Network (NEON) Biorepository. NEON (<https://www.neonscience.org/>) is a continental-scale ecological observation facility, sponsored by the National Science Foundation and operated by Battelle. The project is expected to run for 30 years. For each project year, the NEON Biorepository at ASU will receive, process, store, and make available an average of 100,000 biodiversity occurrences sampled at more than 80 sites across the United States. The diverse samples include DNA extractions, frozen soil samples, bulk and pinned insect collections, herbarium vouchers, and partial or entire vertebrate specimens, among others. Large portions of samples are designated for cryo-storage - using a combination of ultralow and liquid nitrogen (LN2) freezers - to ensure long-term preservation and suitability for molecular/genomic research. A high rate of sample use for NEON-related research projects is expected. The NEON Biorepository will facilitate this by creating a data portal to support occurrence discovery, tracking of sample transactions, in-

BerkeleyMuseum ResidentDirector

Full details at <https://aprecruit.berkeley.edu/apply/-JPF01832> . Apply by September 11, 2018 to ensure full consideration by the committee. Applications will continue to be accepted until September 28th, 2018, but those received after the review date will only be considered if the position has not yet been filled.

The Museum of Vertebrate Zoology at the University of California, Berkeley, is seeking applications for a Resident Director for the Hastings Natural History Reservation. This position is in the Academic Coordinator 2 Series, Steps 1-10. The position is full-time (100% appointment); salary is commensurate with experience. Hastings is a 2500-acre field station located in the Carmel Valley of Monterey County, CA. As part of the University of California Natural Reserve System (<https://ucnrs.org>), Hastings serves as an internationally recognized center for field research and field-based educational activities. Additional information regarding Hastings is available at <http://hastingsreserve.org>

Responsibilities: The Resident Director will oversee all day-to-day aspects of the operations at Hastings, including maintenance and development of the physical facilities, coordination of visitor activities, and management of financial resources. In addition, the Resident Director is expected to engage in significant public outreach efforts such as (1) interacting with local land

trusts, NGOs, and government agencies to promote understanding of the Reservation and (2) encouraging use of Hastings for workshops, symposia, and small conferences that are consistent with the research and education goals of the Reservation. The Resident Director will also play an active role in fundraising to support the Reservation, including preparing competitive grant proposals and interfacing with campus fundraising efforts. The Resident Director will supervise the activities of the Reserve Steward and will work closely with the Faculty Director at the MVZ to shape the research and educational goals of the Reservation.

Minimum/Basic Qualifications required at the time of application: A Bachelors' degree (or equivalent international degree) is required at the time of application

Preferred Qualifications: A graduate degree (M.S or Ph.D. in biology or equivalent international degree) is strongly desired, ideally with an emphasis in ecology, conservation, or ecosystem management. Experience with contractors and maintenance of physical facilities is preferred.

Salary: This is a full-time position. Salary is commensurate with experience.

How to apply: To apply, please go to the following link: <http://aprecruit.berkeley.edu/apply/JPF01832> Applicants should submit the following materials:

- A cover letter - A curriculum vitae - 3 Letters of recommendation

The cover letter should address both the applicant's qualifications and their vision for Hastings within the context of the academic and research missions of the MVZ and the NRS. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (e.g., dossier service or career center) to the UC Berkeley statement of confidentiality available at <http://apo.berkeley.edu/evalltr.html> prior to submitting their letters. Application materials should be uploaded to <https://aprecruit.berkeley.edu/apply>.

This position will be open until filled. The anticipated start date is 10/01/2018. Questions regarding the nature of the position should be addressed to the Faculty Director, Eileen Lacey (ealacey@berkeley.edu). Questions regarding the application process and online submission of documents should be addressed to Malaysha Nolan (m.mnolan@berkeley.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: <http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>.

– *Museum of Vertebrate Zoology* 3101 Valley Life Sciences Building University of California Berkeley, CA 94720-3160 *Call*: 510.642.3567 *Fax*: 510.643.8238

mvz.berkeley.edu

mvzarchives.wordpress.com

Facebook < <https://www.facebook.com/BerkeleyMVZ/> > Twitter < <https://twitter.com/MVZUCB> >

— / —

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>

CalPoly SanLuisObispo VertebrateSpatialEvolEcol

Evolutionary ecologists encouraged to apply....

VERTEBRATE SPATIAL ECOLOGIST TENURE TRACK POSITION

The Biological Sciences Department in the College of Science and Mathematics at California Polytechnic State University, San Luis Obispo is seeking a full-time, academic year, tenure-track Vertebrate Spatial Ecologist at the Assistant Professor rank, beginning September 2019.

Excellent candidates will create synergy in the Department by having expertise in one or more of the following areas: animal habitat use and selection, movement/migration/distribution ecology, land/seascape ecology and macroecology. Empiricists with strong analytical programming and geo-statistical skills and interests in applied marine and/or terrestrial ecology, conservation and management are preferred, especially those who can involve undergraduates in cutting-edge research to understand vertebrate animal distributions and movements. Teaching responsibilities will include a non-major course in Wildlife Conservation Biology, upper division courses in Wildlife Ecology and/or Conservation Biology, and an upper division or graduate

course in Spatial Ecology. A Ph.D. in a relevant field and evidence of excellent teaching (preferably at the college level) are required at time of hiring. Salary is commensurate with qualifications and experience.

To apply, please visit WWW.CALPOLYJOBS.ORG and complete the required online faculty application form and submit to Requisition# 104968. Attach the following required materials to your faculty application: Cover Letter addressing your relevant teaching experience; Curriculum Vitae; Teaching Philosophy; Statement of Professional Goals; a PDF file of a recent Publication or Submitted Manuscript; a Diversity Statement describing how your teaching, research, and/or service at Cal Poly will demonstrate a commitment to diversity and inclusion; unofficial transcript of highest degree earned (official transcripts are required upon hiring). Be prepared to provide 3 professional references with names and email addresses when completing the faculty application. After your application packet is reviewed, your references will receive an email containing a weblink for uploading a letter of recommendation. Review of applications begins September 10, 2018. Complete applications received after that date may be considered.

The Biological Sciences Department offers programs leading to three Bachelor of Science degrees (Biological Sciences, Microbiology, and Marine Sciences), a Master of Science in Biological Sciences including a specialization in Regenerative Medicine, and minors in Biology, Biotechnology, and Microbiology. In keeping with the Learn by Doing tradition at Cal Poly, our undergraduates are strongly encouraged to participate in research projects to fulfill the senior project requirement for graduation. The department also offers courses to satisfy general education and breadth requirements.

At California Polytechnic State University, San Luis Obispo, we believe that cultivating an environment that embraces and promotes diversity is fundamental to the success of our students, our employees and our community. Bringing people together from different backgrounds, experiences and value systems fosters the innovative and creative thinking that exemplifies Cal Poly's values of free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social and environmental responsibility.

Cal Poly's commitment to diversity informs our efforts in recruitment, hiring and retention. California Polytechnic State University is an affirmative action/equal opportunity employer.

Dena Grossenbacher <denagros@gmail.com>

CarnegieM Pittsburgh CollectionsManager

The Carnegie Museum of Natural History has an immediate opening for a COLLECTIONS MANAGER OF AMPHIBIANS AND REPTILES. This position will oversee the direct care, organization, management, and improved accessibility of approximately 242,000 preserved specimens of amphibians and reptiles and their associated data, based on current best museum practices. While there may be opportunities to assist with or conduct research, these will be constrained by management priorities of the collection.

Deadline to submit application is September 30, 2018. Interested candidates encouraged to apply at: www.carnegiemuseums.org/opportunities Click Search Jobs; Click Apply Now for Collection Manager Carnegie Museum of Natural History - Oakland Req#81

Education and Experience: Master's in biology (with an emphasis in herpetology), ecology, or evolution with at least 3 years of collection experience, or a Bachelor's degree in an applicable field and 5 years collection experience. A strong background in herpetology is required, including familiarity with other herpetology collections. The successful candidate should also demonstrate knowledge of taxonomic principles and collection management, strong organizational skills, and supervisory skills for overseeing collection personnel, including technicians, volunteers, students, and interns. A proven track record of improvement, development, promotion and maximized use of collections, as well as database and genetic resource management skills are essential. Imaging skills are highly desirable.

The successful candidate will have a Master's degree in a natural science field AND at least five years of work experience involving day-to-day management of collections

Knowledge, Skills, and Abilities: The successful applicant must have demonstrated expertise in herpetology, including knowledge of taxonomy of global and local (Pennsylvania) amphibians and reptiles, and have experience in natural history collection use and management. Candidates should be familiar with Microsoft Access or similar database platforms, and with external biological data repositories including VertNet and iDigBio. Establishing and curating a genetic resources (tissue)

collection of amphibians and reptiles will also be important components of this position. The Collections Manager of Amphibians and Reptiles will be expected to serve as a strong advocate for natural history collections, and must be able to effectively communicate their importance to members of the public and scientific community alike. Exceptional organizational skills, with an inherent dedication to detail, are required.

Essential Functions Curation (care, maintenance, improvement, and growth of collection, as well as database management, and processing loans) Service (including grant writing), outreach, & professional development Assisting curator with research, as time permits

Duties and Responsibilities: Curate physical specimens, including specimen preparation, and organization, care, and housing of specimens and associated tissues. Conduct and coordinate processing of new and existing collections, including physical preparation, labeling, cataloging, accessioning, and loans. Establish priorities for collection care and management in coordination with curatorial and research staff. Develop and implement collections management policies that are aligned with best museum practices. Provide collection access to the research community, including assisting visitors to the collection and processing specimen loans. Digitize and document collections, including databasing and capturing digital images of scientific labels and specimens. Digitize and document section of Amphibians & Reptiles correspondence, archives, publications, and loan records using collection management software. Maintain electronic and digital records, and update taxonomic and auxiliary information. Apply taxonomic expertise to improve identifications of specimens in the collection. Collaborate and liaise with external biological data repositories and partners, including VertNet, iDigBio, and GBIF. Provide periodic support to the museum community, such as serving on committees, or working with exhibits and education teams to develop herpetology-related content for the broader museum community. Train and supervise technicians, students, interns, and volunteers working in the collection. Collaborate with Curator and other museum staff to develop grant proposals for collections improvements and other collection-based initiatives. Provide support for promotional and institutional advancement activities, including opportunities to engage with donors and participate in tours of the collection.

Physical Requirements While performing the duties of this job, the employee is frequently required to walk, sit, talk, and hear. The employee is occasionally required to use hands to handle specimens and operate tools or



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>

ClemsonU 3 EvolutionaryBiologists

— One of Three —

Clemson University seeks Organismal Biologist

The Department of Biological Sciences at Clemson University invites applications for three tenure-track Assistant Professor positions in (1) Microbiology, (2) Evolutionary Medicine, and (3) Organismal Biology, with an expected start date of August, 2019. We seek creative, interactive individuals who address cutting-edge research questions. The Department awards undergraduate and graduate degrees in Biological Sciences and Microbiology, as well as graduate degrees in Environmental Toxicology. The department of Biological Sciences is a founding member of the newly formed College of Science, a central player in both the university's strategic plan, ClemsonForward (<https://www.clemson.edu/forward/>) and the college's ScienceForward plan (<https://www.clemson.edu/science/about/scienceforward.html>). We invite applicants who will complement and enhance the Department's existing research strengths (<http://www.clemson.edu/science/departments/biosc/>).

Located on Lake Hartwell in the foothills of the Blue Ridge Mountains, Clemson University is South Carolina's public land-grant University. As a Carnegie R1 Institution, the University has excellent research resources including the globally ranked Palmetto high performance computing cluster, Sciences Genomics and Bioinformatics Facility, state-of-the-art light microscopy, electron microscopy, animal, or fish facilities, a multi-user analytical laboratory and metabolomics core, the Campbell Museum of Natural History, and the 17,500-acre Clemson Experimental Forest. There are many opportunities for collaboration across a wide group of partners on and off campus, including faculty in other departments in the College of Science, the College of Engineering, Computing and Applied Sciences, or other colleges at Clemson, USC School of Medicine in Greenville, Greenville Health System, and the Center for Human Genetics (Greenwood, SC).

The University and Department are committed to building a diverse and inclusive body of faculty scholars

dedicated to working and teaching in a multi-cultural environment (<http://www.clemson.edu/inclusion/>). We encourage applications from women, minorities, and individuals with a commitment to mentoring underrepresented demographics in the sciences. We are also supportive of the needs of dual career couples.

Successful candidates must hold a doctoral degree and have postdoctoral experience. Competitive candidates will demonstrate an ability to develop a vigorous and independent, externally funded and nationally recognized research program; demonstrate teaching excellence and a commitment to diversity inclusion; and participate in relevant undergraduate and graduate education programs.

We seek an organismal biologist using integrative and/or comparative approaches to examine fundamental biological questions. We especially encourage applicants whose work integrates across scales and utilizes big data approaches to understand biodiversity and processes of change.

QUALIFICATIONS

Successful candidates must hold a doctoral degree and have postdoctoral experience. Competitive candidates will demonstrate an ability to develop a vigorous and independent, externally funded and nationally recognized research program; demonstrate teaching excellence and a commitment to diversity inclusion; and participate in relevant undergraduate and graduate education programs.

APPLICATION INSTRUCTIONS

Applicants should submit the following items to the distinct Interfolio link listed for the position to which they apply: (1) letter of application; (2) CV; (3) statement of research interests and future plans; (4) statement of teaching interests and experience; (5) statement describing past experience and/or future plans to promote diversity and inclusion; and (6) up to three reprints in one PDF. Applicants should also arrange, through Interfolio, for three confidential letters of recommendation to be submitted. For full consideration, applications should be submitted by August 31, 2018. Review will continue until the positions are filled.

Inquiries should be directed to Dr. Christopher L. Parkinson (viper@clemson.edu).

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.

— / —

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>

ClemsonU DrosophilaResTech

The laboratories of Trudy Mackay and Robert Anholt at the new Clemson University Center for Human Genetics invite applications for a Drosophila Research Technician to support a newly awarded NIH grant. A major challenge of modern biology is to determine how DNA sequence variants give rise to phenotypic variation for complex organismal traits through modulation of regulatory gene networks. This research project seeks to reverse engineer natural genetic variation in Drosophila using CRISPR/Cas9 precise allelic replacement to functionally validate genetic associations of common and rare molecular variants and long non-coding RNAs with organismal phenotypes and transcriptional networks. The successful applicant will have previous experience in Drosophila genetics, genetic transformation, CRISPR/Cas9 gene editing, and basic molecular biology (PCR, genotyping). Salary will be commensurate with credentials and experience.

Enquiries should be addressed to Dr. Trudy F. C. Mackay, Self Family Endowed Professor and Director of the Center for Human Genetics, Clemson University, Self Regional Hall, 114 Gregor Mendel Circle, Greenwood, SC 29646 (tmackay@clemson.edu). Applications must include a cover letter explaining the qualifications for this position and the names of three references. The position is available immediately. Clemson University is an equal opportunity employer.

For more information, go to:

https://cujobs.clemson.edu/psc/ps/JOBS/EXT/-c/HRS_HRAM.HRS_APP_SCHJOB.GBL?Page=-HRS_APP_JBPST&Action=U&SiteId=1&FOCUS=-Applicant&JobOpeningId=103333&PostingSeq=1

Trudy F. C. Mackay, PhD, FRS Self Family Endowed Chair of Human Genetics Clemson Center for Human Genetics Department of Genetics and Biochemistry Clemson University Self Regional Hall

114 Gregor Mendel Circle Greenwood, SC 29646 Email: tmackay@clemsun.edu Tel: 864-889-0522

Trudy Mackay <trudy_mackay@ncsu.edu>

ColbyCollege EvolutionaryEcol

Assistant Professor of Biology - Ecologist Colby College - Waterville, ME

The Department of Biology at Colby College welcomes applications for a tenure-track position as Assistant Professor of Biology to begin September 1, 2019.

<https://apply.interfolio.com/53578> We seek an ecologist with a strong background in macroecology, evolutionary ecology, or community ecology, expertise in natural history, and an empirical research program amenable to participation by undergraduate students. A commitment to undergraduate education and a Ph.D. are expected; postdoctoral experience is desirable. We are especially interested in candidates who, through their research, teaching, and/or service, will promote diversity, inclusion and equity at Colby.

Teaching involves the equivalent of 4.5 courses per year, with laboratories constituting a portion of that load. The successful candidate will teach a 200-level ecology course with a field-based laboratory in some years, an elective course with a field-based laboratory in the candidate's area of specialization, and in our introductory biology course that focuses on evolution and diversity. An active research program, including supervision of undergraduate research, will be expected. An attractive startup package is available.

The location of Colby College in Central Maine provides access to unparalleled resources for teaching and research in ecology, with a 700-acre campus located in a matrix of forested and agricultural landscapes, and ready access to freshwater, marine, and montane habitats. Greenhouses, growth chambers, high-performance computing, and other modern facilities support ecological research. In addition to colleagues within the Biology department, Colby's Environmental Studies program, the Bigelow Laboratory for Ocean Sciences, local non-profits and state agencies provide potential collaborations.

Please submit a letter of application, a statement of teaching interests and philosophy including strategies for inclusivity, a research statement, curriculum vitae, undergraduate and graduate transcripts, and three letters

of recommendation to: <https://apply.interfolio.com/53578> Application review will begin October 12, 2018 and will continue until the position is filled.

Questions about this position should be directed to: bioecologysearch@colby.edu. For more information about Colby's Biology department, please visit: <http://www.colby.edu/bio/>. 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. Colby complies with Title IX, which prohibits discrimination on the basis of sex in an institution's education programs and activities. Questions regarding Title IX may be referred to Colby's Title IX coordinator or to the federal Office of Civil Rights. For more information about the College, please visit our website: www.colby.edu Dave Angelini <drangel@colby.edu>

CornellU LabTech Drosophila GSC evolution

Laboratory Technician Position open in the Aquadro lab at Cornell

The lab of Charles 'Chip' Aquadro in the Department of Molecular and Genetics is seeking a highly motivated candidate to work in a research lab dedicated to studying the molecular population genetics and functional genomics of genes that regulate germline stem cell maintenance and differentiation in *Drosophila*. Primary responsibilities will be supporting the research in the lab, overseeing maintenance of *Drosophila* stocks, and ordering. Additionally, the individual will be responsible for assisting in the generation and phenotypic analysis of genome edited (CRISPR/Cas9) mutations in germline stem cell genes in various *Drosophila* species. Analyses include evaluating reproductive function, tests of direct and indirect interactions with *Wolbachia*, and life history traits.

Responsibilities include but are not limited to assisting in conducting research experiments using techniques such as basic molecular biology (DNA isolation from *Drosophila* stocks as well as bacterial cell culture, bacterial cell transformation, plasmid DNA preparation), PCR amplification of genomic and plasmid DNA, cloning in bacterial cells (including Gibson Assembly), CRISPR/Cas9 gene editing in diverse *Drosophila* species, and light and fluorescent microscopy. General lab maintenance, ordering, and organization, as well as assisting in training incoming students and postdocs in relevant techniques and analyses are also important roles

This is a 12-month term appointment with the possibility of extension contingent on successful performance and continued funding (current NIH funding on this project runs through 2021).

Required Qualifications: Associate's degree or other formal training program of two years or equivalent; more than 1 year, but less than two years or equivalent combination of education and experience. Must be personable, flexible, proactive, demonstrated a positive 'can do' attitude, possess excellent organizational and communication skills and take pride in their work. Ability to develop effective working relationships with students, faculty and staff. Ability to maintain a comprehensive, up to date and accurate research lab notebook. Visual concentration, attention to detail and manual dexterity are required. Must be willing to learn new laboratory skills. Must be able to work independently as well as in a team environment to accomplish required tasks. Should be comfortable with basic computer programs such as MS Word and Excel. Familiar with basic molecular biological, cell biological, and biochemical techniques. Able to work under general supervision and proceed alone on regular tasks.

Preferred Qualifications: Bachelor's degree in biology, genetics, molecular biology, biochemistry, or cell biology, or related subject. Knowledge of genetics, evolutionary biology, molecular biology and basic computational biology a plus.

The Aquadro laboratory is part of the Department of Molecular Biology and Genetics on the Ithaca campus of Cornell University. The department has over 35 faculty and is housed in the Biotechnology Building, a state-of-the-art facility with individual laboratories and outstanding core research facilities (<http://www.biotech.cornell.edu/brc/brc/about/about>). The research and teaching interests of the department faculty include fundamental, as well as medically relevant, problems in molecular biology, genetics, genomics, population genetics, cell biology, biochemistry, development, and macromolecular structure. The faculty also play key

roles in life science and genomics research on campus.

The Aquadro lab is also part of the larger campus-wide Cornell Center for Comparative and Population Genomics (<http://3cpg.cornell.edu>) whose mission includes fostering research, education, and outreach in comparative and population genetics, and which brings together a vibrant and interactive group of over 300 faculty, postdocs, graduate students and staff who share a commitment to comparative and evolutionary genomic approach to the study of living systems.

For More Information about the position and to Apply, please go to the following link. All applications must be made through this online system: <https://cornell.wd1.myworkdayjobs.com/en-US/-CornellCareerPage/job/Ithaca-Main-Campus/Lab-Technician—Molecular-Biology—Genetics—Technician-III.WDR-00015912> More information about Chip Aquadro and his research can be found at the following URL: <https://mbg.cornell.edu/people/charles-aquadro/> Charles F. ('Chip') Aquadro Professor of Population Genetics

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

CSIRO Canberra Genomic Selection

Genomic Selection Research Scientist

* Are you a Research Scientist experienced in quantitative genetics? * Work on interesting projects with real-world application * Join CSIRO - Australia's premier science and technology research organisation

The Position

CSIRO's Agriculture and Food team are looking to appoint a Research Scientist within the Cotton Biotechnology Group.

As the successful candidate, you will be an innovative and forward thinking quantitative geneticist, who has at least four years of postdoc experience as a quantitative or population geneticist. In this role you will work closely with the Cotton Breeding and Molecular Breeding Technologies teams to develop and validate statistical approaches for predicting the field performance of cotton plants.

Find out more by viewing the full position description and selection criteria here: [Position description](#)

Your duties/responsibilities will include: * Incorporate novel approaches to scientific investigations by adapting and/or developing original concepts and ideas for new, existing and further research. * To collate, verify and store cotton genotype, pedigree, and field based phenotype and environmental data in accessible breeding databases such as AGROBASE, working in close collaboration with the teams generating the data to ensure that it remains relevant for both conventional and advanced genetic approaches to cotton improvement. * Maintain an in depth familiarity with recent advances in quantitative genetics and applications of Genomic Selection in different crops and animals that may also be applicable to cotton. * Design and implement robust statistical approaches and computational pipelines to model the relationships between cotton genotypes and their field based agronomic traits such as fibre quality and yield in different growing seasons and environments. * Analyse the prediction accuracies of genomic selection models for different cotton agronomic traits and refine the models or approaches over time as new phenotype and genotype information becomes available from the breeding program or as the GS field advances.

Location: Canberra, ACT or Myall Vale, NSW Salary: \$97K - \$105K plus up to 15.4% superannuation Tenure: Indefinite Reference: 57556

To be successful you will need: * A doctorate or equivalent research experience in a relevant discipline area, such as quantitative genetics, biostatistics, genomics or plant breeding. * A successful postdoctoral experience as a quantitative or population geneticist. * Demonstrated expertise in developing and applying a wide range of analyses for genetic parameter estimation, GWAS, and Genomic Selection, preferably in crop species. * Demonstrated skills in the handling and analysis of large genotype and phenotype datasets, including the generation of genomic relationship matrices, population structure analysis, generation of genomic breeding values, and imputation pipelines. * Evidence of advanced programming skills and software design in languages and statistical software packages relevant to bioinformatics and biostatistics (e.g. Python, SAS, R or equivalent).

We imagine. We collaborate. We innovate. At CSIRO, we do the extraordinary every day. We innovate for tomorrow and help improve today - for our customers, all Australians and the world. We do this by using science and technology to solve real issues. Diversity is the compass that navigates our innovation. We provide an inclusive workplace that respects, values and actively

pursues the benefits of a diverse workforce.

We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you. Find out more [Balance](#)

How to Apply: To apply, please provide a CV as well as a cover letter addressing the selection criteria in brief to Philippe.Moncuquet@csiro.au. If your application proceeds to the next stage you may be asked to provide additional information.

Applications Close: Monday, 27th August 2018

“Philippe.Moncuquet@csiro.au”

<Philippe.Moncuquet@csiro.au>

EastCarolinaU ChairDeptBiol

Position: Chairperson of the Department of Biology at East Carolina University in North Carolina

The Department of Biology (<http://www.ecu.edu/-biology>) is one of 16 departments in the Thomas Harriot College of Arts and Sciences at East Carolina University (ECU), Greenville, NC. East Carolina University, the third-largest campus in the University of North Carolina system, is inviting applications from individuals interested in becoming the Chair of the Department of Biology. Consisting of 45 faculty and 12 staff, the department trains over 1,100 undergraduate students and over 70 graduate students every year. The department offers two undergraduate degrees (BS in Biology and a BS in Biochemistry) and two MS degrees, and it is the largest participant in and leads the administration of the Interdisciplinary Doctoral Program in the Biological Sciences. In addition, faculty in the department advise doctoral students in the Coastal Resource Management PhD program. There is a broad set of research interests represented by our faculty with specific areas of strength including biodiversity, coastal ecology, evolutionary biology, developmental and molecular biology, biomedicine, genomics, and science pedagogy. Our faculty are campus leaders in research productivity, and we seek a leader who embraces the diversity of research disciplines represented in the department and can actively foster cross-disciplinary collaborations. Department faculty are well recognized on campus, nationally and internationally for their efforts in research, teaching and service as evidenced by publications in leading journals, and by the numerous awards and professional appointments that

they have received. Faculty and students in the Department of Biology have ample opportunity to collaborate with other disciplines, including those at East Carolina University's College of Engineering, Brody School of Medicine, School of Dental Medicine, and Coastal Studies Institute. The Department of Biology is committed to enriching the lives of students, faculty, and staff by providing a diverse academic community where the exchange of ideas, knowledge and perspectives is an active part of living and learning. The department oversees several research facilities including the Central Environmental Lab, Microscopy lab, and Genomics Core. East Carolina University is currently finalizing plans for a new greenhouse facility and construction is underway of a Life Sciences Building that will serve as the new home of the Department of Biology.

The Department of Biology seeks to fill the position of department chair with an anticipated start date as early as July 1, 2019 but no later than August 12, 2019. This is a 12-month position. The Chair's responsibilities include leadership of the department in all facets: implementing of the department's five-year strategic plan; promoting excellence in faculty research and teaching; ensuring quality, integrity, and growth of student degree programs; supporting departmental, college, and university policies and standards; fostering collegial relations in departmental governance; and effectively representing the department to internal and external constituents. The chair is expected to spend at least 50% of their effort on administration and leadership duties, with the remaining 50% devoted to research, teaching, and service.

Qualifications for the position include: (1) a Ph.D. in Biology, or a closely related discipline, such as Molecular Biology or Biochemistry; (2) a strong and continuing record of scholarly publications and productivity; (3) demonstrated excellence in teaching and service; (4) administrative experience or evidence of leadership and management skills commensurate with the position; and (5) a demonstrated commitment to diversity and equity. The successful candidate must be eligible for appointment at the rank of Professor.

In a continuing effort to enrich its academic environment and provide equal educational and employment opportunities for all, the Department actively encourages members from all underrepresented groups in higher education to submit applications. Screening will begin October 15, 2018 and the position will remain open until filled.

To apply, complete a candidate profile and submit (1) a CV, (2) a letter of interest that includes statements about your teaching, research, administrative experience

and philosophy and commitment to diversity, and (3) the names and contact information for three references online at www.jobs.ecu.edu. Those selected following initial screening for additional video or on-campus interviews will be asked for three letters of recommendation, discussing administrative experience and/or potential, to be emailed to millerde@ecu.edu. Proper documentation of identity and employability, and an official graduate transcript are required at the

— / —

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>

EckerdCollege MolecularAdaptations

Tenure Track Faculty Position Assistant Professor of Biology

Eckerd College invites applications for a new, tenure-track position at the assistant professor level beginning September 2019. We seek a Molecular Ecologist/Ecological Geneticist, who uses molecular/genetic techniques on animals to explore questions in ecology, including, but not limited to phenotypic plasticity, community ecology, molecular adaptations, population biology, landscape genomics, reproductive strategies, or conservation genetics. We seek a broadly trained scientist-educator who is strongly committed to teaching and mentoring undergraduates, and training them in a program of research and publication. A Ph.D. in the biological sciences is required, preferably with postdoctoral research and teaching experience.

The college is situated on a 188 acres waterfront campus on Tampa Bay, allowing direct access to an extraordinary diversity of terrestrial, marine and freshwater species. The James Center for Molecular and Life Sciences houses the Biology and Chemistry departments and features the latest in laboratory instrumentation. Eckerd College is part of a large scientific research community located in St. Petersburg, Florida.

The candidate will teach seven courses per academic year (3-1-3), including Principles of Ecology, Genetics & Molecular Biology and our first-year introductory course on Ecology, Evolution, & Diversity. The successful can-

didate will also be expected to develop an upper-level course in their area of expertise.

Participation in an interdisciplinary, values-oriented general education program is required, including a regular rotation in the two-semester first-year program. Eckerd College, the only independent national liberal arts college in Florida, has a tradition of innovative education and teaching/mentoring excellence. Submit a letter of application, vita, teaching evaluations, statement of teaching philosophy, description of research plans, graduate and undergraduate transcripts, and contact information for three references so that letters of recommendation can be requested, via <https://eckerd.hirecentric.com/jobs/>. Applications must be complete by October 12, 2018. Inquiries may be sent to Dr. Liza Conrad (conradlj@eckerd.edu). EOE. Applications from women/minorities encouraged.

“conradlj@eckerd.edu” <conradlj@eckerd.edu>

FredHutchinson ViralDiseases

Please see full job description with link to apply below:

Assistant/Associate Member Faculty Position in Viral Diseases The Fred Hutchinson Cancer Research Center

The Fred Hutchinson Cancer Research Center (Fred Hutch) invites exceptional applicants for a full-time faculty appointment at the assistant or associate member level (equivalent to assistant or associate professor at a university) to conduct cutting-edge, independent research related to viral diseases including, but not limited to eradication/persistence, evolution, immunology, structural biology, as well as laboratory-based research relevant to prevention of viral infections. The successful candidate will establish a dynamic research program consisting of independent projects and collaborative studies that are pertinent to our mission to prevent or eradicate infections, such as HIV, emerging infections, and other infections causing chronic diseases including cancer.

Candidates must hold an MD, PhD, MD/PhD or equivalent degree with expertise in molecular virology, immunology, computational genetics or a related area. Candidates must demonstrate a prior record of laboratory and/or clinical research, a track record of high quality peer-reviewed publications, evidence of competitive funding potential and a desire to advance the Fred Hutch mission of treating and preventing infec-

tious diseases and infection-related cancers. Applicants of diverse backgrounds are particularly encouraged to apply.

We offer a highly collaborative and diverse research environment, a generous start-up package, modern laboratory space and state-of-the-art core facilities. We support research activities that span the entire spectrum from basic to clinical biomedical research, as well as clinical interventional trials. The search is being led by the Vaccine and Infectious Disease Division and the Human Biology Division. Opportunities also exist for joint and/or affiliate appointments in the Fred Hutch Pathogen Associated Cancer Integrated Research Center, the Divisions of Clinical Research, Basic Sciences and Public Health Sciences, as well as the University of Washington, depending on mutual interest.

The Fred Hutch offers a vibrant intellectual environment within a beautiful lakeside campus in Seattle’s South Lake Union biotech hub. The Fred Hutch campus contains five major research buildings along with the Seattle Cancer Care Alliance and is in close proximity to major research partners such as the University of Washington School of Medicine, Seattle Children’s Research Institute and the Center for Infectious Disease Research. — Interested candidates should submit a CV, a concise research plan, the names and contact information for three (3) references, and a statement on diversity, inclusion, and mentoring to <http://apply.interfolio.com/53206>. Applications should be received by October 31, 2018 to assure consideration. Later applications may also be considered if the position has not been filled.

Fred Hutchinson Cancer Research Center is committed to cultivating a workplace in which diverse perspectives and experiences are welcomed and respected. We are proud to be an Equal Opportunity and VEVRAA Employer. We do not discriminate on the basis of race, color, religion, creed, ancestry, national origin, sex, age, disability, marital or veteran status, sexual orientation, gender identity, political ideology, or membership in any other legally protected class. We are an Affirmative Action employer. We encourage individuals with diverse backgrounds to apply and desire priority referrals of protected veterans. If due to a disability you need assistance/and or a reasonable accommodation during the application or recruiting process, please send a request to our Employee Services Center at esmail@fredhutch.org or by calling 206-667-4700.

Thank You, Anam Virani Faculty Recruitment Specialist | Human Resources | 206.667.7039 | ajvirani@fredhutch.org | Fred Hutch | Cures Start Here

“Virani, Anam J” <ajvirani@fredhutch.org>

GulbenkianInst Portugal EvolutionaryBiology

Deadline: 15 August 2018

The Gulbenkian Science Institute (IGC; www.igc.gulbenkian.pt), located on the Portuguese coast 20km from Lisbon, has an open call for Independent Fellows, Group Leaders and a Scientific Director. The IGC is a world leading fundamental research Institute, where people actively pursue the most original scientific questions in a multidisciplinary, international and collaborative environment, with access to high quality facilities and services. At IGC we study how biological systems function, interact and evolve within their environment. A wide range of research topics includes evolutionary biology, immunology and host-microbe interactions, cell and developmental biology, sociobiology, computational biology and biophysics. Diversity and cohesive communities encourage collaboration. Research-bridging fields will be considered favorably, as the IGC is keen to develop new research programs at the interface of different disciplines with an emphasis in quantitative biology. See more information below.

Fellows & Group Leaders: http://www.igc.gulbenkian.pt/mediaRep/igc/files/uploads/-recruitment/PICall_EditalENG.pdf Scientific Director: http://www.igc.gulbenkian.pt/mediaRep/igc/files/uploads/recruitment/DeputyDirector_EditalENG.pdf

Promotional video: <https://www.youtube.com/watch?v=6j3Tn3MVSdk&feature=youtu.be> -

Dr. Claudia Bank Principal Investigator Evolutionary Dynamics Group Instituto Gulbenkian de Ciência Oeiras, Portugal

Lab website: evoldynamics.org

Claudia Bank <evoldynamics@gmail.com>

Harvard EvolutionMarineAnimals

Tenure-Track Professor in Marine Biology

The Department of Organismic and Evolutionary Biology (OEB), in partnership with the Museum of Comparative Zoology (MCZ), seeks to appoint a tenure-track professor in Marine Biology. Research areas of interest include, but are not limited to, human impacts on marine life and ecosystems, conservation biology, marine ecology, systematics, physiology and evolutionary biology, with an emphasis on animals (invertebrates or vertebrates). We seek an outstanding individual who will establish an innovative research program and teach both undergraduate and graduate students. The position will likely be associated with a curatorial appointment in the MCZ with shared oversight responsibilities for the museum's research collections. The department and museum have strong linkages to a number of allied institutions, including the Harvard Forest, Arnold Arboretum, Harvard University Herbaria, and Harvard Center for the Environment. Please submit applications online at <http://academicpositions.harvard.edu/postings/8358>. Required materials include a curriculum vitae; a statement of research and teaching interests; four representative publications; and the names, institutional affiliations, and e-mail addresses of three to five references. This appointment will be made initially at the untenured rank (Assistant or Associate Professor). Review of applications and nominations will begin Sept. 15, 2018 and conclude when the position is filled.

Basic Qualifications: Doctorate in Marine Biology or related discipline is required by the time the appointment begins.

Additional Qualifications: Demonstrated strong commitment to teaching is desired.

Special Instructions: Please submit the following materials through the ARIeS portal (<http://academicpositions.harvard.edu/postings/8358>). Candidates are encouraged to apply by September 15, 2018; applications will be reviewed until the position is filled.

1. Cover letter
2. Curriculum Vitae
3. Teaching statement (describing teaching approach and philosophy)
4. Research statement

5. Names and contact information of 3-5 referees, who will be asked by a system-generated email to upload a letter of recommendation once the candidate's application has been submitted. Three letters of recommendation are required, and the application is considered complete only when at least three letters have been received.

6. Publications or copies of creative works, if applicable

Further information about OEB and MCZ is available at <http://www.oeb.harvard.edu/> and <https://mcz.harvard.edu/>. Address questions about the position to fac_search@oeb.harvard.edu.

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.

“Preheim, Christopher S.”
<cpreheim@oeb.harvard.edu>

applications from historically underrepresented groups, including women and minorities. Please submit applications online at: <https://academicpositions.harvard.edu/postings/8387>. Required materials include a cover letter, curriculum vita; a statement of research and teaching interests; four representative publications; and the names, institutional affiliations, and e-mail addresses of three references. Review of applications will begin November 1, 2018, and conclude when the position is filled.

Further information about EPS is available at <http://www.eps.harvard.edu/>. Address questions about the position to Professor David Johnston (johnston@eps.harvard.edu) and about the application process to Chenoweth

Moffatt (moffatt@eps.harvard.edu).

Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority candidates are strongly encouraged.

“Cappo, Sabinna” <scappo@fas.harvard.edu>

HarvardU EarthHistory

TENURE-TRACK PROFESSOR IN EARTH HISTORY

The Department of Earth & Planetary Sciences (EPS) invites applications for an open faculty position spanning the broadly defined fields of Geology, Geobiology and/or Geochemistry as they pertain to reconstructing and understanding the history of the Earth. This is a tenure-track appointment at the assistant level. We seek to attract an outstanding individual to establish an innovative research program and teach both undergraduate and graduate students. We are especially interested in individuals whose work spans the intellectual interests of Harvard faculty, including—although not limited to—the interactions between life, evolution, (bio)geochemistry, tectonics, and marine or terrestrial environmental change over geologic time. There is also the opportunity to work with sister departments such as Organismic and Evolutionary Biology and the School of Engineering and Applied Sciences.

A doctorate or terminal degree in the broad area of earth history is required by the expected start date, currently July 1, 2019. We also seek candidates who have a commitment to teaching. We value diversity in our faculty and are committed to building a culturally diverse intellectual community. We particularly encourage

IntegralGenomics 2-4mnth Bioinformatician

Position: Bioinformatics / Computational Biologist, 2-4 Month Contract

We are presently seeking a bioinformatics / computational biologist to assist our team in setting up our initial pipeline and analysis. The position will play an important role in the design, development and maintenance of research-related, custom software used in a high-throughput, next-generation DNA sequencing Laboratory.

Integral Genomics Inc. provides genomic analysis for the new legal Cannabis industry and supports strain verification, regulatory compliance, and intellectual property claims. Our present engagements are to provide WGS sequencing, SNP array genotyping and data analysis.

Working under the Chief Science Officer, the Bioinformatics / Computational Biologist will specify, encode, and debug complex software applications to analyze large DNA sequence data files; install and maintain data analysis pipelines; and identify the optimal software and hardware configurations to ensure timely and efficient completion of data analyses. Applicant will be expected to work remotely.

REQUIREMENTS: Masters or Ph.D., or foreign equiv-

alent, in genetics, bioinformatics, computer sciences, or related field Experience working with command line-based software for genetic analysis and next-generation sequencing protocols (e.g. BWA, GATK, SamTools, VCFtools and shell scripting). Experience working with high performance computing and parallel processing High performance cluster management skills Ability to utilize computational tools in common scripting languages (e.g. Linux, Perl, Python, and R) Min 3 years experience with next-generation sequencing data analysis, Background in biology and/or molecular biology Thrive in a fast-paced work environment that requires independent self-direction with an aptitude for team collaboration and open communication. Strong knowledge of exploratory data analyses

DESIRED: Strong computational skills and background, particularly in pipeline builds and parallel processing Experience with Microsoft Azure Web Services for high performance computing Experience with large datasets of WGS data Experience with design of custom SNP array

Compensation: \$8,000 - \$10,000 CAD per month based on experience and timeline. Good potential for future engagements / employment for the right candidate.

Start Date: ASAP

To apply send CV and cover letter to: gina@integralgenomics.com

riculum vitae, representative publications, a statement of research plans and teaching interests, and three letters of recommendation to: <https://academicjobsonline.org/ajo/jobs/11513> . Lehigh University is a highly competitive, research-oriented, private university experiencing significant growth. We are located one hour north of Philadelphia and 90 minutes west of New York City. This search in Biological Sciences is running in conjunction with a search for two tenure-track positions in statistics or applied probability in the Department of Mathematics.

For additional information contact Biostatistics Search Committee Chair, 111 Research Dr., Bethlehem, PA 18015, inbios@lehigh.edu. <http://www.lehigh.edu/~inbios/> The deadline for applications is October 8th, 2018.

Lehigh University is especially interested in candidates who can contribute, through their research, teaching and/or service, to the diversity and excellence of the academic community. Lehigh University is the recipient of an NSF ADVANCE Institutional Transformation award for promoting the careers of women in academic sciences and engineering.

Lehigh University is an Equal Opportunity Affirmative Action Employer and provides comprehensive benefits including partner benefits. (<http://www.lehigh.edu/~inprv/faculty/worklifebalance.html>).

"amr511@lehigh.edu" <amr511@lehigh.edu>

LehighU Biostatistics

Biostatistics Tenure Track Assistant Professor Lehigh University Biological Sciences

The Department of Biological Sciences at Lehigh University (Bethlehem, Pennsylvania) invites applications for a tenure-track position in Biostatistics to complement departmental strengths in cell/molecular biology, evolutionary biology, and neuroscience. The successful candidate will hold a Ph.D. at the time of employment. In addition, at least one year of postdoctoral research experience is required. She/he will have a research program in Biostatistics, broadly defined. Department faculty have strong records of scholarship and funding from federal agencies. There are collaborative opportunities within the department and across university programs. Faculty in the Biological Sciences Department teach in the undergraduate and Ph.D. programs within their areas of expertise. Applicants, please submit your cur-

MaxPlanck Ploen 2GroupLeaders EvolutionaryBiol

The Max-Planck-Institute for Evolutionary Biology invites applications for two

Max Planck Research Group Leaders (W2) in Evolutionary Biology

The Max-Planck-Institute for Evolutionary Biology is located in Northern Germany and has grown into a major center for evolutionary studies at a broad scale, including organismal, population genetic, genomic and theoretical approaches (<http://www.evolbio.mpg.de/>).

The institute seeks to appoint two new independent Max Planck Research Group Leaders. The successful candidates will be innovative scientists who will establish internationally recognized research programs. We welcome applications from outstanding evolutionary bi-

ologists, but also from equally talented individuals with experience in disciplines such as physics, computer science, mathematics, cell / developmental / molecular biology, provided the program of research tackles significant unsolved problems in evolution. Numerous possibilities exist for collaborative interactions with other groups and departments at the institute, as well the neighboring universities (University of Kiel and University of Lübeck) and institutes (GEOMAR in Kiel, Forschungszentrum Borstel).

Applicants should hold an advanced degree and have significant post-doctoral experience. The position is a Max Planck Research Group Leader (MPRGL), equivalent to an Associate Professor (W2). The initial appointment of the group leader is for 5 years with the possibility of extension (2 x 2 years) after international review. For more general information please see also: <https://www.mpg.de/mprg/faqs>. The start date is negotiable and the position provides a startup package, yearly personnel and running costs, well-equipped laboratory space, as well as access to core facilities.

The Max Planck Society is committed to employing disabled individuals and especially encourages them to apply. Additionally, the Max Planck Society seeks to increase the number of women in science and therefore explicitly encourages qualified women to apply.

Applications need to include

- a cover letter explaining why you would like to join our institute
- your Curriculum Vitae, including your complete publication list
- a statement of scientific achievements and a list of 3 potential referees
- a two page summary of your future research plans
- up to three of your most important papers

and should be sent electronically as one single pdf-file by September 21, 2018 to the Managing Director (E-mail: tautz@evolbio.mpg.de).

Short-listed candidates should be prepared to join a two-day selection symposium, during which they will have the opportunity to present their research to a recruitment commission on December 17-18, 2018. The successful candidates will be offered a position shortly after this symposium.

Prof. Dr. Diethard Tautz Max-Planck-Institut fuer Evolutionsbiologie Abteilung Evolutionsgenetik August-Thienemannstrasse 2 24306 Ploen (Germany) Tel.: 04522 763 390 Fax: 04522 763 281 tautz@evolbio.mpg.de <http://www.evolbio.mpg.de/>

15929/evolutionarygenetics tautz@evolbio.mpg.de

MPI Konstanz ResCoordinator EvolutionBehaviour

Max Planck Research Coordinator Position in the Department of Collective Animal Behaviour, Konstanz, Germany (see <http://collectivebehaviour.com/positions/>)

The Department of Collective Behaviour at the Max Planck Institute for Ornithology is a highly international, collaborative and interdisciplinary department investigating the behaviour and evolution of collective animal behaviour in the lab and field. We presently have around 50 scientists from over 20 countries who work on the principles that underlie the mechanism and evolution of collective behaviour across a wide range of systems, including insects, fish, birds and mammals.

We seek a Research Coordinator to work closely with the Director, Iain Couzin, and his team, to help further the scientific achievements of the department, and to oversee research in the institute's laboratory facilities located predominantly in Konstanz, but also in nearby Radolfzell. Our working language is English, but this particular position also requires knowledge of German.

Your tasks: - Guidance of students, doctoral students and postdocs. - Support in planning and conducting behavioural experiments with fish, insects, birds, and possibly other species. - Managing the technical assistants and animal keepers. - Coordination and organisation of animal holding in cooperation with the local animal research facility. - Support and control of the application and documentation process for animal experiments. - Ensuring the proper functioning and maintenance of the laboratory equipment. - Training of new personnel in the use of laboratory equipment and the analysis of technical data. - Responsible for occupational safety and administrative tasks in the laboratories. - Implementing and monitoring animal welfare and experimental protocols.

Your profile: - University degree and doctorate in biology (or related scientific field) - Experience with behavioural experiments on animals - Interest in collective animal behaviour - Excellent English and German in word and writing - Organisational and management skills - Enthusiastic and positive outlook

Desirable experiences: - Leadership and intercultural

experience - Interest in the application of technology in science - Application and documentation of animal experiments - Felasa B or any equivalent course for care and use of laboratory animals - Knowledge of occupational health and safety - Implementation of quality assurance measures in laboratories.

Our offer This appointment is for two years initially, with the possibility of a permanent appointment based on satisfactory performance. Salary is competitive and commensurate with experience (up to TVöD E14), and benefits are made according to the collective agreement of the civil service.

The candidate will work in a dynamic research environment, and will be based in the Max Planck Institute for Ornithology, Department of Collective Behaviour located on the campus of the University of Konstanz, one of the nine “elite universities” in Germany. Konstanz is an historic city in southern Germany on the shores of Lake Constance, approximately 50 minutes from Zurich Airport, and at the gateway to the Alps. The University has almost 12,000 students and is situated on a hill overlooking Lake Constance, the Island of Mainau and Mainau Forest. The campus is a short cycle or bus ride from the city centre. Konstanz has a large and well-preserved old town (Altstadt), and a vibrant day and nightlife, including many museums, galleries, and parks. The Max Planck Institutes and the University of Konstanz focus on excellence in research and the successful applicant will benefit from outstanding infrastructure, opportunities for training and a highly collaborative and international research environment.

The Max Planck Society and the University of Konstanz are committed to increasing the number of individuals with disabilities in their workforce and therefore we encourage applications from such qualified individuals. Furthermore, we seek to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply. We offer extensive support to help researchers balance professional and home life, including assistance with childcare and support of the elderly, and flexibility in how employees arrange working hours. For details, see http://www.mpg.de/equal_opportunities . Further information on this position For further information, please check our website at <http://collectivebehaviour.com> or contact Dr. Mäggi Hieber Ruiz mhieber@orn.mpg.de. Do not forward your application to this email address, the application need to be submitted through the online application system

— / —

This message has been arbitrarily truncated at 5000 characters.

To read the entire message look it up at <http://life.biology-mcmaster.ca/~brian/evodir.html>

Museum für Naturkunde Berlin Biodiversity of Lepidoptera

Position: Researcher (f/m), Biodiversity of Lepidoptera

Work schedule: full-time

Duration: initially for 2 years, tenure after successful evaluation within the first 2 years (tenure track)

Salary level: E 13 TV-L, this translates to a monthly gross salary level ranging from 3.672,02 euro - 5.378,92 euro , depending on the qualification and experience of the candidate. In addition to the salary, the contract includes health care and social security benefits

Responsibilities: Museum für Naturkunde Berlin is currently establishing an internationally visible “Center for Integrative Biodiversity Discovery” to meet the scientific and societal demands arising from the global biodiversity crisis and the need to secure the future of ‘System Earth’. The center will develop new scientific approaches to the study of biodiversity that will contribute to a more efficient and significantly faster global biodiversity inventory and at the same time enable high-quality taxonomic research on extinct and recent organisms. We are seeking a talented and motivated taxonomist/biodiversity researcher (f/m) to develop and support the new “Center for Integrative Biodiversity Discovery” at the Museum für Naturkunde Berlin - Leibniz Institute for Evolution and Biodiversity Science. The jobholder is expected to establish his own research agenda in the field of integrative biodiversity discovery of Lepidoptera. She/he will also be scientific head of the Lepidoptera collection (including Trichoptera). Her/his research should be embedded in and support the research program of the Centre for Integrative Biodiversity Discovery. Specifically, we expect a strong interest in contributing to accelerating the process of biodiversity discovery and taxonomic workflows in order to overcome the ‘taxonomic impediment’. Both tasks involve engagement in grant applications as well as training and supervision of students and junior researchers. We also expect active participation in public outreach activities of the museum about biodiversity and biodiversity discovery. The Museum für Naturkunde Berlin provides an excellent research environment. It houses state-of-the-art laboratories for morphology (including histology, imag-

ing, SEM, and Alabs), molecular genetics/genomics and computation. Numerous research groups are working in a wide range of research fields including taxonomy, phylogenetics, population genetics, and developmental and evolutionary genetics. Our world-class zoological collections provide unique access to specimens collected over the last 200+ years.

Requirements: PhD in biology/zoology and proven record of postdoctoral experience in collection-based biodiversity research on a species-rich group of Lepidoptera. Strong experience in and strong general knowledge of integrative biodiversity discovery and taxonomy research (proven by a strong publication record, which must include taxonomic studies, as well as previous third party funding, experience in field work, knowledge and experience in taxonomy related workflows). Research in one of MFN's geographic focus regions (Southeast Asia, Africa) is desirable. Successful candidates will be expected to work in a highly collaborative, interdisciplinary environment at Germany's largest natural history museum. The ideal candidate should have a strong knowledge of interdisciplinary and innovative research approaches beyond the own field of expertise (e.g. between biology, pharmacy, or medicine). Excellent team player, proven communication skills and intercultural competence. Professional written and verbal communication in English.

Applications with the usual materials (statement of research interests and experience, curriculum vitae, list of publications, and academic certificates) should be sent until 14.09.2018 reference to job advertisement No. 68/2018 to: Museum für Naturkunde, Personalreferat, Invalidenstrasse 43, D-10115 Berlin, Germany or to recruiting@mf.n.berlin. As submitted materials will not be returned, only submit copies with your application.

The job advertisement can be found online at <https://www.museumfuernaturkunde.berlin/en/-uber-uns/jobs-und-karriere/stellenausschreibungen/-researcher-fm-biodiversity-lepidoptera>. For further information please visit the museum website or contact PD Dr. Michael Ohl (michael.ohl@mf.n.berlin).

Special Notes: In the interest of equal opportunity, applications by qualified female applicants will be particularly welcome. Applicants with a disability with equal qualifications will be given priority.

Family Policy: The Naturkundemuseum Berlin has set itself the goal of promoting a work-life balance and has been awarded the certificate berufundfamilie audit of berufundfamilie gGmbH - an initiative of the Hertie Foundation. Further information can be found under:

— / —

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>

NatIMuseumsScotland 30mnths VertebrateBiobank

Biobank Research Fellow (Vertebrate Biology)

34,151 - 37,136 per annum plus membership of Civil Service pension scheme

BBSRC has recently grant-funded the CryoArks Biobank led by Professor Mike Bruford of Cardiff University. CryoArks Biobank is a major investment towards cryogenically preserving genetic materials for conservation and research. The UK's first national zoological biobank will provide a central hub for researchers across the UK, to give them access to tissues, cells and DNA from endangered species and other wildlife, which can be used in research and for conservation planning. National Museums Scotland and the Royal Zoological Society of Scotland are key partners in CryoArks with the aim of establishing the Edinburgh Biobank.

As Biobank Research Fellow you will establish, develop, curate, manage and database the Edinburgh Biobank as part of the CryoArks initiative in collaboration with the Royal Zoological Society of Scotland (RZSS), and coordinate relevant activities with other CryoArks members and the European Association of Zoos and Aquaria (EAZA) Biobank hubs. You will be working both at National Museums Collections Centre (NMCC) and the RZSS WildGenes Lab based at Edinburgh Zoo. You will also lead targeted DNA-sequencing projects and act as lead author on scientific publications to demonstrate the utility of the Biobank and lead the communication of research results and the importance of CryoArks to the general public.

Comprising around 0.5 million specimens, the Vertebrate Biology collection contains material from all over the world, with particular strengths in Scottish, British and captive vertebrates. Several thousand tissue samples from vertebrates collected during the last 25 years comprise NMS's current biobank. The RZSS archives also contain several thousand samples relating to the conservation management of threatened species.

Qualified to postgraduate level, or with equivalent experience in Molecular Biology, you will have specialised

knowledge of the taxonomy and diversity of vertebrates, as well as proven research ability and experience of working in molecular genetics and phylogenetics. You will have a passion for organising and an understanding of the principles of collections management in museums and zoos. You must be able to work effectively to meet deadlines, both independently and as part of a team, and possess good communication and ICT skills. A driving licence is desirable. This is a unique opportunity to play a key role in the shaping of a major UK initiative in the biosciences.

This is a fixed-term post for 30 months.

To make an online application for this post and to find further details of this post and of all our vacancies please visit our website.

If you require further information telephone 0131 247 4094 (answerphone), stating reference NMS18/866.

Closing date for completed applications is Sunday, 9 September 2018. It is anticipated that the selection event will take place on/around week commencing 1 October 2018.

Please note that CVs are not considered as/as part of applications and will not be forwarded to the shortlisting process.

National Museums Scotland is committed to being an Equal Opportunities Employer.

Thanks

Ioanna

Ioanna Lampiri, Assoc CIPD Human Resources Officer

National Museums Scotland Chambers Street Edinburgh EH1 1JF

0131 247 4451

Ioanna Lampiri <I.Lampiri@nms.ac.uk>

NIAB Cambridge Quantitative Geneticist

Senior Research Scientist (Quantitative Genetics), NIAB, Cambridge, UK A position is available for an enthusiastic and talented genetic data analyst to work on crop genetics research projects at NIAB (National Institute of Agricultural Botany), Cambridge, UK. NIAB is the UK's fastest growing crop science organisation, with rapidly expanding research capabilities in plant genetics,

agronomy, farming systems and data science, the largest national field trials capability, and strong research links with industry, government and academia. The NIAB Genetics and Breeding team carries out leading-edge crop genetics research, with direct translation to plant breeding programmes in the UK and elsewhere. Ongoing projects generate large genetic data sets for gene discovery (e.g. QTL mapping, especially in multi-founder ("MAGIC") populations, GWAS), screening of genetic resources, crop genomics, and genomic selection. The successful applicant will play a leading role in the curation, analysis and interpretation of these data, including data QC, model fitting, statistical analysis and development of novel analysis pipelines, as well as dissemination and publication of results. Initially, the successful applicant will largely work on genetic mapping and QTL mapping projects involving NIAB's wheat MAGIC populations. The successful candidate will also have the opportunity to provide wider data analysis support across NIAB, including in the design of experiments. Opportunities will be available to develop and grow research interests within the overall NIAB genetics and breeding research portfolio. This is a permanent post and we are seeking a researcher with a background in quantitative genetics or statistics and an interest in agriculture and plant breeding.

The successful applicant should have a PhD in quantitative genetics, plant genetics, or a related subject area. They should be experienced in genetic data analysis, particularly genetic mapping and QTL mapping, as well as the use of statistical software, preferably R. A good understanding of experimental design is also critical. Some basic bioinformatics experience and/or programming skills (e.g. Python) are desirable, together with a good scientific publication and presentation record. Some knowledge of plant breeding and crop science would also be beneficial. A proven ability to work independently and as part of a team are both essential, as are good communication skills. The post will require travel within the UK and internationally.

Starting salary is in the range of pounds 30,084 to pounds 34,316 pa depending on qualifications, skills and experience. Further details and an application form are available at: <http://www.niab.com/vacancies/-index/> or from the HR Office, NIAB, Huntingdon Road, Cambridge CB3 0LE, Tel No. 01223 342282, Email: jobs@niab.com, quoting Ref No. SV/A999.

Closing date for applications: 9 September 2018 Dr Keith Gardner | Genetics and Breeding NIAB | Huntingdon Road | Cambridge | CB3OLE Tel (direct) +44 (0)1223 342484 | Tel (office) +44 (0)1223 342200 This email and any files transmitted with it may contain confidential or privileged information which are intended

for the addressee only.

Keith Gardner <Keith.Gardner@niab.com>

NorthernArizonaU Flagstaff ViralEvolution

Position: Research Specialist - Viral Genomics and Evolution The Pathogen and Microbiome Institute (PMI) at Northern Arizona University seeks a Research Technician to perform basic and applied research focused on viral genomics and evolution. The top candidates for this position should be highly motivated and have experience with viral and cell culture, molecular genetic analyses, including RNA/DNA isolation, PCR/qPCR, gel electrophoresis, next-generation sequencing, and the ability to work with viruses under biosafety level 2 (BSL2) conditions. There is a possibility of future work in the PMI BSL3 laboratory that would involve handling viral pathogens such as Rift Valley fever virus, Oropouche virus and Western equine encephalitis virus. Extra emphasis will be given to candidates with command line scripting experience, though this is not a requirement.

Primary duties will include: - Maintaining cell cultures - Passaging viruses - Molecular cloning - PCR/qPCR assay development and validation - Library preparation for next generation sequencing, including Illumina, PacBio and Oxford Nanopore platforms - Working under BSL2 conditions, with the possibility of future work under BSL3 conditions.

- Working both independently and in a team-based environment - Laboratory management and maintenance of shared reagent stocks - Working safely with potentially hazardous materials, such as laboratory chemicals and disease-causing organisms

Opportunities will also be available for command line scripting and data analysis.

Northern Arizona University is located in Flagstaff, AZ, a beautiful mountain town with a surprisingly vibrant restaurant scene. Located a little over an hour from the Grand Canyon and ~45 min from Sedona, Flagstaff is a hiker's paradise. In fact, the city of Flagstaff operates more than 50 miles of unpaved trails and there are, on average, 266 sunny days per year with which to enjoy them. At 7000 ft in elevation, Flagstaff experiences all four seasons, but the summers are mild and, in the winter, you can be on the slopes within 30 min! For additional information and to apply: <https://>

hr.peoplesoft.nau.edu/ psp/ ph92prta/ EMPLOYEE/ HRMS/ c/ HRS_HRAM.HRS_APP_SCHJOB.GBL? Page=HRS_APP_JBPST& Action=U& FOCUS=Applicant& SiteId=1& JobOpeningId'3610& PostingSeq=1 Contact info: jason.ladner@nau.edu

Jason Thomas Ladner, Ph.D.

Assistant Professor The Pathogen and Microbiome Institute Northern Arizona University 1395 South Knoles Drive, Building 56 PO Box 4073 Flagstaff, AZ 86011-4073 (Tel) : 928-523-0647 <http://scholar.google.com/citations?user=BERy15AAAAAJ&hl=en> <https://github.com/jtladner> Jason Thomas Ladner <Jason.Ladner@nau.edu>

OhioStateU CollectionsManager

Curator / Collections Manager

Summary of duties: The Department of Evolution, Ecology and Organismal Biology within the College of Arts and Sciences, seeks a Curator to join our team. The College of Arts and Sciences is the largest college and the academic heart of the university. The College hosts 81 majors. With 38 departments, 20+ world-class research centers, and more than 2,000 faculty and staff members, students have the unique opportunity to study with the best artists, scholars, and scientists in their field. The College values diversity and offers a supportive, open, and inclusive community.

This Position will serve as the curator and collections manager of the Tetrapod division at the Museum of Biological Diversity. Duties include those related to the accession and maintenance of the collection, service to professional societies and within the university, and outreach to the general public.

Required Qualifications: Master's degree in museum studies, evolutionary biology, or related field from an accredited university plus experience working with museum collections in a position with similar responsibilities or an equivalent combination of education and experience; working knowledge of the taxonomy and identification of tetrapods as evidence by previous experience and/or education; demonstrable knowledge of care and management of natural history collections, with a special emphasis on preventative conservation, collection-storage environments, and techniques pertaining uniquely to fossil vertebrate collections as evidenced by previous experience; familiarity with biodiversity

informatics, including relational databases, web-based applications, and distributed networks as evidenced by previous experience and/or education; demonstrable experience with and an interest in public outreach and engagement.

Desired Qualifications: Post Doctorate Degree; experience in previous collection-management; expertise in ornithology; experience preparing tetrapod specimens.

Target Salary: \$50,418.00 - \$52,789.31 Annually

Questions can be directed to: Bryan Carstens carstens.12@osu.edu

Apply at: <https://www.jobsatosu.com/postings/88886> "Carstens, Bryan C." carstens.12@osu.edu

Okinawa 2ResTech AntBiodiversity

The Economo Lab (<http://arilab.unit.oist.jp/>) at the Okinawa Institute of Science and Technology Graduate University (<http://www.oist.jp/>) is seeking qualified applicants for two technician positions. The lab works at the interface of ecology, evolution, and natural history, with an empirical focus on ant biodiversity. We use a variety of approaches to understanding biodiversity including field expeditions, collections-based research, x-ray micro-CT, 3D modeling and morphometrics, phylogenomics, biodiversity informatics, and quantitative theory. Although two positions are described below, we are flexible with regards to division of duties among the two hired individuals.

RESEARCH TECHNICIAN:

Description: The hired individual will get involved with a number of research activities in the lab including: curating an entomological research collection, managing lab databases, procuring lab supplies and materials, and performing miscellaneous tasks to support lab research. In addition, there are exciting opportunities to become an expert in X-ray micro-CT scanning and downstream applications such as segmentation, 3D modeling (e.g. <https://sketchfab.com/arilab>), morphometrics, 3D printing, and interacting with biodiversity data in virtual and augmented reality.

Qualifications: An undergraduate degree or higher in a scientific or technical field and experience with scientific research are required. Although there is no requirement for proficiency in a specific computational program/language, it is important that the person has

strong computational skills and a high ability to learn different software and methods independently. Although not required by any means, experience with any of the following would be highly desirable: biodiversity collections management, 3D modeling, 3D animation, data management, computational phylogenetics, geometric morphometrics, GIS, HPC, VR/AR applications.

RESEARCH COMPUTING TECHNICIAN:

Description: The hired individual will be responsible for computational support of lab research including; designing and maintaining research databases, maintaining lab websites, assist with design and maintenance of bioinformatic data analysis pipelines, application support for utilizing HPC resources, and desktop support to lab members. In addition, there are opportunities to lead or participate in development of new technologies that facilitate and accelerate biodiversity research.

Qualifications: An undergraduate degree or higher in a scientific or technical field and experience with scientific research computing are required. As this position is not tied to a single application or task, the ideal candidate would have a good baseline of programming skills, including familiarity with both compiled and interpreted languages, and ability to learn independently. Proficiency with Linux, SQL-based database design and administration, and at least basic familiarity with server administration are required. Experiences with one or more of the following would be highly desirable but are not required; GIS, bioinformatics, phylogenetics, ecoinformatics, parallel computing, and statistical computing.

Job Data: OIST is a newly established international graduate university located in the resort area of Onna-son, Okinawa, Japan, and offers a high quality of life and good working conditions in an international environment. Logistical and financial assistance with relocation will be provided, along with a competitive salary and benefits package. OIST is an English-language working environment, so knowledge of Japanese is not required.

To apply, please send a cover letter, CV, and list of three references with contact information to economoo@oist.jp in an email with subject 'Research Technician Application' or 'Research Computing Technician Application', as appropriate. Informal inquiries are also welcome at the same address. Application review will begin immediately and will remain open until the positions are filled.

Evan P. Economo Assistant Professor Biodiversity and Biocomplexity Unit Okinawa Institute of Science and Technology Graduate University 1919-1 Tancha Onna-son Okinawa, Japan 904-0495 <http://>

[/arilab.unit.oist.jp/](http://arilab.unit.oist.jp/) www.antmaps.org
Economo" <evaneconomo@gmail.com>

PrincetonU Tech DrosophilaMicro

The Ayroles Lab < <http://www.ayroleslab.com/> > at Princeton University (ayroleslab.com) is looking to hire a lab technician. Our group takes a multi-disciplinary approach to investigate the genetic basis for variation in complex traits addressing broad questions in evolutionary and medical genetics. The technician will contribute to ongoing research investigating how the microbiome influences evolutionary processes using *Drosophila*. Through experimental evolution, we test if and how the microbiome facilitates adaptation to stressful environments.

This is a casual hourly position of approximately 30 to 40 hours/week. The expected timeframe of this position is October 2018 through February 2019. Review of applications will begin immediately. Salary will be commensurate with experience. Job posting can be found here: <https://research-princeton.icims.com/jobs/9088/temporary—lab-technician/job?mobile=false&width=1200&height=500&bga=true&needsRedirect=false&jan1offset=-300&jun1offset=-240> Responsibilities may include:

- Applying molecular biology and microbiology techniques.
- *Drosophila* maintenance, crossing, and screening
- Participation in experimental design and execution of experiments.
- Participation in group meetings. - Other lab duties as assigned.

Applicants for this position should have experience in at least one of the following areas:

- 1) *Drosophila* husbandry (stock maintenance, crosses)
- 2) Basic microbiology (bacterial culture, sterile technique)
- 3) Basic molecular techniques (DNA/RNA extractions, PCR)

Most importantly, the applicant should have strong organizational skills and attention to detail. Applications should include CV as well as a brief statement describing previous research experiences and their interest in this position.

Princeton University is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to age, race, color, religion, sex, sexual orientation, gender identity or expression, national origin, disability status, protected veteran status, or any other characteristic protected by law. EEO IS THE LAW.

Lucas Henry <lucas.price.henry@gmail.com>

RoslinInst Edinburgh EvolutionaryProgrammer

The Roslin Institute is a world-class centre for research on Quantitative Genetics of populations, particularly in managed populations such as livestock, companion animals, forests and crops. We have a vacancy for a lead scientific programmer to work with Prof. J. Hickey on the further development of the AlphaSuite, a collection of software packages widely used in the animal and plant breeding communities, as well in the human genetics field. The lead scientific programmer will also have to interface with the various technical services that the university has to its disposal, such as the large scale research cluster, which has over 1000 individual processor cores.

Working in a team of eleven computational biologists the post holder will work within a team on the development of tools and applications for manipulation of very large datasets, maintaining and developing software codes to required high standards. This position will require designing programming solutions for huge dataset management and analysis.

The ideal candidate will be a self-motivated, proactive and passionate individual with strong experience in programming in different languages (e.g. C/C++, FORTRAN, Java), proven knowledge in scripting languages (Python and BASH) and in developing and implementing performance critical software. The ideal candidate will have experience in research and development activities. The post is initially for 1 year, with the expectation of a longer term extension.

The post-holder will join the Genetics and Genomics department at the Institute which comprises 18 group leaders, both desk based and lab based scientists. The department benefits from synergies arising from academic backgrounds including DNA-chemistry, statistics,

mathematics and theoretical physics in addition to genetics.

Informal enquires can be made to John Hickey john.hickey@roslin.ed.ac.uk

Formal applications can be made via this link: <https://www.ed.ac.uk/roslin/working/opportunities/-vacancies/lead-scientific-programmer-044700> HICKEY John <John.Hickey@roslin.ed.ac.uk>

If you are interested in this position, details can be found here: <https://careers.kew.org/vacancy/-bioinformatician-plant-fungal-trees-of-life-project-paftol-362961.html> The Royal Botanic Gardens, Kew is a non-departmental public body with exempt charitable status, whose principal place of business is at Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom.

Vanessa Barber <V.Barber@kew.org>

RoyalBotanicGardens Kew Bioinformatician

Job: RoyalBotanicGardens.Kew.Bioinformatician

Applications are invited for the position of Bioinformatician on the Plant at Fungal Trees of Life (PAFTOL) Project at the Royal Botanic Gardens, Kew, London, U.K.

Kew is the world's leading botanic gardens, at the forefront of plant and fungal science, a UNESCO World Heritage Site and a major visitor attraction. We want a world where plants and fungi are understood, valued and conserved 'V because our lives depend on them. We use the power of our science and the rich diversity of our gardens and collections to provide knowledge, inspiration and understanding of why plants and fungi matter to everyone.

The successful candidate will be an active member of PAFTOL's multi-disciplinary team led by the Head of Comparative Plant and Fungal Biology. The post holder, together with a senior bioinformatician, will be responsible for implementing the design and build of software systems and data analysis necessary to ensure the completion of PAFTOL, and will play a critical role in the success of the project.

You will be an excellent bioinformatician with a Ph.D or equivalent experience and a proven background in genomic data analysis ideally in a research environment. You will have a track record of helping to design and build bioinformatics pipelines and applying phylogenomic methods to infer the tree of life, with sufficient specialist knowledge to help improve upon existing tools and methodologies. You will be a proven team player, with the ability and appetite to help deliver project outputs, outreach, and to train and support researchers and students as required.

Closing Date: 16th September 2018

RZSS Edinburgh AppliedConservationGenetics

An opportunity has arisen for a committed researcher to join the Royal Zoological Society of Scotland WildGenes lab. Reporting to the Head of Conservation and Science Programmes, the RZSS WildGenes programme manager will coordinate the world-class programme of applied conservation genetic research delivered by the RZSS WildGenes laboratory.

Who we are looking for The successful candidate will have exceptional managerial skills, hold a PhD in Conservation Genetics or Population Genetics/Genomics, and demonstrate a track record of project establishment and delivery within the conservation and science sectors. Since our projects are based across the globe, the role will involve international travel. Willingness to travel to attend meetings is therefore essential.

Closing date: Sunday 5th August 2018

Invitation to interview will be by email/phone and interviews will take place on the week commencing 20th August 2018. Due to the level of interest in these positions, we are not able to contact each unsuccessful applicant individually. Therefore, if you have not been contacted by 15th August, please assume that you have been unsuccessful this time.

For any questions and queries, please email Dr Helen Senn, Head of Conservation and Research Programmes, at hsenn@rzss.org.uk quoting "WildGenes Programme Manager" as the subject, or call 0131 314 0317.

How to apply To apply for this role, please download either the Conservation Programme Manager (RZSS Wildgenes) job profile < <http://www.rzss.org.uk/-media/6304/cons-1701-conservation-programme-manager-wildgenes.docx> > (462kb pdf) and complete an Application Form < <http://www.rzss.org.uk/-media/6258/rzss-employment-application-form.docx> >

(1.89 MB Word Doc) and an Recruitment Monitoring Form < <http://www.rzss.org.uk/media/6259/rzss-recruitment-monitoring-form.docx> > (1.91Mb Word Doc)

CV's are welcomed and should be submitted along with the Application Form.

Once completed you should email it to recruitment@rzss.org.uk Applications may also be sent in the mail to: The Royal Zoological Society of Scotland Edinburgh Zoo - HR Team 134 Corstorphine Road Edinburgh EH12 6TS

Helen Senn <HSenn@rzss.org.uk>

San Francisco State U Evolutionary Biologist

The Department of Biology at San Francisco State University offers an exciting opportunity for a Tenure-Track Assistant Professor position in Evolutionary Biology beginning August 2019. We seek a colleague who conducts research on evolutionary processes in natural populations (especially non-model organisms). We are particularly interested in researchers who integrate their field and/or laboratory work with mathematical modeling or with conservation issues such as climate change, disease, urbanization, or biodiversity. Applicants must be committed to developing an externally funded research program and contributing to both undergraduate and graduate programs through teaching and mentorship of student research. We are especially interested in candidates who have a demonstrated commitment to increase the access and success of underrepresented students in biology, or who have detailed plans to accomplish such goals. Ph.D. and post-doctoral experience in a related field are required. Candidates must have an active record of research related to their specialty area as well as evidence of external support or the potential for external funding of these activities. Candidates will be expected to teach an evolution course for biology majors as well as additional courses within their area of expertise at the undergraduate and graduate levels.

Please see the Department's website (biology.sfsu.edu) for additional details. Please submit the following materials online to < <https://academicjobsonline.org/ajo/-jobs/11661> > by September 28, 2018 (review of applications will continue until the position is filled): 1) letter of intent/interest; 2) current CV; 3) a statement

on how your teaching and scholarship align with the commitment of the Biology Department to foster an inclusive and diverse academic community; 4) teaching statement; 5) research statement; 6) representative sample of published papers; 7) contact information for three references (letters of recommendation will be requested at a later date).

SFSU is a comprehensive, urban university that serves the ethnically diverse Bay Area. The mission of San Francisco State University is to create an environment for learning that promotes appreciation of scholarship, freedom, human diversity, and the cultural mosaic of the City of San Francisco and the Bay Area; to promote excellence in instruction and intellectual accomplishment; and to provide broadly accessible higher education for residents of the region, state, the nation, and the world. SFSU and the Department of Biology are committed to a diverse professoriate that includes women and individuals from underrepresented minority groups. SFSU is an EEO/AA employer. For additional information, visit the SFSU Biology web site at <http://biology.sfsu.edu> or contact Andy Zink <zink@sfsu.edu>

Andy Zink <zink@sfsu.edu>

SGN Frankfurt Biodiversity Genomics

Job offer ref #12-18016

The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. LOEWE Centre for Translational Biodiversity Genomics (LOEWE-TBG), <https://tbg.senckenberg.de>, is a joint venture of the Senckenberg Gesellschaft für Naturforschung (SGN), Goethe-University Frankfurt, Justus-Liebig-University Giessen and Fraunhofer Institute for Molecular Biology and Applied Ecology IME aiming to intensify biodiversity genomics in basic and applied research. We will establish a new and taxonomically broad genome collection to study genomic and functional diversity across the tree of life and make genomic resources accessible for societal-demand driven applied research.

The Senckenberg Gesellschaft für Naturforschung and the LOEWE-TBG invite applications for a

Evolutionary Biologist / Ecotoxicologist / Bioinformatician (100%)

In this LOEWE-TBG project, we want to assess, how

anthropogenic substances influence the mutation rate of metazoan organisms. Based on an existing genome-wide mutation rate test, we thus want to develop and introduce new ecotoxicological assessment methods that will be eventually internationally established within the ISO framework. Furthermore, the project will significantly increase our knowledge on the mutation process as such. It is planned to work with several ecotoxicological model species such as *Chironomus riparius*, *Daphnia galeata*, *Eisenia fetida* and *Folsomia candida*.

Your tasks:

• performing, respectively coordinating ecotoxicological experiments with partners
 • improving existing bioinformatics workflow
 • analysing individual reseq data
 • publishing the results

Your profile:

• PhD in a relevant field
 • population genomic experience with individual resequencing data (mapping to reference genome, genotype calling, awareness of data quality issues etc.)
 • experience with ecological/ecotoxicological experiments
 • programming and/or scripting experience to adjust/improve existing
 • working with bioinformatic pipelines
 • ability to work in close collaboration with several partners
 • excellent communication skills

What is awaiting you?

• An interesting task in a dynamic team of researchers in an international research institution
 • The opportunity to gain experience in the above-mentioned research field
 • The occasion to build a network with scientists in interdisciplinary fields
 • Flexible working hours
 • Annual special payment
 • Company pension scheme
 • Senckenberg ID card for free entry in museums in Frankfurt
 • A holiday of 30 days/year

Salary and benefits are according to a full time public service position in Germany (TV-H E13, 100 %). The contract should start as soon as possible and will be limited until December 31st, 2021. The Senckenberg Gesellschaft für Naturforschung support equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung.

How to apply

Please send your application, mentioning the reference of this job offer (ref. # 12-18016) before September 30th, 2018 by e-mail (attachment in a single pdf document) and including a cover letter detailing research interests and experience, a detailed CV and a copy of

your certification to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de

[recruiting <recruiting@senckenberg.de>](mailto:recruiting@senckenberg.de)

Smith College Massachusetts Geneticist/Genomicist

Smith College is seeking a biologist with expertise in genetics and genomics to fill a tenure-track position as Assistant Professor of Biology beginning July 1, 2019.

A strong background in the generation and/or analysis of genetic and genomic data, a PhD by the time of appointment, and a commitment to undergraduate education are essential; postdoctoral experience is desirable. Teaching responsibilities will include a 200-level course with laboratory in genetics and molecular biology, and a 300-level course with laboratory in genomics. Participation in the introductory sequences is also expected, though on a rotational schedule. The candidate must demonstrate a commitment to developing an active research program, including supervision of undergraduate research. We are hoping to attract applicants whose research interests further broaden the organismal expertise of our department.

State-of-the-art resources at Smith include the Centers for Microscopy & Imaging, Molecular Biology, and Proteomics, the Botanic Garden, an accredited animal care facility, and a high performance computing center. The new faculty member might also contribute to Smith's programs in Biochemistry, Computer Science, Environmental Science, Neuroscience, and/or Statistics & Data Sciences. The Five College Consortium, comprised of Smith, Amherst, Mount Holyoke, and Hampshire Colleges and the University of Massachusetts - Amherst, provides a rich intellectual and cultural life for faculty and students, as well as opportunities for collaborative research and mentoring of doctoral students.

Submit application at <https://apply.interfolio.com/53351> with a cover letter, curriculum vitae, a teaching statement, a research statement, a diversity statement addressing commitment to enhancing access and inclusion, and three confidential letters of recommendation. Review of applications will begin on October 1, 2018.

Diversity and a culture of inclusion among students,

faculty, administration, staff, and curriculum are crucial to the mission and values of Smith College. Smith welcomes applicants from a range of backgrounds including, but not limited to, those based on ability, age, ethnicity, gender, gender identity, national origin, race, religion, sexual orientation and veteran status.

Smith is committed to providing an accessible application process for individuals with disabilities and encourages applicants to request any needed accommodation(s).

Smith College is an EO/AA/Vet/Disability Employer. Women, underrepresented racial groups, veterans and individuals with disabilities are encouraged to apply.

lkatz@smith.edu

StMarysCollegeMD EvolutionaryNeurobiol

Evolutionary biologists with a focus in neuroscience are encouraged to apply.

Neurobiologist - The Department of Biology and the Cross-disciplinary Program in the Neurosciences at St. Mary's College of Maryland jointly invite applications for a tenure-track Assistant Professor position beginning August 2019. We especially encourage applicants with research interests in cellular and/or molecular neuroscience. Teaching responsibilities include: Principles of Biology, Neurobiology, Introduction to the Neurosciences, Seminar in the Neurosciences, and electives in the candidate's area of specialization. Mentoring undergraduate research is also expected. Ph.D. required; postdoctoral training and/or teaching experience preferred.

Non-sectarian since its founding in 1840, St. Mary's College of Maryland is a public Carnegie Baccalaureate, Arts and Sciences institution which has been designated as Maryland's public honors college. We are located in St. Mary's City, 70 miles southeast of Washington, D.C. With selective admissions policies, academically talented students, and a rigorous curriculum, we offer a small college experience similar to that found at exceptional private colleges. St. Mary's faculty benefit from a comprehensive program of support for scholarship, research, travel, and curriculum development, including course releases for pre-tenure faculty and leaves for tenured faculty. The quality of life is enhanced by the recreational opportunities of the Chesapeake region and

by our proximity to Washington, D.C. and Baltimore.

St. Mary's College < <http://www.smcm.edu/> > embodies diversity and inclusion in its mission. We create an environment that recognizes the value of individual and group differences and we encourage inquiries from applicants who will contribute to our cultural and ethnic diversity. Application materials should include a cover letter, curriculum vitae (including e-mail address), statement of teaching philosophy, statement of research interests, and evidence of teaching effectiveness (if available). Applicants should also arrange for the submission of three confidential letters of recommendation, which can be requested through their Interfolio Dossier account. Applicants should indicate in their cover letter how their teaching at the College will contribute to a culture of inclusion and campus diversity. Applications are being accepted online at: apply.interfolio.com/53863. Questions may be directed to Jordan Price at BioSearch18@smcm.edu.

Review of applications will begin on October 1, 2018 and continue until the position is filled. Employment will be contingent upon successful completion of a criminal background check. St. Mary's College of Maryland is an affirmative action/equal opportunity employer.

Visit our website: www.smcm.edu/hr -

Kevin J Emerson, PhD Associate Professor of Biology
Biology Department St. Mary's College of Maryland
18952 E. Fisher Rd St. Mary's City, MD 20686-3001
kjemerson@smcm.edu <http://faculty.smcm.edu/kjemerson>
Office: 240 - 895 - 2123, Schaefer Hall 231

"Emerson, Kevin" <kjemerson@smcm.edu>

UCentralFlorida GenomicsBioinformatics

Position Number 30096 Class Title Assistant Professor,
Genomics & Bioinformatics

Job Description The University of Central Florida (UCF) has established nine interdisciplinary clusters to strengthen its academic and research missions. The Genomics and Bioinformatics Cluster (GBC) (<http://www.ucf.edu/research/genomics>) was established with a goal to develop a nationally and internationally recognized program in the broad area of genomics and computation. As part of the GBC, we are currently seeking to hire a tenure-earning assistant professor conducting research in Computational Biology, Bioinformat-

ics, or Computational Genomics. The tenure home for this faculty position will likely be either in the Burnett School of Biomedical Sciences (College of Medicine), the Biology Department (College of Sciences), or the Computer Science Department (College of Engineering and Computer Science). A candidate may also be jointly appointed among these departments as appropriate to qualifications and interest.

Candidates must have a strong research publication record and demonstrated independent research, with either existing research funding, or strong potential to initiate and obtain funding for their research program. The GBC emphasizes interdisciplinary research in genomics that covers at least two disciplines among biology, biomedical sciences, and computer science. In particular, the GBC is looking to expand research programs in genomics that are enabled by next-generation sequencing technologies and that address one or more areas among molecular evolution, biodiversity, microbiome research (environmental and plant/animal health), biological model systems, infectious diseases, translational applications for cancer, computational biology, systems biology, machine learning, and data mining. Strong candidates in other areas of genomics will also be considered.

The GBC faculty will be expected to strengthen their individual tenure homes as well as the cluster. All GBC faculty members (and their students) will be housed jointly to facilitate collaboration.

UCF is one of the nation's largest universities with a diverse student body of more than 66,000 students. UCF has grown substantially in size, quality, diversity, and reputation in its first 50 years. Today, the university offers more than 200 degree programs at its main campus in Orlando and more than a dozen satellite locations. UCF is an economic engine, attracting and supporting industries vital to the region's future while providing students with real-world experiences that help them succeed after graduation. For more information, visit <http://www.ucf.edu/faculty/>. Position Minimum Qualifications A Ph.D. or M.D./Ph.D. from an accredited institution at the time of appointment in an area appropriate to the cluster.

Preferences Postdoctoral research training experience is strongly preferred.

Special Conditions Equal Employment Opportunity Employer As an equal opportunity/affirmative action employer, UCF encourages all qualified applicants to apply, including women, veterans, individuals with disabilities, and members of traditionally underrepresented populations. UCF's Equal Opportunity Statement can be viewed at: <http://www.oie.ucf.edu/documents/>-

[PresidentsStatement.pdf](#). As a Florida public university, UCF makes all application materials and selection procedures available to the public upon request.

Additional Application Materials Required UCF has a diverse student body and community, and we are committed to meeting the needs of our diverse community. Please tell us about your approach and experience with meeting the needs of a diverse community both in the context of a faculty-student setting and as a colleague (see required documents below).

The university requires all applications and supporting documents be submitted through the UCF Online Recruitment System at <https://www.jobswithucf.com>. No paper applications will be considered. In addition to the online application, candidates must provide the following materials:

The above-mentioned diversity statement, A cover letter, A curriculum vitae, A teaching statement, A research statement, and Contact information for three professional references (with email addresses). In the cover letter, candidates should clearly specify the position that they are applying for, address their background in genomics and/or bioinformatics, and identify the anticipated department(s) for their potential tenure home.

In the research statement, candidates should include descriptions of their successful interdisciplinary research collaborations and how their current and future research can contribute to the cluster's overall interdisciplinary objectives.

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

UIdaho HerbariumCollectionsManager

Dear Colleagues,

I am excited to announce that the University of Idaho Stillinger Herbarium (<https://www.uidaho.edu/-research/entities/herbarium>) is seeking a Collections Manager. Established in 1892, the Stillinger Herbarium is the largest herbarium in Idaho, and the herbarium's collections contribute to a wide variety of research at the University of Idaho and beyond, supporting research

in systematics, ecology, floristics, conservation biology, and natural resource management. The herbarium and its resources are also used for both formal and informal teaching and learning at the University of Idaho, and in the community.

Mission: The Stillinger Herbarium champions the stewardship of plant diversity, inspires and prepares the next generation of botanists, and advances collection-based botanical research, education, and outreach at the University of Idaho through innovative thinking, transformative educational experiences, and community engagement.

Vision: The Stillinger Herbarium enhances the University of Idaho's impact and facilitates its land-grant research mission by providing an innovative and accessible botanical resource that documents the diversity of plants, lichens, and fungi in Idaho, the Pacific Northwest, and the world through space and time, while cultivating a group of inspired and engaged citizens, students, and scientists.

Position Summary: Provide leadership, oversight, and outreach for the University of Idaho Stillinger Herbarium in collaboration with the Director and in accordance with the herbarium's mission to 1) document the flora of Idaho and the Pacific Northwest through space and time, 2) facilitate, support, and conduct research and education in plant systematics, floristics, and ecology at the University of Idaho, 3) serve as a repository for voucher specimens from botanical research conducted at the University of Idaho, 4) serve as a reference for the identification of plant diversity, and 5) provide access to the collection and its associated data for the scientific community. Responsibilities include: generating external funding, conducting independent floristic and/or biodiversity informatics research, managing databases, hiring, training, and supervising an array of personnel, setting priorities, delegating work, hosting visiting scholars/researchers, processing loans, gifts, and exchanges, answering requests for data and plant identifications, and keeping the herbarium open on a regular basis. In addition, this position will be expected to maintain a working knowledge of ongoing scientific advancements in the fields of Natural History Collections Management and Biodiversity Informatics. The Collections Manager will contribute to the teaching, research, and outreach missions associated with a major land grant university. The herbarium houses over 200,000 specimens of vascular plants, non-vascular plants, lichens, and fungi, and between 1,000 and 5,000 collections are added annually.

Job Duties Include: Directing the day-to-day operations of the Herbarium, maintaining and improving existing herbarium collections, curating new accessions, includ-

ing specimen identification, directing the herbarium's loan/exchange/gift program with other institutions nationally and internationally, maintaining and improving herbarium equipment, especially computer resources (hardware, software, and databases), and providing a safe work environment. Administrative duties include the recruitment, training, and supervision of graduate assistants, part-time staff, work-study students, and volunteers, working with the Director to develop and manage budgets relating to herbarium activities, and annual reporting to funding agencies and the university. Research expectations include, leading all phases of field-based research and collecting for the Herbarium, writing grant proposals with the Director to support field-based research and strategic growth of the Herbarium, including digitization projects and online databases, participating in the dissemination of scholarship, which includes presenting research findings at scientific meetings, manuscript writing for ongoing research projects, and participating in the peer-review process for scientific journals.

Minimum Qualifications: 1. M.S. or Ph.D. in Botany or related discipline

2. Experience working with botanical collections and/or curation of natural history collections.
3. Knowledge of standard herbarium protocols and natural history collections management.
4. Ability to collect, press, dry, mount, systems.
5. Understanding of the flora of western North America.
6. Ability to conduct extended, remote, field-based research and collection trips for the Herbarium.

Preferred Qualifications: 1. Personnel management experience.

2. Experience preparing grant proposals.
3. Knowledge of non-vascular and mycological species.

— / —

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>

Uillinois EvolutionaryPhysiology

Assistant Professor of Animal or Plant Physiology
School of Integrative Biology University of Illinois at
Urbana-Champaign

The School of Integrative Biology at the University of Illinois at Urbana-Champaign seeks an outstanding scientist with a background and experience in plant or animal physiology for a full-time, 9-month, tenure-track faculty position at the assistant professor level with an anticipated start date of August 16, 2019. A Ph.D. or equivalent degree in biology or a related field is required at the time of appointment. Salary is commensurate with experience. The successful candidate will join one or more of the departments within the School (Departments of Animal Biology, Entomology, or Plant Biology) and develop an externally funded research program, teach at the undergraduate and graduate level, and collaborate with other faculty. Applicants will be evaluated on their record and promise of excellence in research and teaching.

The ideal candidate's research on physiology will interface with ecology, evolutionary biology, development, behavior, and/or molecular genetics. Incorporation of a field component in the research will be especially valued.

Urbana-Champaign, located 120 miles south of Chicago, offers a variety of cultural opportunities that showcase the area's diverse ethnic population, superb public and private schools, quality public transportation, and a rapidly expanding community of high-tech businesses.

To ensure full consideration please create your candidate profile through <http://go.illinois.edu/AsstProfPhysio> and upload your application materials: application letter, curriculum vitae, summary of research and plans, teaching philosophy, and contact information for three or more professional references by the closing date of October 1, 2018. Letters of recommendation may be requested electronically from referees at a later date. Only applications submitted through the University of Illinois Job Board will be considered. For further information contact:Physiology Search Committee; sib@life.illinois.edu or 217 333-3488.

Applicants may be interviewed before the closing date; however, no hiring decision will be made until after that date. The University of Illinois conducts criminal background checks on all job candidates upon acceptance of

a contingent offer.

The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit <http://go.illinois.edu/EEO>. To learn more about the University's commitment to diversity, please visit <http://www.inclusiveillinois.illinois.edu> Becky Fuller <fuller@life.illinois.edu>

UMarylandCollegePark LabManager MolecularGenomics

Faculty Assistant - Molecular and Genomics Lab - University of Maryland, College Park

Job Summary: The EspíndoLab, in the Department of Entomology at the University of Maryland, is opening a Faculty Assistant to manage our lab and perform molecular and genomics work on plants and insect pollinators. The work has a negotiable start date, ideally before the end of 2018.

Qualifications: We are seeking an independent and organized lab manager to join our lab. The ideal candidate owns a Bachelor's or Master's in Biology, Entomology, Botany, Ecology, Evolution or similar, and has expertise with the production and treatment of molecular and genomic data for phylogenetic purposes. Expertise in standard molecular techniques, and the preparation of material for High-Throughput sequencing are essential. The incumbent is able to learn, follow, and troubleshoot new protocols, and can collaborate and assist other lab members. Women and members of minority groups are encouraged to apply.

Application Details: We offer a dynamic, supportive, intellectually motivating, and collaborative environment. This position is based at the College Park campus of the University of Maryland. This is a full-time, 12-month, 1-yr position, including a comprehensive benefits packet (<https://uhr.umd.edu>). Salary commensurate with experience. If interested, email Prof. Anahí Espíndola ([anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)) a single PDF including: i) a motivation letter explaining your experience and qualifications, ii) your CV, iii) contact information of one-two references. The position will remain open until the appropriate candidate is found, but applications received before September 28th, 2018 will be given full consideration. For questions, email Prof. Espíndola ([anahiesp\[at\]](mailto:anahiesp[at])

umd.edu).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Learn about the lab: <http://anahiespindola.github.io>
Contact: Prof. Anahí Espíndola, [anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)

Anahi Espindola <anahi.espindola@gmail.com>

UMassachusetts Lowell EvolutionaryEcology

UMassLowell.EvolutionaryEcology

The Department of Biological Sciences at the University of Massachusetts, Lowell invites applications for a full-time, tenure-track faculty position in Ecology/Environmental Biology, at the Assistant or Associate Professor level, starting September 2019. We seek a colleague who takes a functional and/or comparative approach to study ecological and/or environmental questions.

The area of specialization is open, but we are interested in applicants with expertise in behavioral, evolutionary, functional, molecular, physiological, or population ecology. The successful candidate is expected to establish a vigorous, collaborative, externally-funded research program that engages trainees at all levels, and incorporate her/his research into the classroom to fulfill our teaching and student engagement mission. Teaching responsibilities will include an advanced undergraduate course in ecology/environmental biology and a graduate-level course (MS, PhD students) in the candidate's area of specialization.

The department currently consists of 22 faculty serving a diverse student population of >700 undergraduate and >50 graduate students. Faculty research interests are broad including neuroscience, immunology, cancer biol-

ogy, developmental biology, cell biology, molecular evolution, invertebrate systematics, functional morphology, structural biology, microbiology, virology, and biology education. The department has a Master's program, a newly approved Doctoral program in Applied Biology, and also participates in 3 inter-departmental graduate (MS & PhD) programs in Biochemistry, Marine Biology, and Biomedical Engineering & Biotechnology. A number of our undergraduate students also conduct research, leading to theses, as required for Honors College degrees, and publications.

The University of Massachusetts Lowell is located in the heart of the life sciences supercluster of the Northeast Massachusetts region, which is home to >100 life science companies. Together with the nearby biotechnology and biomedical hub in Boston/Cambridge, the candidate would also leverage the ample opportunities that exist for scientific interaction, exchange, and collaboration on campus, across the UMass system, as well as with local industries.

Minimum Qualifications (Required):

- -Earned doctorate and postdoctoral experience (required at the time of application)
- -The ability to collaborate effectively with diverse student and faculty groups

Additional Considerations:

- -Demonstrated teaching and mentoring abilities at the undergraduate and/or graduate levels
- -Potential to establish a sustainable, externally funded research program
- -Demonstrated publication record in scholarly journals
- -Excellent communication and interpersonal skills

Special Instructions to Applicants:

Please include a CV, cover letter, research interest, and teaching philosophy with your application through our website: <http://explorejobs.uml.edu/lowell/en-us/job/-494572/assistantassociate-professor-biological-sciences-ecologyenvironmental-biology>

Names and contact information for three references will be required at the time of application. References will be contacted for a letter of reference immediately after application submission. References will be required to upload recommendation letters to our on-line portal; neither emailed nor hard-copy letters will be accepted. *Three letters of reference are required.

Review of applications will begin on September 1, 2018 and continue until the position is filled. However, the position may close when an adequate number of qualified

applications are received.

Frederic Chain <frederic_chain@uml.edu>

“Chain, Frederic J” <Frederic.Chain@uml.edu>

UMichigan FishCollectionManager DeadlineExt

Note extended deadline. Review of applications will begin August 6, 2018. The projected start date in Ann Arbor, Michigan is November 1, 2018 or as soon as possible.

The Department of Ecology and Evolutionary Biology (EEB) is seeking a Collection Manager for the Museum of Zoology (UMMZ) Fish Division (<https://lsa.umich.edu/ummz/fishes.html>), located at the new state of the art Research Museums Center (RMC) in Ann Arbor, Michigan. The UMMZ develops and maintains zoological collections explicitly for use in research and education, benefiting science, society, and the university at large. The scientific role of the UMMZ is to train students and engage in systematic biology and biodiversity studies. These broad and overlapping fields entail the discovery and study of the diversity of organisms, their evolutionary relationships, and the processes that originate biodiversity. EEB has an outstanding, diverse and collaborative group of researchers in evolutionary biology, biodiversity science, and ichthyology.

The UMMZ Fish Collection is worldwide in its geographic scope and one of the largest of its type, including more than 200,000 lots and 3.3 million specimens representing 98% of fish orders. The collection is particularly strong in Neotropical, North American, African and Southeast Asian freshwater holdings. Historical collections often date back to the early 20th Century and include irreplaceable samples from North and Central America, Asia and Madagascar.

We seek candidates with a strong commitment to a vision of the Fish Collection as a key resource for research and education within the University and to the ichthyological community nationally and internationally. The position offers exciting opportunities for mentoring, and career development, including limited research within the context of the Fish Division curatorial priorities.

Responsibilities

Growth, Maintenance and Digitization of the fish collections, including fluid, cleared-and-stained and skeleton

specimens, tissue samples, and ancillary collections such as paper archives, field notes, geographic and environmental data, and digital assets such as photography, X-rays, and micro CT scans. Activities may include organizing and participating in field expeditions (including international collecting), coordinating and contributing directly to digitization efforts, as well as writing collection-based grants to support the fish collection.

Working with faculty curators to develop and implement policies, standards, and procedures. This involves, as necessary, developing standard operating procedures for acquisition, accessioning, databasing, archival and use of new or emerging genomic, digital resources and other ancillary collections. Reviewing, updating, and enhancing the fish collections management plan.

Accessioning and cataloguing of new specimens, tissues and ancillary collections into the collection and the electronic database. This activity includes coordinating curatorial priorities with faculty curators and the daily management of staff workers, work-study students, graduate curatorial assistants and other personnel.

Support of and coordination with faculty curators, student researchers and visiting collaborating researchers to plan and develop research projects utilizing the research collections and/or enhance collection resources.

Being involved in grant writing to secure grant funding for research projects that enhance collection resources.

Maintenance and growth of the fish genomic resources in the Liquid Nitrogen Facility. This activity involves the accessioning of new samples, database cross-referencing to voucher specimens, as well as development and maintenance of database records on genomic resources in the Fish Division.

Coordinate and process inter-departmental and inter-institutional loans and exchanges. Activities include the packing and unpacking of loans (specimens and tissues) and securing state, federal and international permit requirements when appropriate, as well as the electronic exchange of digitized information. Facilitating the establishment of Memoranda of Understanding or Material Transfer Agreements among institutions for loans, exchange and import/export of collection-related materials nationally and internationally.

Routine maintenance and updating of the data portal through which our holdings are made accessible to researchers across the world. This activity is performed in ongoing coordination with faculty curators and requires regular attention to both our electronic, searchable database and a server that connects us to the international community.

Training and supervision of staff volunteers, work-study students, graduate curatorial assistants, and when needed, visiting researchers in all aspects of specimen preparation and conservation practices, database use, geo-referencing and digital imaging (e.g. photography,

— / —

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>

UMichiganHerbarium CollectionManager

The Department of Ecology and Evolutionary Biology (EEB) is seeking a Collection Manager of Vascular Plants at the University of Michigan Herbarium, located at the new Research Museums Center (RMC) in Ann Arbor, Michigan. The Herbarium develops and maintains collections explicitly for use in research and education, benefiting science, society, and the university at large.

The U-M Herbarium is worldwide in its geographic scope and is the second largest public university collection in North America, comprising about 1.75 million specimens. The collection is particularly strong in Michigan and the Great Lakes region, Mexico, and southeast Asia (esp. Sumatra, Philippines) and includes major holdings from all major plant and fungal groups; see also <https://lsa.umich.edu/herbarium/collections.html>. We seek candidates with a strong commitment to a vision of the Herbarium Collection as a key resource for research and education within the University and to the botanical community nationally and internationally. The position offers opportunities for mentoring, and career development. For PhD level candidates there is a possibility of becoming a Research Scientist within the EEB Department.

For more information and to apply please visit this website before the deadline of September 4, 2018:

http://careers.umich.edu/job_detail/160776/-research_museum_collection_manager Please contact Chris Dick (cwddick@umich.edu) with any questions about the position

University of Michigan Herbarium: <https://lsa.umich.edu/herbarium> Department of Ecology

and Evolutionary Biology: <https://lsa.umich.edu/eeb/> Christopher Dick <cwddick@umich.edu>

UMichigan microCT Morphology

Job: Morphology Technician - microCT - University of Michigan - Museum of Zoology

The Museum of Zoology at the University of Michigan (UMMZ) is seeking a research technician to contribute to the 3D imaging and analysis of zoological specimens using computed tomography (CT). The UMMZ hosts one of the world's largest university-affiliated biodiversity research collections and is actively digitizing vertebrate specimens to facilitate a range of research objectives in evolution, ecology, and conservation. The position will involve scanning zoological specimens, training of students and other researchers, and post-scan processing of specimen data. The position provides opportunities for independent research on digital morphology and morphometrics using CT data. Specific duties include:

- * Operating and managing a dedicated Nikon XT225 microCT scanner for high-throughput imaging of vertebrate specimens.
- * Post-scan reconstruction, data storage, image processing, and dissemination to the broader research community (e.g., through MorphoSource).
- * Training of students and other researchers in basic machine operation and in post-scan processing
- * Routine machine maintenance (e.g., filament changes).
- * Development of workflows for advanced imaging techniques, including contrast-enhanced CT scanning (diceCT) for soft-tissue reconstruction
- * Participation in conferences and/or workshops focusing on biodiversity imaging and digital specimens.
- * Engagement with a diverse population of CT researchers and trainees, from undergraduate students to visiting scholars.

The ideal candidate will have had prior experience with the generation and/or analysis of microCT data and/or vertebrate morphology, but we will consider applicants with equivalent experience in other areas that involve digital imaging (e.g., 2D medical radiography). Prior experience with either CT hardware or software (e.g., Avizo, Volume Graphics, Dragonfly) is desirable.

Required Qualifications:

The position is open to qualified candidates with an undergraduate degree and experience with the use of microCT technology. Individuals with advanced degrees (M.S., PhD, and postdoctoral) are encouraged to apply;

salary is commensurate with experience and educational background. Applicants should have an interest in the imaging and analysis of museum research specimens, but prior zoological experience is not required. We encourage applications from individuals with CT experience who have primarily worked in medical, engineering, or other fields. We also welcome applicants with primary expertise in the skeletal and soft tissue diversity of non-model/non-livestock vertebrates.

How to Apply: A cover letter, a CV, and contact information for 3 references is required. The cover letter should detail relevant experience and interest in CT or other imaging technology, especially as applied to zoological specimens. The position is full-time and includes benefits.

Applications should be sent by email to Dan Rabosky (drabosky@umich.edu) and should be received by August 31 2018 for full consideration. The position is available immediately.

The University of Michigan is an equal opportunity/affirmative action employer.

“drabosky@umich.edu” <drabosky@umich.edu>

UNorthTexas Biostatistics

Department of Mathematics, Department of Biological Sciences, University of North Texas

Tenure-Track Assistant Professor in Biostatistics

The Department of Mathematics and the Department of Biological Sciences at the University of North Texas invite applications for a joint tenure-track assistant professor position in biostatistics, statistics, or a closely related field. The appointment is expected to begin in Fall 2019.

The responsibilities of the position are to pursue research and teach undergraduate and graduate courses, including biostatistics. The successful candidate will have a Ph.D. at the time of appointment. Preference will be given to applicants with * Postdoctoral training * Undergraduate and/or graduate level teaching experience * A strong interest in interdisciplinary research

With about 38,000 students, UNT is the largest university in Dallas-Fort Worth and the 33rd largest in the nation. We offer 101 bachelor's degrees, 82 master's degrees, and 38 doctoral degrees, many nationally and internationally recognized. UNT is a student-focused

public research university and is the flagship of the UNT System. The Department of Mathematics has 34 faculty members and about 60 graduate students, and the Department of Biological Sciences has 50 faculty members and about 200 graduate students. Both departments offer degrees through the Ph.D. Further information may be found at <http://www.math.unt.edu> and <https://biology.unt.edu>.

Applicants must apply online at <http://facultyjobs.unt.edu> : the posting identification number is 6002005. The application must include a cover letter, a current vita, unofficial transcripts (official transcripts are required upon hire), a research statement, a teaching statement, and three letters of recommendation. The letters must be uploaded to www.mathjobs.org by their authors. Inquiries regarding the position, but not the application materials, may be directed to Dr. Rajeev Azad, Search Committee Chair, at Rajeev.Azad@unt.edu.

Review of applications begins September 15, 2018. Applications will be reviewed weekly thereafter until the search is closed.

The University of North Texas System is firmly committed to equal opportunity and does not permit - and takes actions to prevent - discrimination, harassment (including sexual violence), and retaliation on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity or expression, age, disability, family status, genetic information, citizenship or veteran status in its application and admission processes, educational programs and activities, facilities, and employment practices. The University of North Texas System immediately investigates and takes remedial action when appropriate.

The University of North Texas System also takes actions to prevent retaliation against individuals who oppose a discriminatory practice, file a charge, or testify, assist or participate in an investigative proceeding or hearing.

“Azad, Rajeev” <Rajeev.Azad@unt.edu>

USouthCarolina EvolutionaryBiology

Assistant Professor of Evolutionary Biology University of South Carolina 'V Department of Biological Sciences

The Department of Biological Sciences invites applications for a tenure-track, assistant professor position in

Evolutionary Biology to begin August 16, 2019. We seek to hire an evolutionary biologist studying mechanisms governing evolutionary dynamics in natural or experimental systems. Individuals using empirical and theoretical approaches are encouraged to apply. Faculty positions require a commitment to research, teaching, and service. Duties include developing a creative and vibrant research program in evolutionary biology, teaching that advances our graduate program in ecology and evolution, undergraduate teaching and advising, and mentoring graduate students.

Minimum qualifications include a PhD in evolutionary biology or related discipline and evidence of established scholarship including a strong record of publishing in peer-reviewed journals. Post-doctoral experience is preferred.

The Department of Biological Sciences (www.biol.sc.edu) is a multidisciplinary unit of approximately 1,600 undergraduate students, 50 graduate students, and 35 tenure-faculty members representing a broad range of research areas, including Ecology and Evolution, Marine Biology, Molecular and Cellular Biology, Plant Science, and Neuroscience. The department has excellent core technical support facilities and strong links with the Belle W. Baruch Institute for Marine and Coastal Sciences (www.baruch.sc.edu) and the School of the Earth, Ocean, and Environment (seoe.sc.edu) in the College of Arts and Sciences.

The University of South Carolina System is comprised of the state's flagship university in Columbia (founded in 1801 and currently one of the top 50 "Best Colleges" according to U.S. News and World Report), three regional comprehensive universities (USC Aiken, USC Beaufort and USC Upstate), and Palmetto College consisting of four two-year campuses (USC Lancaster, USC Salkehatchie, USC Sumter, USC Union and Fort Jackson/Extended University). Together, the USC System institutions offer more than 450 degree programs on campus and online and are uniquely positioned to meet the state's educational, cultural, health and research needs. Our diverse engaged faculty and staff enjoy a dynamic and intellectually stimulating work environment.

All applicants must fill out an online application at the USC employment website at: <http://uscjobs.sc.edu/postings/37360>. Candidates should be prepared to upload a full CV, statement of research interests, statement of teaching interests, and the names and contact information, including telephone number, of three references. Please have your reference providers send your recommendation letters to hilbish@biol.sc.edu. Questions may be directed to Dr. Jerry Hilbish, Search Committee Chair, at hilbish@biol.sc.edu (put "Evolution Search"

in the subject line).

To ensure full consideration, complete applications should be received by October 1, 2018. Files will be reviewed until a candidate is selected. The University of South Carolina is an affirmative action, equal opportunity employer. Minorities and women are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities on the basis of race, color, religion, national origin, sex, sexual orientation, gender, age, disability, veteran status or genetics.

Jeffrey L. Dudycha Professor Dept. of Biological Sciences
University of South Carolina Columbia, SC 29208 [dudycha \[at\] biol.sc.edu](mailto:dudycha[at]biol.sc.edu) <http://ww2.biol.sc.edu/~dudycha/>
Jeff Dudycha <dudycha@mailbox.sc.edu>

UtahStateU EvoDevo

Position Summary:

The Department of Biology (www.biology.usu.edu) invites applications for a 9-month tenure-track Assistant Professor position (50% research, 40% teaching, and 10% service) in evolutionary developmental biology.

Responsibilities:

We seek an innovative scientist with research interests in the mechanisms underlying diversification of developmental processes in model or non-model organisms. Preference will be given to those applicants whose research complements existing strengths in the department and university. Teaching may include Developmental Biology, Genetics, or General Biology.

Dept/College Highlights:

The Department of Biology has nearly 50 faculty and offers MS and PhD programs in Biology, Ecology and Neuroscience. The Biology Department guarantees graduate student support for up to six years for all matriculated students. The Department is committed to excellence in research and teaching.

Utah State University includes approximately 25,000 undergraduate and 3,000 graduate students.— The USU-Logan Campus is in Cache Valley, a region with 114,000 residents located in a picturesque mountain valley that straddles northern Utah and southern Idaho, about 80 miles from Salt Lake City. Additional information about Utah State University can be found at www.usu.edu .

Utah State University is committed to enhancing multicultural and gender diversity and is sensitive to the needs of dual-career couples. It is an AA/EO employer and encourages application from minorities, women, people with disabilities and veterans.

Qualifications:

A Ph.D. is required and postdoctoral experience is preferred. Candidates will be expected to establish an independent, externally funded, and nationally recognized research program; form effective collaborations with other faculty; and contribute to undergraduate and graduate education in the Department of Biology. Implementation of innovative teaching methods is encouraged.

Applicants must submit a cover letter, curriculum vitae, statements of teaching and research philosophy and goals, up to three publications, and the names and contact information for three references. Applications should be submitted at <https://jobs.usu.edu> (Direct link: <https://usu.hiretouch.com/job-details?jobid=3034>). For further information or inquiries, please contact Nancy Kay Pierson (NancyKay.Pierson@usu.edu), Search Manager. Review of applications will begin September 15, 2018 and continue until the position is filled.

zachariah.gompert@aggiemail.usu.edu

UTexasArlington EvoDevo

The University of Texas at Arlington is seeking an Assistant Professor of Cell and Developmental biology, broadly defined, including individuals who study evolutionary development.

Cell and Developmental Biology The Department of Biology at the University of Texas at Arlington (<http://www.uta.edu/biology/>) invites applications for a tenure-track faculty position in Cell and Developmental Biology (broadly defined) at the level of Assistant Professor. Research areas of interest range from fundamental questions related to cell signaling and development to species interactions, including pathogenesis and epidemiology of infectious disease. Candidates who use molecular and cell biology techniques to understand the mechanisms underlying responses to disease are particularly attractive. Candidates must have a doctoral degree in a relevant field and will have a clear vision to develop a nationally recognized, extramurally funded research pro-

gram, as well as teach at the undergraduate and graduate (Master's and Ph.D.) levels. Start-up funds, salaries, and teaching loads are highly competitive. Successful candidates are expected to demonstrate a commitment to diversity and equity in education through their scholarship, teaching, and/or service. We are deeply committed to increasing diversity and especially encourage applications from women and minority scholars.

The Department and University have numerous resources including state-of-the-art labs, an Animal Care Facility, a Life Science Core Facility, a Center for Human Genomics, an Amphibian and Reptile Diversity Research Center housing specimen and tissue collections, and affiliations with the Botanical Research Institute of Texas (BRIT). The UT Arlington campus also houses the newly established North Texas Genome Center, and the Shimadzu Institute for Research Technologies (a major partnership between UT Arlington and Shimadzu Scientific Instruments) that offers extensive resources for advanced 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.

The University of Texas at Arlington is a Carnegie Research-1 "highest research activity" institution. With a projected global enrollment of close to 58,000 in Academic Year 2017-18, UTA is the largest institution in The University of Texas System. The University is a Hispanic-Serving Institution and is ranked fifth in the nation for undergraduate diversity by U.S. News & World Report.

Arlington is a city of nearly 400,000 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. 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. Review of applications will begin immediately and continue until the position is

filled. For full consideration, applications should be submitted by October 15. Applicants must apply online at [https://uta.peopleadmin.com/\(search job #F00092P\)](https://uta.peopleadmin.com/(search job #F00092P)). Applicants should include in their application: 1) curriculum vitae, 2) summary of current and proposed research (three pages), 3) teaching interests, and 4) names and email addresses of four references. A criminal background check will be conducted on finalists.

mkfujita@exchange.uta.edu

“Fujita, Matthew” <mkfujita@exchange.uta.edu>

UWaikato AnimalBehaviour

Applications are invited for the position of Lecturer/Senior Lecturer in Animal Behaviour at the University of Waikato, Hamilton, New Zealand.

Closing Date : 20 August 2018 (NZ time) Vacancy number: 380291 Details can be found here:

[https://hr-wss.its.waikato.ac.nz/plsql/wss/-WK8127\\$APP.QueryList?Z.ORDER_BY=1](https://hr-wss.its.waikato.ac.nz/plsql/wss/-WK8127$APP.QueryList?Z.ORDER_BY=1) Joseph Waas <joseph.waas@waikato.ac.nz>

UWashington EvolutionaryPhysiology

The University of Washington (UW) Department of Biology is seeking an Assistant Professor in Integrative Physiology as part of a long-term strategic hiring plan associated with the new Life Sciences Building on the UW Seattle campus. This position focuses on how organisms and their physiological processes sense, respond and/or adapt to abiotic or biotic factors. This integrative physiologist position will employ quantitative, mechanistic approaches that integrate across disparate taxa, organizational levels, or timescales. The position may also involve the use of modern tools (e.g., -omic, computational, or biochemical approaches), particularly for research linking genotypes, phenotypes, functions, and their responses to the environment. This integrative physiologist position may work on any group of organisms (e.g., plants, animals, fungi, microbes), matching the taxonomic breadth of our department. We invite applications for a full-time (100% FTE, 9-month), tenure-

track faculty position at the Assistant Professor level with an anticipated start date of September 16, 2019 .

The UW Department of Biology provides a supportive research environment. Our faculty members use innovative and quantitative approaches to investigate the evolution and function of biological systems from molecules to ecosystems. We are seeking a colleague with an interest in collaborating across fields to make these connections. All UW faculty members engage in teaching, research, and service. Successful applicants are expected to develop original, independent research programs, teach and train undergraduate and graduate students, promote diversity and equity in their research and teaching, and promote community engagement.

Please contact Assoc. Prof. Sharlene Santana <ssantana@uw.edu>, Chair of the UW Biology Faculty Search Committee, with any questions.

Qualifications Applicants must have earned at least a doctorate, or foreign equivalent, by the date of appointment.

Application Instructions Applications and all recommendation letters must be received by EOD 1 October 2018. The application is available through the following URL: <https://apply.interfolio.com/53282> Please complete the form and provide a single file containing your cover letter, CV (including your full publication list), research statement (up to three pages), teaching statement (one page), and diversity, equity and inclusion statement (one page) (Note: all but the cover letter are mandatory). For the diversity statement, please explain how you have promoted equity and diversity in the past, and how you will continue to promote them in your work and classroom environment. Please insert a page break between sections.

– Sharlene E. Santana, Ph.D. Associate Professor - Department of Biology < <http://www.biology.washington.edu/> > Curator of Mammals - Burke Museum of Natural History and Culture < <http://www.burkemuseum.org/> > University of Washington, Box 351800 Seattle, WA 98195-1800 Lab: Kincaid 508 Office: (206) 221-6488 Burke: (206) 616-1781 Lab Website < <http://faculty.washington.edu/ssantana-wordpress/> >

“Sharlene E. Santana” <ssantana@uw.edu>

WichitaStateU
AquaticVertebrateEvolBiol

Wichita State University

Aquatic vertebrate ecologist / evolutionary biologist

Questions? contact:

James Beck

james.beck@wichita.edu

The Department of Biological Sciences at Wichita State University invites applications for a 9-month, tenure-track Assistant Professor position. The successful candidate will be an ecologist or evolutionary biologist with interests in aquatic vertebrate biology, broadly defined to include interactions with freshwater systems at any spatial scale. The candidate is expected to develop an externally funded research program involving undergraduate students and Masters of Science graduate students. Biology faculty typically teach 3 courses per year and teaching responsibilities will include undergraduate and graduate courses in the candidate's area of expertise. We seek applicants who will work in a collegial atmosphere to foster excellence in teaching and establish research collaborations with existing faculty. Preference will be given to candidates whose research and teaching agendas will actively utilize one or more of WSU Biology's Field Station sites that are detailed below.

THE DEPARTMENT: The Department of Biological Sciences offers majors in Biology with either an Ecological/Environmental/Organismal or a Biomedical emphasis. There are approximately 390 undergraduate majors and the department's Master of Science in Biology program currently includes 20 graduate students. There are 11 faculty members and five full-time departmental support staff/administrators. The WSU Field Station operation spans four reserves that total over 5000 acres and each reserve includes aquatic features such as streams, rivers, springs, or impoundments associated with either restored or native tall and mid-grass prairies. The Ninescah Reserve is the base of operations for our Field Station Manager and includes research and storage/maintenance buildings. A newly renovated 2025 ft² space on the Wichita main campus is dedicated to organismal biology coursework and WSU's natural history collections. The department houses modern laboratory space that include analytical/molecular equipment, an accredited

animal facility, a greenhouse, and access to the Kansas State University High Performance Computing cluster. For more information about our department visit www.wichita.edu/biology. Wichita State University is located in the heart of Wichita, the largest urban center in Kansas, and has an enrollment of >15,000 students. For more information about Wichita State University visit http://webs.wichita.edu/?u=employment&p=/why_wsu/. To learn more about Wichita visit http://webs.wichita.edu/?u=employment&p=/why_wichita/. **REQUIRED QUALIFICATIONS:** A Ph.D. in Biology or a related field is required at the time of employment. Research experience in aquatic vertebrate biology and research / teaching plans incorporating field components are required.

PREFERRED QUALIFICATIONS: Postdoctoral research experience is preferred, but strong candidates lacking postdoctoral experience will be considered.

APPLICATION: <https://jobs.wichita.edu/postings/13569> Complete applications include:

- 1) A letter of application
- 2) Current curriculum vita
- 3) Statement of teaching philosophy and goals
- 4) Statement of research interests and goals
- 5) Contact information for three professional references
- 6) Copies of unofficial academic transcripts

Complete applications are due September 14, 2018. The successful applicant will start August, 2019.

"Beck, James" <James.Beck@wichita.edu>

YaleU EvolutionAnimalBehaviour

YALE UNIVERSITY

Faculty Position

in

Animal Behavior

The Department of Ecology and Evolutionary Biology at Yale University invites applications for an Assistant Professor in Animal Behavior. We are interested in individuals with integrative research programs that complement the mission of the Department of Ecology and Evolutionary Biology. The successful candidate will contribute to undergraduate and graduate teaching in animal behavior. A record of outstanding achievement

and a promising research program are more important than the specific research area. A Ph.D. or equivalent degree at time of hire is required for this position.

Interested candidates should submit online a CV, three relevant reprints or manuscripts, brief research and teaching statements, and three letters of reference at <https://apply.interfolio.com/53230> Applicants may contact Thomas Near at thomas.near@yale.edu with any questions regarding the position. The search will remain open until the position is filled. Review of applications

will begin

1 November 2018. The anticipated appointment start date is July 2019.

Yale University is an Equal Opportunity/Affirmative Action Employer. Yale values diversity among its students, staff, and faculty and strongly welcomes applications from women, persons with disabilities, protected veterans and under-represented groups.

thomas.near@yale.edu

Other

American classics book	72	sweeps	77
CIBIO-InBIO Portugal Biodiversity	73	SouthAfrica VolResAssist PhysiologyBehaviour	77
DNA YieldFrom BitingMidgesSamples	74	SouthAfrica VolunteerFieldAssist StripedMouse ...	78
ESEB-ProgressMeetings CallForProposals DeadlineNov30	74	Spain EMPSEB24 Sep9-15 PhDStudentsSurvey ...	78
FlySpecies Interactions	75	SpecialIssue ToolsPopEvolGenetics	79
Invasive Species Network	75	Teaching Quantitative Skills	79
LavalU 2 VolResAssist MothBehaviour	76	UMelbourne WrenFieldVolunteers	80
Looking for diphtheria DNA	76	UWisconsin Madison EarlyCareerScientistSeminars	80
Software Phylogeny OneTwoTree	77	UZurich FieldAssist BirdsLapland	81
Software RAI SD Fast-accurate-detection-selective-			

American classics book

On behalf of Academic Studies Press, it is my pleasure to announce the publication of American Classics: Evolutionary Perspectives by Judith P. Saunders. American Classics is freely available on JSTOR via an Open Access grant from Knowledge Unlatched. Start reading here: <https://www.jstor.org/stable/j.ctv4v3226> Series: Evolution, Cognition, and the Arts July 2018 | approx.

380 pp. 9781618115928 | Open Access 9781618117656 | \$119.00 | Cloth 9781618117663 | \$34.00 | Paper

Summary: This collection of essays examines selected works in the American literary tradition from an evolutionary perspective. Using an interdisciplinary framework to pose new questions about long admired, much discussed texts, the collection as a whole provides an introduction to Darwinian literary critical methodology. Individual essays feature a variety of figures Benjamin Franklin to Billy Collins targeting fitness-related issues ranging from sexual strategies and parental investment to cheating and deception. Attention is paid to the phys-

ical and social environments in which fictional characters are placed, including the influence of cultural-historical conditions on resource acquisition, status-building, competition, and reciprocity. The discussion throughout the volume makes connections to existing secondary comments, suggesting how Darwinian scrutiny can generate unexpected insight into long familiar works.

Judith P. Saunders is Professor of English at Marist College in New York State. She is the author of *The Poetry of Charles Tomlinson: Border Lines* and *Reading Edith Wharton through a Darwinian Lens: Evolutionary Biological Issues in Her Fiction*.

For more information on this title, please visit the book's dedicated webpage at:

<https://www.academicstudiespress.com/browse-catalog/american-classics> Jenna Colozza Marketing Assistant

Academic Studies Press 28 Montfern Avenue Brighton, MA 02135

www.academicstudiespress.com Tel: 617.782.6290 | Fax: 857.241.3149

Jenna Colozza <jcolozza@academicstudiespress.com>
Jenna Colozza <jcolozza@academicstudiespress.com>

CIBIO-InBIO Portugal Biodiversity

Dear Colleagues,

I would like to inform you about the call for applications for a research fellowship (Bsc) in Environmental Metagenomics at the Research Center in Biodiversity and Genetic Resources (CIBIO-InBIO), Vairão, Portugal, which will be open until August 17th, 2018.

If possible, I would greatly appreciate to be able to count on your collaboration in the dissemination of this opportunity amongst potential candidates.

Thank you so much!

All the best,

CIBIO-InBIO's Science Communication and Outreach Office

CIBIO - Centro de Investigação em Biodiversidade e Recursos Genéticos/ InBIO Laboratório Associado, Universidade do Porto Campus Agrário de Vairão Rua Padre Armando Quintas 4485-661 Vairão Portugal

*** Research Fellowship (BI) - Bsc Reference: ICETA

2018-47 Link to the call < <http://www.eracareers.pt/-opportunities/index.aspx?task=global&jobId=102073> > (<https://cibio.up.pt/open-positions-careers/details/-bi-iceta-2018-22> < <https://cibio.up.pt/open-positions-careers/details/-bi-iceta-2018-22> >)

A Research Fellowship (BI) - Bsc (Reference ICETA 2018-47) is now available in the area of Environmental Metagenomics at ICETA - Instituto de Ciências, Tecnologias e Agroambiente da Universidade do Porto, funded by own funds, under the following conditions:

Scientific Area: Biological Sciences/Environmental Metagenomics

Admission requirements: Candidates should hold a BSc degree in Biology or related fields and should have a solid experience in molecular biology and demonstrate core expertise in: (i) performing DNA extractions; (ii) Primer design and testing; and (iii) Planning, setting up and executing PCRs;

Desirable skills/competences: (i) Working with non-invasive and environmental samples; (ii) Library preparation for MiSeq (highly desirable); (iii) Handling of DNA sequence data and (iv) Processing MiSeq outputs using bioinformatic pipelines. High motivation, communication and team work skills, as well as proficiency in English (spoken and written) are also considered core competences and will be highly valued.

Work plan/Job description: The successful candidate will work on multiple projects that will be developed by researchers at CIBIO-InBIO in the scope of the EnvMetaGen project (Reference NÂ° 668981 - funded by the European Commission under the call H2020-WIDESPREAD-2014-2). Examples include analysis of diet of bats and birds by DNA metabarcoding of faecal DNA; analysis of invertebrate species composition of rivers, lakes and estuaries; researching critical components of the diet of endangered species.

Applicable Legislation: a bolsa é atribuída ao abrigo da Lei nÂ°40/2004, de 18 de Agosto (Estatuto do Bolseiro de Investigação Científica) e Regulamento de Bolsas e Investigação da Fundação para a Ciência e a Tecnologia em vigor (<http://www.fct.pt/apoios/bolsas/docs/-RegulamentoBolsasFCT2015.pdf> < <http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf> >).

Workplace: The work will be carried out at CIBIO - Research Centre for Biodiversity and Genetic Resources, Vairão, Portugal, under the scientific supervision of Dr Pedro Beja.

Monthly Salary: Monthly stipend is euro 745 according to the stipends established by FCT, I.P. in Por-

tugal (<http://alfa.fct.mctes.pt/apoios/bolsas/valores> < <http://alfa.fct.mctes.pt/apoios/bolsas/valores> >). Payment will be made by bank transfer on a monthly basis. The successful candidate will also be entitled to the reimbursement of Social Security payments (Seguro Social Voluntário) and work insurance.

Legislation and regulations: Law N.º 40/2004, dated August 18 (Statute of Scientific Research Fellow); Regulation of Advanced Training and Qualification of Human Resources 2010; and as Grant Regulation of ICETA, approved by FCT. [Lei N.º 40/2004, de 18 de Agosto (Estatuto do Bolseiro de Investigação Científica); Regulamento da Formação Avançada e Qualificação de Recursos Humanos 2010 e conforme Regulamento de Bolsas do ICETA aprovado pela FCT.

Grant duration: The fellowship is expected to start during September 2018 and have the duration of 6 months (renewable up to 24 months).

Selection methods: The ranking of candidates will be performed by a

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evoldir.html>

DNA Yield From Biting Midge Samples

Dear Evoldir Community,

We are interested in DNA extractions from biting midges (Culicoides) stored in ethanol in -20C.— We used Phenol Chloroform DNA extraction method after crushing the whole insect which works well except that DNA yield is not good enough for Next-gen sequencing. Apparently, we will need 500ng DNA in 20-25ul—extractions

These samples all following nanodrop values and have been successfully PCR'ed. Sample no 1:— 13ng/ul,— in total 25ul, 260/280=1.82, 260/230=0.64,— Sample no 2:— 5.5ng/ul, in total 25ul, 260/280=1.95, 260/230=0.43 Sample no 3:— 5.3ng/ul in total 25ul, 260/280=1.79, 260/230=0.41

Can anyone— recommend insights into- how to increase the DNA yield?

Thanks in advance for your help and I will of course

re-post responses. Farah Ishtiaq, Ph.D. Wellcome Trust-DBT India Alliance Fellow (Faculty Fellow) Centre for Ecological Sciences 3rd Floor, Biological Sciences Building Indian Institute of Science Bangalore-560012 ishtiaq.farah@gmail.com

Farah Ishtiaq <fishtiaq2001@yahoo.com> Farah Ishtiaq <fishtiaq2001@yahoo.com>

ESEB-Progress Meetings Call For Proposals Deadline Nov 30

Progress meetings in evolutionary biology

We are excited to announce the second round of a new initiative by the European Society of Evolutionary Biology (ESEB), in partnership with the Journal of Evolutionary Biology (JEB).

We invite applications for funding to support focussed conference or workshops on a topical issue where rapid progress is currently being made in understanding Evolutionary Biology. ESEB will supply funds up to 'A15,000 to assist with workshop planning (venue, travel or attendance support). We encourage proposals on any topic.

We expect these meetings to bring together a range of researchers focussed around a topic for a “state of the art” conference, ideally proposing a new synthesis, viewpoint or technical or analytical breakthrough facilitating new avenues of research. Attendees would represent researchers from all career stages and must accord with our Equal Opportunities guidelines. Attendance should be open to all, but ESEB members should be prioritised. Typically, meetings would last 2-3 days.

A condition of the funding is that the meeting has a clear objective to produce either a Special Issue or Target Review for JEB. Within 4 months of the meeting manuscripts arising from the meeting should be submitted to the journal, to be handled by the organisers as guest editors or the editorial board of JEB, as appropriate.

This is a novel opportunity for a one-off topical meeting for ESEB members and the evolutionary community. There will be one round per year, with a deadline of Nov 30, 2018. Applicants should be members of ESEB or our sister society, the Society for the Study of Evolution.

There is no official application form. The application document should include

- The title of the conference and why this is suitable for a Progress Meeting. - Names and addresses of the organisers, with short (1 page each) CVs - List of keynote speakers, with justification (potentially key recent references). They should have agreed in principle to participate - A 2-page description of the aims and potential scope of the conference - Conference venue details - Methods of selecting participants - Publication plans

Queries and applications should be submitted to office@eseb.org by the deadline. People are also welcome to approach any of us at the forthcoming joint meeting in Montpellier. The successful application will be chosen by an ESEB committee.

Luke Holman, Reviews Editor, JEB Mike Ritchie, former Editor in Chief, JEB Wolf Blanckenhorn, Editor in Chief, JEB Tanja Schwander, Deciding Editor and former Special Issue Editor, JEB

Ute Moniatte | ESEB Office Manager | office@eseb.org European Society for Evolutionary Biology | www.eseb.org ESEB <office@eseb.org>

FlySpecies Interactions

Hi everyone,

We are writing because we are hoping for help finding data. Specifically, we are interested in investigating species interactions and natural selection across broad geographical areas in the gall forming fly *Eurosta solidaginis*. Many colleges and universities throughout the eastern United States and Canada have used this system in undergraduate laboratory courses to illustrate directional and stabilizing natural selection.

We suspect there are a lot of unpublished data that can be compiled to gain a better understanding of how the strength and direction of selection varies across broad geographic areas. Please write if you have access to and are willing to share one of the following types of data:

1. The average strength of species interactions (proportion of galls attack by each enemy: *Eurytoma gigantea*, *Eurytoma obtusiventris*, *Mordellistena* sp., downy woodpeckers, chickadees) and variance standardized selection gradients/differentials acting on *Eurosta* gall size (diameter), including their standard errors if possible. We would also need a location of the collection (coordinates or an approximate area), and a rough time (month and year) that the collection was taken.
2. If possible, we prefer raw data. This would mean having a dataset that

includes the size (diameter) and fate (attacked by enemy X or Y or survived) of each gall, from which selection coefficients can be calculated. Again, we would also like to know the time and place that the collection occurred. Any additional data on environmental correlates (population sizes & densities, climatic data, landscape features, etc.) would be an appreciated bonus.

If you're able to help out please respond to denon.start@mail.utoronto.ca.

Thanks!

Denon Start, Art Weis, Ben Gilbert, & Adam Siepielski
 "denon.start@utoronto.ca" <denon.start@utoronto.ca>

Invasive Species Network

Dear all,

I am delighted to announce the launch of INVASIVESNET - the International Association for Open Knowledge and Open Data on Invasive Species. INVASIVESNET will facilitate improved global access to high quality, open-source knowledge and data on invasive alien species (IAS), by developing a sustainable network of networks for effective knowledge exchange.

Our International Council is made up of leading scientists from five continents. We now invite new members to join INVASIVESNET, and to support our overarching aim for greater co-ordination, co-operation, and information exchange among scientists, management, the community of practice and the public.

The key objectives of INVASIVESNET are:

- * To establish a global network of networks on IAS
- * To enhance accessibility to existing open sources of knowledge and databases on IAS
- * To encourage and facilitate free access to global scientific research on biological invasions
- * To develop relevant funding infrastructure to support open access publications on IAS

We are now open for INVASIVESNET Membership! Benefits include access to our forums and databases, discounted or waived article processing fees in INVASIVESNET journals < <http://www.reabic.net/journals/Default.aspx> >, possibilities to publish your organisation's achievements and events on our social media, and eligibility for scientific awards. Membership

is open to both individuals and organizations wishing to participate in promoting the objectives of INVASIVESNET.

For further information and membership details, please check out the INVASIVESNET website < <https://invasivesnet.org/> > or follow us on Twitter < <https://twitter.com/Invasivesnet> > or Facebook < <https://www.facebook.com/invasivesnet/> >.

We hope to welcome you soon!

Frances Lucy

President of INVASIVESNET

<https://invasivesnet.org/> INVASIVESNET - Home < <https://invasivesnet.org/> > INVASIVESNET collaborates with industries and other stakeholders to develop and facilitate effective solutions. Read more. Invasive ascidians fouling the hull of a yacht, Malahide marina, Ireland.

kit8x@hotmail.com

Gypsy moths (*Lymantria*) are a group of plant defoliators adapted to a wide variety of deciduous and coniferous hosts. During population outbreaks, gypsy moth larvae can cause widespread forest damage. Adult female flight capacity represents a key dispersal limitation and therefore a crucial trait determining our ability to monitor and regulate the spread of gypsy moth populations. Currently, a single introduced species featuring limited female flight capacity (*L. dispar dispar*) is established throughout eastern USA and Canada. The persistent arrival of female-flight-capable gypsy moth species on ships and cargo at North American trading ports represents an important invasion threat, in terms of their potential for successful establishment or hybridization with local moths. The present research aims to develop genetic markers capable of identifying the species, origin, and female flight capacity of gypsy moths, and to explore the genetic architecture and evolution of flight in this group.

Gwylim Blackburn <gwylim.blackburn@gmail.com>

LavalU 2 VolResAssist MothBehaviour

VOLUNTEER RESEARCH ASSISTANT: FLIGHT BEHAVIOR AND EVOLUTION OF GYPSY MOTHS

Two short-term volunteer research assistant opportunities (September 5-25, 2018) are available under the direction of Dr. Ilga Porth (Laval University), representing the chance to work with regulated invasive gypsy moths (*Lymantria dispar* spp.) in a USDA quarantine facility in Connecticut (USA)*. The assistants will live in a dormitory at the quarantine facility, and will perform moth maintenance and collection of female flight behavior data under laboratory conditions. Following data collection, they will have the option to participate in subsequent data analyses geared towards gypsy moth behavior, morphometrics, population genetics, or evolution. Travel to the quarantine facility (from Canada or USA), living expenses, and a daily stipend will be provided.

To apply, please email Gwylim Blackburn (gwylim.blackburn@gmail.com) with a brief message outlining your interest in the project and an attached CV that lists 2 references. Review of applications will occur as they arrive. The successful candidate for this position will require a passport valid for travel in the USA. *PROJECT DETAILS:

Looking for diphtheria DNA

Dear All,

My name is Antony Dimopoulos and I'm a PhD student at the University of Oxford doing research on metagenomics and ancient DNA. I am currently working on a project to detect *Corynebacterium diphtheriae* in dental calculus samples from ancient skeletons, using computational methods.

To validate the computation findings we want to use positive controls to implement in a PCR protocol. Therefore we were wondering if anyone has *Corynebacterium diphtheriae* genomic DNA that could send us. Thanks in advance!

Please reply to evangelos-antonios.dimopoulos@hertford.ox.ac.uk

Evangelos Dimopoulos <evangelos-antonios.dimopoulos@hertford.ox.ac.uk>

Software Phylogeny OneTwoTree

Recently, we have published an online tool for an automatic phylogeny reconstruction named OneTwoTree. I believe such a tool can be of interest to evolutionary biologists.

The tool is available at <http://onetwotree.tau.ac.il/> and the paper can be found at <https://onlinelibrary.wiley.com/doi/abs/10.1111/1755-0998.12927> Anna Rice <annarice123@gmail.com>

Software RAiSD Fast-accurate-detection-selective-sweeps

Dear Community,

We are pleased to announce the release of a new software for selective sweep detection called RAiSD (Raised Accuracy in Sweep Detection). RAiSD implements a novel computational method for identifying multiple signatures of selective sweeps using single nucleotide polymorphism vectors. This approach leads to higher sensitivity and accuracy, as well as considerably reduced complexity than current methods.

An article (Open Access) describing and evaluating the method and the software can be found here: <https://www.nature.com/articles/s42003-018-0085-8>

RAiSD is available (Open Source) on GitHub: <https://github.com/alachins/raisd>

Best regards,

Nikolaos Alachiotis (n.alachiotis@gmail.com) and Pavlos Pavlidis (pavlidisp@gmail.com)

Institute of Compute Science (ICS) Foundation for Research and Technology - Hellas (FORTH)

– Nikolaos Alachiotis

Nikolaos Alachiotis <n.alachiotis@gmail.com>

SouthAfrica VolResAssist PhysiologyBehaviour

We are looking for several volunteer research assistants to carry out exciting experiments with captive Damara-land mole-rats, *Fukomys damarensis* at the Kuruman River Reserve, in the South African Kalahari Desert.

Broadly, our research investigates the influence of genes, hormones and social factors on individual developmental, growth and behaviours. Currently, we are particularly interested in characterizing the phenotypical differences between breeding and non-breeding individuals and to develop an integrated understanding of the causes and consequences of contrasts in reproductive output.

Applicants should be available for a period of 6 to 12 months starting as soon as possible. They should be hardworking, enthusiastic, physically fit, and prepared for long hours in the laboratory. Successful applicants will be responsible to run experiments and will be involved in data collection (behavioural observations, collection of blood and urine samples). Other general tasks related to animal handling and husbandry and data handling will also be expected. Some specific volunteer positions will require the successful applicants to be comfortable with being involved in experiments requiring the sacrifice of experimental subjects. Working weeks will not exceed 45 hours.

This position is particularly suited, but not exclusively, for people aiming to carry on their academic education or a management position in a research project. Successful applicants can expect to gain invaluable experience in animal handling procedures and in conducting and managing experiments. They will also gain database skills (MySQL) and will be provided with the opportunity to work on a personal analysis project using the data available in our existing database. Costs of food and accommodation while at the project will be covered.

If you are interested in this position send your CV and cover letter stating your availability to Philippe Vulliod (philippe.vulliod@gmail.com). Shortlisted applicants will be invited for a Skype interview.

Deadline: 10th October 2018 (the position will however remain open until filled)

Philippe Vulliod <philippe.vulliod@gmail.com>

SouthAfrica VolunteerFieldAssist StripedMouse

Volunteers needed for the period October 2018 to May 2019

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

Opportunity: This is a great opportunity for anybody who wants to get more experience in field work related to animal behavior, evolution, eco-physiology, and ecology before starting an MSc or PhD project.

Project: We study the evolutionary and ecological reasons as well as physiological mechanisms of group living, paternal care, communal nesting and social flexibility in the striped mouse. One focus is on the adaptation to droughts, combining physiological, behavioral, ecological and evolutionary research. As this species is diurnal and the habitat is open, direct behavioral observations in the field are possible.

What kind of people are needed? Applicants must have an interest in working in the field and with animals. Hard working conditions will await applicants, as the study species gets up with sunrise (between 5 and 6 AM), and stops its activity with dusk (7 PM). Work during nights might also be necessary. Work in the field will be done for 5 days a week. Applicants must be able to manage extreme temperatures (below 0 at night in winter, sometimes over 40°C during summer days). Applicants must both be prepared to live for long periods in the loneliness of the field and to be part of a small social group.

Work of volunteer field assistants: Trapping, marking and radio-tracking of striped mice; direct behavioral observations in the field. Volunteers will also see how blood samples are collected for physiological measurements. Volunteers are expected to help with maintenance of the research station (water pump, solar power, etc.).

Confirmation letter: Students get a letter of confirmation about their work and can prepare a report of their own small project to get credit points from their university for their bachelor or masters studies.

Costs: Students have to arrange their transport to the field site themselves. Per month, an amount of Rand 1650 (around 110 Euro) must be paid for accommodation at the research station. Students must buy their

own food in Springbok. Including extras (going out for dinner; shopping), you should expect costs of about 450 Euros or 600 US\$ per month.

German students can apply for a grant from the Deutsche Akademischer Auslandsdienst (DAAD, www.daad.de). Here, commonly travel grants of 300 Euro are given to students. Students from other countries are encouraged to seek funding from their home institutions / home country. Students get an invitation letter which they can use to apply for funding in their home country.

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

When and how long: We are looking for volunteers to start in October 2018 as well as beginning of 2019. Volunteers are expected to stay for a minimum of 2-3 months, though longer periods are preferred.

How to apply? Send a short motivation letter stating why and for which period you are interested and your CV via email to succulent.karoo.research.station@kabelbw.de.

More information under

http://stripedmouse.com/site1_3_5.htm

Dr. Carsten Schradin

Director of the Succulent Karoo Research Station (South African non-profit organization), Goegap Nature Reserve, PO Box 541, 8240 Springbok, South Africa

<http://www.stripedmouse.com>

Description: Description: Description: Logo_June 2014

Director Succulent Karoo Research Station
<succulent.karoo.research.station@kabelbw.de>

Spain EMPSEB24 Sep9-15 PhDStudentsSurvey

Dear all:

Please, find here a poll from EMPSEB24 < <https://congresos.ugr.es/empseb24/> > organizers (European Meeting of Ph.D. students in Evolutionary Biology), about some relevant aspects of the Ph.D. in Evolution-

ary Biology areas.

<https://goo.gl/forms/KW7TmSmUIe8xhXX42> Could you please fill it? It should not take more than 5 minutes! All respondents will be treated anonymously and confidentially. The results will be part of a very interesting and useful study about needs and challenges accompanying Evolutionary Biology from the point of view of Ph.D. students.

Thank you very much in advance! We would really appreciate your help!

EMPSEB24 Organizing Committee

empseb24@gmail.com

SpecialIssue ToolsPopEvolGenetics

Dear colleagues, We are editing a special issue for the journal *Genes* (impact factor: 3.19) entitled “Tools for Population and Evolutionary Genetics”.

In recent years, the development of next generation sequencing techniques has fueled an explosion in the pace at which genomic data sets are generated, while dramatically decreasing the costs of genome sequencing. Comparison of these datasets can uncover remarkable information about the evolution of organisms. The availability of datasets of ever-increasing size and complexity has resulted in a growing need for computational tools that allow their effective and efficient analysis.

This special issue focuses on tools for population and evolutionary genetics, including, but not limited to, bioinformatics approaches, and computational tools, algorithms and resources. We welcome submissions of reviews, research articles, and short communications. We also encourage the submission of manuscripts describing new tools, in the form of “concept papers”.

Deadline for manuscript submissions: 31 July 2019.

Link to special issue page: http://www.mdpi.com/journal/genes/special_issues/tools_evo David Alvarez-Ponce, University of Nevada, Reno Julie M. Allen, University of Nevada, Reno Won C. Yim, University of Nevada, Reno Marco Fondi, Università degli Studi di Firenze Guest Editors

– David Alvarez-Ponce, PhD Assistant Professor Department of Biology University of Nevada, Reno Max Fleischmann Agriculture Building, office 140B Tel.: (775) 682-5735 www.genomeevol.wordpress.com David

Alvarez-Ponce <david.alvarez.ponce@gmail.com>

Teaching Quantitative Skills

The Quantitative Undergraduate Biology Education and Synthesis (QUBES; <https://qubeshub.org/>) project offers an online platform to facilitate faculty professional development and sharing open educational resources for teaching quantitative skills. We offer professional development opportunities called Faculty Mentoring Networks (FMNs; <https://qubeshub.org/community/fmns>).

This Fall 2018, we are offering four different FMNs! The options are: 1. Reducing Barriers to Teaching with R in Undergraduate Biology 2. NEON Data Education Fellows Faculty Mentoring Network 3. Building mathematical intuition with online MathBench biology modules 4. Amplifying the data analytic opportunities in your CURE

The modules and data in these FMNs can be used and adapted for an evolution course. During these FMNs, you will learn how to effectively implement data and programing into your classrooms.

Read more about each FMN below:

1. Reducing Barriers to Teaching with R in Undergraduate Biology

This Faculty Mentoring Network is intended for undergraduate biology instructors with prior R programming experience who are interested in learning ways to teach with R effectively to students with little to no programming experience. Participants will focus on developing, implementing, and sharing modules for teaching statistical and biological concepts in R with Swirl. Swirl lessons simplify the R learning process by providing a guided, interactive experience through on-screen prompts and exercises which students answer directly in the RStudio console. Participants will learn the Swirl program, implement one existing Swirl lesson, contribute one new lesson and will leave the FMN with >10 ready-to-use Swirl lessons covering diverse biology and data analysis concepts.

For more information visit https://qubeshub.org/groups/teaching_r_fmn Registration: Applications are due by July 25, 2018. Click this link (<https://docs.google.com/forms/d/e/1FAIpQLSeW0Bh8SRhDgqsDyesOXJZCEUJgkbO5ZpKI1fbWYybYgNSG0Q/viewform>) to apply.

2. NEON Data Education Fellows Faculty Mentoring Network

The National Ecological Observatory Network (<https://www.neonscience.org/>) and the Quantitative Undergraduate Biology Education and Synthesis project (QUBES) are pleased to offer networking and professional development opportunities through this Faculty Mentoring Network for faculty interested in implementing or adapting existing NEON teaching materials to their educational settings. Faculty who already teach using NEON data and would like to use the FMN to improve and transition it to an open educational resource are also invited to participate. More information on NEON educational materials can be found on the Teaching Resources page (https://qubeshub.org/community/-groups/neon2018/teaching_resources).

For more information visit <https://qubeshub.org/-community/groups/neon2018/overview> Registration: Applications are due by July 22, 2018. Click this link (https://docs.google.com/forms/d/e/1FAIpQLSeTGRPW2oKAw8zXJNXAPX7EFFP4qWaZAECmg-hGE_ewVkGtw/viewform) to apply.

3. Building mathematical intuition with online MathBench biology modules

Have you tried using online modules with mixed success? Or are you thinking about using online modules but wondering how best to incorporate them into your course? Apply now to join us for the Fall 2018 QUBES Faculty Mentoring Network (FMN): Building mathematical intuition with online MathBench biology modules.

Participants in this FMN will focus on how to integrate MathBench Biology Modules (mathbench.umd.edu) into undergraduate life sciences or mathematics courses. MathBench introduces and reinforces mathematical material in a way that is hands-on, accessible, and intuitive. Accepted applicants will adapt and implement MathBench modules in their courses. Faculty will participate in biweekly online sessions to collaborate with and learn from others in the network and receive mentoring from implementation experts. Based on their experiences, participants will create implementation guides and instructor resources that will be posted on QUBESHub as open educational resource publications.

For more information visit <https://qubeshub.org/-community/groups/mathbenchfnn> Registration: Applications are due by July 20, 2018. Click this link

— / —

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>

UMelbourne WrenFieldVolunteers

We are looking for field assistants to help monitor a colour-banded population of superb fairy-wrens near Melbourne, Australia for a study on animal personalities.

This is a four-month position, commencing mid-September 2018

Duties include catching birds for personality testing before and after the breeding season (Oct-Jan), and regular censusing of colour-banded birds during the breeding season, searching for and monitoring nests, behavioural observations, video analysis, and data proofing. Working days are long, with early starts six days a week. Enthusiasm, self-motivation, and a strong work ethic are a must.

The study is based at Serendip Sanctuary, a small reserve with abundant birdlife on the outskirts of Melbourne.

Qualifications: mist-netting experience highly desired. Additionally, experience monitoring colour-banded birds and nest-searching is preferred. Must also be early riser, physically fit, able to work in extreme weather conditions, and enjoy basic shared living conditions.

Accommodation is provided, but assistants cover travel to the site and their own food costs. The project will reimburse up to AU\$750/mo towards receipted food and travel expenses.

For more information contact: Timon van Asten (t.van@unimelb.edu.au). To apply, please email a letter outlining previous relevant field research experience, and a resume including names and contact information for 3 referees that are familiar with your mist-netting and/or nest-searching experience.

Timon van Asten <t.van@unimelb.edu.au>

UWisconsin Madison EarlyCareerScientistSeminars

Call for Applicants: J.F. Crow Institute Early-Career Scientist Seminars

The J.F. Crow Institute for the Study of Evolution at the University of Wisconsin-Madison is inviting early-career evolutionary biologists from outside UW-Madison to apply to participate in an early-career scientist seminar series in spring 2019. For more information about our Institute, please visit our website (evolution.wisc.edu). Please come share your science with our community!

The 3-5 speakers selected for the series will be invited to visit UW-Madison. The speaker will present a 50-minute seminar, ideally aimed at evolutionary biologists with a broad range of backgrounds. The speaker will also participate in a 45-minute discussion after the seminar with undergraduate evolution majors. For the day of the seminar we will schedule meetings with faculty and students working in evolutionary biology. The speaker would be responsible for their own travel to Madison, but would receive a \$100 honorarium to offset travel costs. If an overnight stay is required, arrangements could be made to stay with a member of the Crow Institute.

Eligibility: Non-UW-Madison graduate students and postdoctoral fellows who received a Ph.D. no longer than 5 years ago.

Applications for a spring seminar are due by October 1st.

The application is available at www.evolution.wisc.edu/earlycareerseminar. If you have any questions please contact Megan Frayer (mfrayer@wisc.edu), Jered Stratton (jstratton2@wisc.edu), or Tiago Ribeiro (tribeiro@wisc.edu).

Megan Frayer <mfrayer@wisc.edu>

For the upcoming field season (Sept-Oct 2018; at least for 3-4 weeks, time is flexible) we are looking for a highly motivated expenses paid field volunteer to join our field project (main responsible Dr. Michael Griesser, University of Zurich, Switzerland). The study site is located near Arvidsjaur, Swedish Lapland.

Our current project investigates the influence of habitat quality on the foraging behavior of Siberian jays. The work of the field volunteer will be to help with catching and color-ringing birds, blood sampling, behavioral observations, and data management. This work will give insight into a long-term study system and will be carried out partly in managed forests and partly in scenic pristine boreal habitats. Observe that temperatures in the end of the season can be as low as -10C. The team will vary in size depending on the weeks, but at least two other people will be present during the whole field season.

Qualifications: (1) Ample bird ringing and mist-netting experience (2) Previous field experience (3) Ability to work in small teams and sociable personality (4) Driving license (5) Fluent in English

We will cover for the accommodation, travel expenses from and to the study site (in total up to 300 Euros), as well as the living expenses.

Applications - including a CV, a letter of motivation (1 page) and the name of two referees - should be sent to Michael Griesser michael.griesser@gmail.com, preferably in a single PDF.

Applications received until 25 August 2018 will be given full consideration.

Michael Griesser <michael.griesser@gmail.com>

UZurich FieldAssist BirdsLapland

Expenses paid field assistant positions to assist in bird ringing and behavioral observations of Siberian Jays in Swedish Lapland

PostDocs

AarhusU BioinformaticsHumanPopGenomics	83	SantaFeInst EvolutionaryBiol	111
AarhusU StatisticalGenetics	83	SGN Frankfurt PhylogenomicsMetagenomics	112
BostonU HarvardU AvianGenomics	84	SGN Frankfurt SpeciationGeneFlow	113
BrookfieldZoo Chicago SpeciesConservation	84	Southampton UK PDF Tech EvolutionPlasticity	114
CAS Beijing EvolutionaryBiology	85	SpelmanC Atlanta GenomeEvolutionOfAmoebozoa	114
CIBIO Portugal 2 Biodiversity	86	UAlabama MusselBiodiversity	115
ClemsonU ComplexOrganisimalTraits	87	UArizona FungalGenomics	115
Cornell DrosophilaGermlineStemCellEvolution	88	UArizona VertebrateTraitInformatics	116
CornellU AdaptationGenomics	89	UArkansas EvolutionaryEcol	117
CornellU DrosophilaGermlineStemCellEvolution	90	UCalifornia Berkeley DiseaseEvolution	118
CornellU EnvironmentalMicro Bioinformatics	91	UCalifornia Berkeley StatPopGenetics	119
CornellU TeachingPostDoc OrganismalBiodiversity	91	UCalifornia LosAngeles PopulationGenetics	120
CRG Barcelona CancerEvolution	92	UCalifornia SanDiego BacterialPhysiologyEvolution	120
Eawag Switzerland EvolutionaryEcol	93	UExeter antiviral RNAi across species	121
Edinburgh PlantBreeding	93	UGrenobleAlpes ExptEvolution	121
GeorgeWashingtonU EvolutionPrimateCognition	94	UIDaho ModelingTransmissibleVaccines	122
HarvardU EOWilson Biodiversity	95	UJyvaskyla Finland HostParasiteEvol	123
Hawaii CoralReefConservation	96	UKentucky 2 GenomeEvolutionEpigenetics	123
HebrewUJerusalem BeeEvolution	96	UKonstanz EcoEvolutionaryDynamics	124
HebrewU VenomChannelEvolution	97	ULausanne EvolutionOfNeuralCircuits	124
HongKong AcclimationClimateChangeMarineOrganisms	97	UManitoba LampreyGenomics	125
IndianaU Reproduction Evolution Disease	98	UMaryland ComparativePhylogenomicsPollination	126
JYU Finland SpermEvolTardigrade	98	UMunich EvolutionOfOsmundaceae	126
Kiel Ploen EvolutionAntibioticResistance	99	UNevada Reno BioinformaticsGenomics	127
KunmingInstituteOfZoology BiodiversitySciences	99	UNotreDame PDF PhD EvolutionPfalciparum	128
MNH UFlorida ScanningSpecimens	100	UOxford EvolutionBacterialCooperation	128
MonashU Melbourne LifeHistoryTheory	101	UPennsylvania HumanPopGen	129
MortonArboretum Illinois Biogeography	101	UPittsburgh HostParasiteDynamics	129
MPI Ploen ModellingCancerEvolution	102	UPittsburgh HostParasiteEvolution	130
NorthCarolinaStateU AppliedEvolModeling	103	UPittsburgh MolecularEvolution	131
Norwich SingleCellBioinformatics	104	UppsalaU SpeciationGenomics	131
NTNU Norway Hologenomics	104	UPuertoRico EvolutionButterflyColour	132
OhioStateU AntVenomics	105	USDA-ARS Missouri MaizePopulationGenetics	133
OklahomaStateU MacroevolFunctionalMorphology	106	USheffield PDF Tech PopGenStats	133
OxfordU 2 ViralEvolution	107	USouthFlorida-Tampa DemographicHistoryOfHumanPopulations	134
PennsylvaniaStateU PopGeneticsPhylogenetics	108	UVermont EvolutionaryGenomicsPhysiology	134
Portugal YeastExpEvol	108	UWashington ConservationGenetics	135
RoyalBotanicGardens Kew Phylogenomics	109	WashingtonStateU Plant-Microbe-Eco-Evo	135
RoyalVetCollege London AnimalEvolGenomics	109	WashingtonU EvolutionAvianBrainSize	135
SanDiegoStateU ArthropodHybridization	110		

AarhusU BioinformaticsHumanPopGenomics

A 2-year postdoc position is available in the research group of Søren Besenbacher at the Department of Molecular Medicine (MOMA), Aarhus University.

The postdoc will study the mutation processes in humans and related species by analyzing de novo mutations found using whole-genome sequencing of parent-offspring trios. This can also include assessing the influence of de novo mutations on human diseases. Depending on your interests, focus can be on methods development, large-scale data analysis, or both.

For details and application see <https://tinyurl.com/y8nfsvvb>

Application deadline is August 15.

besenbacher@clin.au.dk

AarhusU StatisticalGenetics

Hi all, I'm advertising for a 2-year postdoc to work on developing and applying methods for analysis of genome-wide association study data. Applications by 5th October. A summary below, or for more details see this link

<http://www.au.dk/en/about/vacant-positions/-scientific-positions/stillinger/Vacancy/show/1001254/-5283/> —

Aarhus University is recruiting a 2-year postdoc in statistical genetics based at the Bioinformatics Research Centre (BiRC). The provisional starting date is 1st November 2018.

The postdoc will be jointly supervised by Drs Doug Speed, Manuel Matthiesen and Søren Dinesen Åstergaard. There are two broad aims, however the specific projects will be decided according to the interests and experience of the successful applicant.

1 - Application of recently developed methods to genome-wide association study (GWAS) data. Dr Speed has created the software package LDAK which contains a variety of methods for analysing GWAS data. These include the prediction tool MultiBLUP. A possible project

of the postdoc will be applying MultiBLUP to GWAS data for a large number of traits (e.g., from dbGAP, the Wellcome Trust Case Control Consortium or UK Biobank), to compare its performance to that of rival methods such as polygenic risk scores and LDpred, then investigate ways MultiBLUP can be improved.

2 - Development of new methods for analysing GWAS data. Central to LDAK is a method for estimating the SNP heritability of a trait, the proportion of phenotypic variation explained by all SNPs. To date, SNP heritability has been estimated only for common SNPs (MAF>0.01), but it is currently unknown how best to estimate the contribution of rare SNPs. Therefore, a potential project is investigating how best to estimate the rare SNP heritability of a trait. First the postdoc will test methods using simulated data, then apply the most successful to GWAS data for traits such as schizophrenia, alzheimer's disease and heart failure.

Requirements A PhD degree and strong expertise in statistical genetics is essential. The position will involve analysis of large-scale genetic datasets, so the ideal candidate would be familiar with popular genetic software (e.g, PLINK) and at least one coding languages (e.g. R).

Supervisors Assistant Professor Doug Speed specializes in developing statistical methods for analyzing large scale GWAS data. He has released the software LDAK (www.ldak.org) which contains tools for detecting causal variants, constructing prediction models and better understanding genetic architecture, using both individual-level data and summary statistics.

Professor Matthiesen specializes in the analysis of large scale GWAS data and its clinical interpretation. He is a physician by training with a specialization in medical genetics, and has a strong background in genetic epidemiology, biostatistics and molecular genetics.

Professor Søren Dinesen Åstergaard is a medical doctor who focuses on psychiatric research. He is particularly interested in translational psychiatry, and the idea that studies should cover the full pathway from discovery in the lab, bench to bedside, bedside to clinical applications, and from clinical applications to healthcare and global health.

Place of work and associated departments The position will be primarily based at the Bioinformatics Research Centre, a department with approximately 50 members focused on the development of statistical models and computational algorithms to analyse genetic data (www.birc.au.dk). The position will also be linked to the Lundbeck Foundation Initiative for Integrative Psychiatric Research (iPSYCH), a consortium in charge

of 50,000 cases for autism, ADHD, schizophrenia, bipolar disorder and depression (www.ipsych.au.dk) and to the Department of Clinical Medicine, Denmark's largest health science institute (www.clin.au.dk/en).

The place of work is C.F. Møllers Allé 8, 8000 Aarhus, and the area of employment is Aarhus University with related departments.

If you have any questions about the position or application procedure, please contact doug@aias.au.dk.

Doug Speed <doug.speed@ucl.ac.uk>

BostonU HarvardU AvianGenomics

Postdoctoral Position in Brood Parasite Genomics

We are hiring a postdoctoral fellow to work on comparative and population genomics of brood parasitic birds. The successful candidate will use multiple, newly generated, high quality genome assemblies and population resequencing data to understand the genomic basis of convergent evolution in avian brood parasite phenotypes across multiple time scales and potential consequence for the dynamics of sex chromosome evolution.

This is an NSF-funded position, to be jointly mentored by Michael Sorenson at Boston University and Tim Sackton at Harvard University. The postdoctoral fellow will also have extensive opportunity to interact with collaborators, including Chris Balakrishnan (East Carolina University), Wes Warren (University of Missouri), and Jeff DaCosta (Boston College). Funding is available for up to 2 years, with the second year contingent on successful performance.

Qualifications The preferred candidate will have a PhD in evolutionary biology, genomics, population genetics, or a related field, with a demonstrated record of research achievement (via publications or preprints). They will also be proficient with programming in a scripted language (e.g. R, Python, or Perl). Experience with shell scripting and computing cluster environments and/or experience working with whole genome datasets in population or comparative genomics will be beneficial, but is not required.

Working Environment The successful candidate will split their time between Tim Sackton's Bioinformatics group at Harvard and the Sorenson lab at Boston University. The exact logistics are flexible and will depend on the candidate's interests and experience, but in any case the

postdoctoral associate will have an opportunity to gain experience and training in bioinformatics, population genetics, comparative genomics, and ornithology. The combined experience of our groups spans a wide range of topics and provides an outstanding opportunity for training, collaboration, and scientific growth. The larger scientific environment in Boston is unparalleled and provides numerous opportunities for engagement, including the Boston Area Evolutionary Supergroup (<https://evogen.hms.harvard.edu>) and numerous seminar series and journal clubs.

Contact Preferred start date would be early 2019, but there is flexibility around this. To apply, please send a CV and cover letter describing interest and previous experience to Tim Sackton (tsackton@g.harvard.edu) and Michael Sorenson (msoren@bu.edu).

We are committed to diversity and especially encourage members of underrepresented communities to apply.

Tim Sackton, PhD Director of Bioinformatics Informatics Group Faculty of Arts and Sciences Harvard University

Timothy Sackton <tsackton@g.harvard.edu>

BrookfieldZoo Chicago SpeciesConservation

Post-doctoral Fellow - Species Conservation Methods

The Chicago Zoological Society/Brookfield Zoo is seeking a Post-doctoral Fellow - Species Conservation Methods who will develop analytical methods and software tools to advance the conservation of species. The Post-doctoral Fellow - Species Conservation Methods will work with a small team of conservation scientists to design, build, and support software that is used globally by wildlife managers, researchers, and students as part of the Species Conservation Toolkit Initiative (SCTI). SCTI is a multi-institutional, international partnership to ensure that the new innovations and tools needed for species risk assessment, conservation planning, and managing populations are developed, are globally available, and are used effectively. The initiative leverages expertise in population biology, computer programming, and species conservation planning to: build and support modeling tools that are essential to guiding conservation actions for thousands of threatened species in the wild; facilitate the intensive management of hundreds of

species that are being protected within ex situ programs; and integrate conservation efforts across the spectrum of management approaches. Information about the SCTI tools is available at www.vortex10.org. Primary duties and responsibilities: - Participates in the design of computer modeling tools for conservation assessments and planning for wildlife populations in the wild and in captivity. - Implements new methodologies for species conservation through extending existing software tools (Vortex, PMx, Outbreak, and MetaModel Manager) or developing new tools. - Provides technical support and helps to provide training to conservation professionals and graduate students using modeling methods and tools. - Prepares reports for scientific publication and presentation.

The requirements for this position include: - Ph.D. degree in biology or related field required or Ph.D. in information science with considerable training also in biology. - One year experience in conservation biology research or species management required. - Experience in computer programming for Windows applications required, including prior experience with or ability to learn C#.NET programming or related object-oriented languages. - Excellent verbal and written communication skills, including proven ability in writing of reports and scientific papers, grant proposal preparation, and oral presentations. - English fluency at a full professional proficiency required. - Ability to work independently and collaboratively and prioritize tasks as necessary. - Experience and/or ability to work and interact effectively with a diverse, multicultural audience.

The preferred qualifications include: - Broad research and conservation interests preferred. - Experience with software program VORTEX or other PVA models, and PMx or other pedigree analysis tools desirable. - Experience with software development for multiple platforms (web, tablet, etc.) a plus. - Experience with user interface design highly desirable. - Multilingual ability, Spanish fluency a plus.

Additional Information: This position description summarizes the primary duties and functions of this position, but should not be considered a complete listing of every duty the incumbent may ever be called upon to perform.

More details regarding this position are available on the CZS career site (<https://sjobs.brassring.com/TGWebHost/jobdetails.aspx?siteid=5163&partnerid%814&AReq84BR>).— Anyone who is interested in being considered for this opening is encouraged to visit the CZS Career site to obtain more details about the position and to apply by submitting a profile as soon as possible.— Please visit our website at www.czs.org/careers and look for requisition number

1684BR.— The Chicago Zoological Society is an Equal Opportunity Employer.

Robert C Lacy, PhD Senior Conservation Scientist
Chicago Zoological Society rlacy@ix.netcom.com

Species Conservation Toolkit Initiative
www.vortex10.org

Bob Lacy <rlacy@ix.netcom.com>

CAS Beijing Evolutionary Biology

Recruiting PIFI Postdoctoral or Visiting Scientists Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology (IoZ), Chinese Academy of Sciences (CAS), Beijing

The Key Laboratory welcomes evolutionary biologists from all over the world to join our research labs under the support of CAS PIFI program (Presidential International Fellowship Initiative). As outlined at <http://international-talent.cas.cn/front/index.html#/bicsite/pifiIntroduce/pifi>, CAS provides 1-to-2-year postdoctoral fellowships (Category C) and 2-to-9-month visiting fellowships for faculty (Categories A & B). All fellowships come with an internationally competitive salary and round-trip airfare. As an example of PIFI fellow in the Key lab, Dr. Orr shared his personal experience at http://newsletter.cas.cn/wap/Science.Story/201807/t20180727_4541553.html. Closing Date of the application for 2019 program: September 20th, 2018. Start of position: flexible

Nine individual labs in the Key Laboratory which are interested in hosting PIFI applicants are listed below:

Ge Lab: Group of Insect Evolution and Functional Morphology
Guo Lab: Fish Evolution and Genomics
Group
Lei Lab: Avian evolution and systematics
Li Lab: Invertebrate Zoology
Qiao Lab: Systematics and Evolution of Aphids
Yang Lab: Group of morphology and evolution of beetles
Zhai Lab: The Evolutionary and Population Genomics Lab (EPG)
Zhang Lab: Functional Evolution by New Gene Origination
Zhu Lab: Evolution of Functional Insect Groups

Details of individual labs: Ge Lab: Group of Insect Evolution and Functional Morphology
Ge (SQ) lab mainly focuses on the functional morphology of insects and its evolutionary trends. We are currently addressing three parts: 1. Biomechanics, energetics, and evolution of key structures of insects, e.g. structures related to loco-

motion of jumping, walking, flying, feeding and reproduction. The control of the movement is being studied from both morphological and biomechanical perspectives by using a combination of innovative techniques, such as -CT, CLSM, SIM, MRI, SBFSEM, FIB, Computer-based 3-dimensional reconstructions, behavioral analyses with high-speed three-dimensional videography, particle-image velocimetry and metabolic measurements. 2. Morphological changes and mechanism during development of metamorphosis. 3. Discovery and application of new innovative techniques for functional morphology. People who are interested in applying for the PIFI program with us can write to gesq_AT_ioz.ac.cn.

Guo Lab: Fish Evolution and Genomics Group Guo (BC) Lab has research interests in both comparative and population genomics to understand how genetic variation contributes to fish diversification and adaptation. There are two major research topics in my lab. 1) Gene duplication and consequence in fish genome. With this topic, we will analyze publicly available fish genome data to characterize how duplicated genes evolve in fish genome (Guo et al., 2011, 2012; Guo 2017), and eventually to understand their role during the successful radiation of teleosts. 2) Local adaptation in marine fish. Local adaptation is usually difficult to detect in marine fishes with large population size, e.g., due to weak population structure, low genetic differentiation, etc. Our earlier studies show that local adaptation could be inferred by using population genomics with integrating environmental associated analysis (Guo, et al., 2015; 2016a; 2016b). As such, we will use population genomics approach by utilizing next generation sequencing (NGS) data to identify the genetic signature of adaptation in wild marine fish, e.g., hairtails, salmon, sticklebacks, etc. For more information about our lab and/or interest in the PIFI program, please write to guobaocheng@ioz.ac.cn.

Lei Lab: Avian evolution and systematics Lei (FM) Lab mainly focuses on the following researches related to birds: biogeographical distribution, endemism and biodiversity conservation; phylogeny and comparative phylogeography; genomics and adaptive evolution; molecular epidemiology of avian influenza and viruses' transmission. Bird tissue and blood collection will be Ornithological Research Group's (ORG's) long term aim for setting up the largest Genetic Bank of Asia. Over 16 on-going research programs are supported by China MOST, CAS, NSFC, IDRC Canada and other agency. For more information please visiting our webpage: http://sourcedb.ioz.cas.cn/yw/scs/pi/200907/t20090716_2088440.html. Researchers who are interesting in applying for PIFI programs can contract to Prof. Fumin Lei: leifm@ioz.ac.cn.

Li Lab: Invertebrate Zoology Li (SQ) Lab seeks to understand how geological events (e.g. Tethyan

— / —

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>

CIBIO Portugal 2 Biodiversity

Dear Colleagues,

I would like to inform you about the call for applications for two Post-doctoral Research Fellowships at the Research Center in Biodiversity and Genetics Resources (CIBIO-InBIO), Vairão, Portugal, which will be open until September 5, 2018.

If possible, I would greatly appreciate to be able to count on your collaboration in the dissemination of these opportunities amongst potential candidates.

Thank you so much!

All the best,

CIBIO-InBIO's Science Communication and Outreach Office

CIBIO - Centro de Investigação em Biodiversidade e Recursos Genéticos/ InBIO Laboratório Associado, Universidade do Porto

Campus de Vairão

Rua Padre Armando Quintas

4485-661 Vairão

Portugal

Two Post doctoral Research Fellowships

References: ICETA 2018-51 and ICETA 2018-52

Link to the call (ICETA 2018-51- <http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId=102755>)

Link to the call (ICETA 2018-52- <http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId=102757>)

Two Post doctoral Research Fellowships (BPD) in the project PTDC/BIA-BIC/3545/2014, entitled "Next

Generation Conservation: preserving the continuum of life in space and time” is available at CIBIO, through ICETA, Instituto de Ciências e Tecnologias Agrárias e AgroAlimentares da Universidade do Porto, funded by the Fundação para a Ciência e a Tecnologia, I.P., (FCT/MCTES) and COMPETE - Programa Operacional Factores de Competitividade (POFC) - POCI-01-0145-FEDER-016853.

Main research field: Biological sciences

Sub research field: Biodiversity and evolution

Eligibility Requirements:

ICETA 2018-51

§The prospective candidates must hold a PhD in Biology, Computer Science or similar scientific area.

§The candidates must be proficient in computational analysis and programming in R environment.

§Preference will be given to candidates with previous experience in species distribution modelling, conservation prioritization analysis (e.g. Marxan, Zonation or Prioritizer) and Geographic Information Systems.

§Proficiency in written and spoken English will also be valued.

ICETA 2018-52

§The prospective candidates must hold a PhD in Biology or similar scientific area.

§The candidates must have previous experience in data analysis in R environment and solid experience with large genetic and genomic data sets.

§Preference will be given to candidates with previous experience in phylogeography, population genomics and/or landscape genetics.

§Proficiency in written and spoken English will also be valued.

Work Plan:

NGC project aims at developing a novel and general framework to assist in delineating priority conservation areas, optimized to preserve biodiversity at different evolutionary levels, while accounting for adaptive potential and evolutionary and spatial dynamics under climate change.

ICETA 2018-51

The activities related to this grant include managing genomic databases, testing surrogacy value of different diversity metrics and environmental variables to intra-specific genetic diversity, identification of priority areas for conservation of neutral and adaptive diversity, and scientific writing of papers and reports.

ICETA 2018-52

The activities related to this grant include managing genomic databases, identifying neutral and non-neutral genetic diversity, analyzing population structure and phylogeographic patterns, landscape genetics/genomics and delimiting gene flow corridors.

Applicable Legislation: The grant is awarded under the Research Fellowship Holder Statute, approved by Law n.º 40/2004, of August 18th, and the < <http://www.fct.pt/apoios/bolsas/docs/-RegulamentoBolsasFCT2015.pdf> > Regulation for Studentships and Fellowships of the Fundação para a Ciência e a Tecnologia, I.P..

Work Place: The work will be conducted at CIBIO-InBIO, UP - Centro de Investigação em Biodiversidade e Recursos Genéticos, Universidade do Porto, Campus de Vairão, Rua Padre Armando Quintas, 7, 4485-661 Vairão, under the supervision of Dra. Sílvia B. Carvalho.

Duration of the fellowship: The fellowships will have duration of 7 months, potentially renewable for additional 5 months, starting on October 1st 2018.

Monthly stipend: Monthly stipend is euro 1495 according to the stipends established by FCT, I.P. in Portugal (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>). Payment will be made by bank transfer on a monthly basis. The successful candidates will also

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

ClemsonU ComplexOrganisimalTraits

The laboratories of Trudy Mackay and Robert Anholt at the new Clemson University Center for Human Genetics invite applications for a postdoctoral fellow to support a newly awarded NIH grant. A major challenge of modern biology is to determine how DNA sequence variants give rise to phenotypic variation for complex organismal traits through modulation of regulatory gene networks. This research project seeks to reverse engineer natural genetic variation in *Drosophila* using CRISPR/Cas9 precise allelic replacement to functionally validate genetic associations of common and rare molecular variants and

long non-coding RNAs with organismal phenotypes and transcriptional networks. The successful applicant will have expertise in CRISPR/Cas9 gene editing, next generation sequencing methods and analysis and Drosophila genetics. Applicants should have a strong record of research productivity, excellent oral and written communication skills, and the ability to perform independent as well as collaborative research. A Ph.D. in genetics or related field is required.

Enquiries should be addressed to Dr. Trudy F. C. Mackay, Self Family Endowed Professor and Director of the Center for Human Genetics, Clemson University, Self Regional Hall, 114 Gregor Mendel Circle, Greenwood, SC 29646 (tmackay@clemson.edu).

Applications must include a cover letter explaining the qualifications for this position, a curriculum vitae with list of publications, and the names of three references. The position is available immediately. Clemson University is an equal opportunity employer.

Applications should be submitted electronically at:

<https://apply.interfolio.com/53001> – Trudy F. C. Mackay, PhD, FRS Self Family Endowed Chair of Human Genetics Clemson Center for Human Genetics Department of Genetics and Biochemistry Clemson University Self Regional Hall 114 Gregor Mendel Circle Greenwood, SC 29646 Email: tmackay@clemson.edu Tel: 864-889-0522

Trudy Mackay <trudy_mackay@ncsu.edu>

Cornell Drosophila Germline Stem-Cell Evolution

Post-Doctoral Associate Position Open in Aquadro lab at Cornell

A successful candidate will help design and carry out research aimed at testing evolutionary and functional hypotheses to explain the episodic positive selection on the Germline Stem Cell regulatory gene bag of marbles (bam) in different species of the fruit fly genus *Drosophila*. An ability to integrate population genetic and functional genomic approaches is key. Work will focus on experimental studies including CRISPR/Cas9 genome editing and the analysis of fertility, cytological and gene expression for edited variants in multiple species of *Drosophila*. Good 'hands' in the lab are critical as is attention to detail and accuracy. The main responsibilities include conducting research, attending

lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Minimum/Basic Qualifications (required by start date):
 - PhD or equivalent degree in genetics, developmental biology, population genetics functional genomics, or a related field. - Demonstrated record of research productivity and publications. - Strong molecular biology skills

Preferred Qualifications: - Research experience with *Drosophila* genetics and/or developmental biology. - Experience with CRISPR/Cas9 genome editing or a strong desire to learn. - Knowledge of or willingness to earn at least basic population genetics theory. - Experience with fluorescent microscopy - Experience with genomic data analysis. - Programming/scripting experience or a willingness to learn (e.g. Python/ Perl, R)

Our lab's current research is on the population genetics and functional evolution of genes that regulate germ line stem cells in *Drosophila*. Our focus is the evolutionary and functional analysis of bag of marbles (bam), the key regulatory 'switch' gene for germ line stem cell renewal or differentiation in *Drosophila*. Our work involves the use of CRISPR/Cas9 genome editing to functionally test hypotheses of protein function and evolutionary drivers of strong positive natural selection we discovered acting on bag of marbles in multiple species and lineages of *Drosophila*. Central to our studies are tests of functional and evolutionary interactions of the intracellular bacteria *Wolbachia* and germ line stem cell genes, particularly bag of marbles, across the genus *Drosophila*. We are also carrying out computational analyses of the evolutionary history of *Wolbachia* infections in *Drosophila* species.

The Aquadro laboratory is part of the Department of Molecular Biology and Genetics on the Ithaca campus of Cornell University, and is also part of the larger campus-wide Cornell Center for Comparative and Population Genomics (<http://3cpg.cornell.edu>) whose mission includes fostering research, education, and outreach in comparative and population genetics, and which brings together a vibrant and interactive group of over 350 faculty, postdocs, graduate students and staff who share a commitment to comparative and evolutionary genomic approach to the study of living systems.

Salary: This is a full-time position. Salary is commensurate with qualifications and experience and consistent with the current NIH postdoc salary scale and your level of experience.

How to apply:

Email Chip directly of your interest at

CFA1@CORNELL.EDU

Formally apply through Academic Jobs Online for position #11553 <https://academicjobsonline.org/ajo?action=joblist&id553&send=Go&.cgifields=all> Applicants should submit the following materials: - A cover letter - A curriculum vitae - One-page statement of your research accomplishments - One-page statement of your specific interests and qualifications for this position and why you feel you are an excellent fit. - Contact information for 3 references. Letters of reference are not required at this time.

This position will be open until filled. The appointment is for a duration of one year with the possibility of annual renewal up to three years. Please address inquiries to Chip Aquadro cfa1@cornell.edu

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/AED, Protected Veterans, and Individuals with disabilities. We actively encourage applications from women, persons of color, and persons with disabilities.

Charles F. ('Chip') Aquadro Professor of Population Genetics The Charles A. Alexander Professor of Biological Sciences Stephen H. Weiss Presidential Fellow Director, Cornell Center for Comparative and Population Genomics <http://mbg.cornell.edu/people/charles-aquadro> <http://3cpg.cornell.edu> cfa1@cornell.edu

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

CornellU AdaptationGenomics

Postdoctoral opportunity to study the genomic basis of adaptation with gene flow

The laboratory of Nina Overgaard Therkildsen at Cornell University is looking for a highly motivated postdoc to work on an NSF-funded project aimed at elucidating the genomic underpinnings of adaptive divergence despite extensive gene flow in the Atlantic silverside (*Menidia menidia*). The Atlantic silverside is a small estuarine fish that exhibits a remarkable degree of local adaptation in growth rates and a suite of other traits

tightly associated with a climatic gradient across latitudes. Decades of prior lab and field studies have made the Atlantic silverside one of the marine species for which we have the best understanding of evolutionary tradeoffs among traits and drivers of selection causing adaptive divergence. Yet, the underlying genomic basis is so far completely unknown. Our ongoing work integrates whole genome sequencing of wild fish sampled across the distribution range with breeding and phenotyping in the lab to 1) examine fine-scale spatial patterns of genomic differentiation along the adaptive cline and 2) map key locally adapted traits to the genome to dissect their underlying genomic basis. The postdoc will have access to a newly generated reference genome along with linkage and QTL maps and already generated low-coverage whole genome sequence data for >1,000 individuals.

Varying levels of gene flow across the species range create a natural experiment for testing general predictions about the genomic mechanisms that enable adaptive divergence in the face of gene flow, and key goals of the project include integrating patterns of variation in the wild with findings from the trait mapping to 1) examine how genomic architectures underlying local adaptation vary across connectivity regimes and 2) shed light the potential role of chromosomal rearrangements and other tight linkage among adaptive alleles in facilitating adaptation. We are also building up time series of samples from multiple locations to examine dispersal - selection dynamics over seasonal time scales for real-time inference of how selection against migrants and their offspring maintains local adaptation despite homogenizing connectivity. Specific focus areas for the postdoc will depend on their interests, and there will also be opportunities for developing new lines of inquiry. Additional opportunities arise from a prior dataset we have on the genomic basis for rapid fisheries-induced evolution in this species.

Qualifications: Candidates should have completed or be within 1-3 months of completing a PhD in evolutionary genomics, molecular ecology, bioinformatics or a related field. We are looking for a creative and talented scientist who is a team player with a good publication record and excellent organizational and communication skills. The successful candidate must have a strong computational/bioinformatics 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.—

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. The start date is flexible, and the position is initially for one year, with possibility of renewal for up to three years, depending on performance.

Our lab is based in the Department of Natural Resources at Cornell University, and we are broadly interested in how species adapt to their changing environments, and how rapidly they respond to increasing human impacts. We are also keenly interested in exploring ways to leverage genomic analysis to improve fisheries management and conservation. Our lab is part of the larger campus-wide Cornell Center for Comparative and Population Genomics (<http://3cpg.cornell.edu>) whose mission includes fostering research, education, and outreach in comparative and population genetics, and which brings together a vibrant and interactive group of over 350 faculty, postdocs, graduate students and staff who share a commitment to comparative and evolutionary genomic approach to the study of living systems.

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

CornellU DrosophilaGermlineStem-CellEvolution

Post-Doctoral Associate Position Open in Aquadro lab at Cornell

A successful candidate will help design and carry out research aimed at testing evolutionary and functional hypotheses to explain the episodic positive selection on the bam gene in different species of the fruit fly genus *Drosophila*. An ability to integrate population genetic and functional genomic approaches is key. Work will focus on experimental studies including CRISPR/Cas9 genome editing and the analysis of fertility, cytological and gene expression for edited variants in multiple species of *Drosophila*. Good hands' in the lab are critical as is attention to detail and accuracy. The main responsibilities include conducting research, attending lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Minimum/Basic Qualifications (required by start date):
 - PhD or equivalent degree in genetics, developmental biology, population genetics functional genomics, or a related field. - Demonstrated record of research productivity and publications. - Strong molecular biology skills

Preferred Qualifications: - Research experience with *Drosophila* genetics and/or developmental biology. - Experience with CRISPR/Cas9 genome editing or a strong desire to learn. - Knowledge of or willingness to earn at least basic population genetics theory. - Experience with fluorescent microscopy - Experience with genomic data analysis. - Programming/scripting experience or a willingness to learn (e.g. Python/ Perl, R)

Our lab's current research focus is on the population genetics and evolution of genes that regulate germ line stem cells in *Drosophila*. Our focus is the evolutionary and functional analysis of bag of marbles (bam), the key regulatory switch' gene for germ line stem cell renewal or differentiation in *Drosophila*. Our work involves the use of CRISPR/Cas9 genome editing to functional test hypotheses of protein function and evolutionary drivers of strong positive natural selection we discovered acting on bag of marbles in multiple species and lineages of *Drosophila*. Central to our studies are tests of functional and evolutionary interaction of the intracellular bacteria *Wolbachia* and germ line stem cell genes, particularly bag of marbles, across the genus *Drosophila*. We are also carrying out computational analyses of the evolutionary history of *Wolbachia* infections in *Drosophila* species.

The Aquadro laboratory is part of the Department of Molecular Biology and Genetics on the Ithaca campus of Cornell University, and is also part of the larger campus-wide Cornell Center for Comparative and Population Genomics (<http://3cpg.cornell.edu>) whose mission includes fostering research, education, and outreach in comparative and population genetics, and which brings together a vibrant and interactive group of over 350 faculty, postdocs, graduate students and staff who share a commitment to comparative and evolutionary genomic approach to the study of living systems.

Salary: This is a full-time position. Salary is commensurate with qualifications and experience and consistent with the current NIH postdoc salary scale and your level of experience.

How to apply: To apply, please go Academic Jobs Online position #11553 <https://academicjobsonline.org/ajo?action=joblist&id553&send=Go&.cgifields=all> Applicants should submit the following materials: - A cover letter - A curriculum vitae - One-page statement of your research accomplishments - One-page statement of your specific interests and qualifications for this position and why you feel you are an excellent fit. - Contact information for 3 references. Letters of reference are not required at this time.

This position will be open until filled. The earliest start date is September 4 2018. The appointment is for a duration of one year with the possibility of annual re-

newal up to three years. Please address inquiries to Chip Aquadro cfa1@cornell.edu

Diversity and Inclusion are a part of Cornell University's heritage. We are an employer and educator recognized for valuing AA/AED, Protected Veterans, and Individuals with disabilities. We actively encourage applications from women, persons of color, and persons with disabilities.

Charles F. ('Chip') Aquadro Professor of Population Genetics The Charles A. Alexander Professor of Biological Sciences Stephen H. Weiss Presidential Fellow Director, Cornell Center for Comparative and Population Genomics <http://mbg.cornell.edu/people/charles-aquadro> <http://3cpg.cornell.edu> cfa1@cornell.edu

cfa1@cornell.edu

CornellU EnvironmentalMicro Bioinformatics

Postdoctoral Associate, Cornell University, Ithaca, New York

We seek to hire a Postdoctoral Associate to work in the research laboratory of Dr. Esther Angert in the Department of Microbiology, Cornell University. This NSF-funded postdoctoral research associate position is currently available for a highly motivated individual with expertise in bioinformatics as it relates to microbial ecology, evolution and biogeochemical processes. The successful candidate will leverage data and assemblies generated from a microbial community sequencing project and integrate these metagenomic data with information collected from a petroleum hydrocarbon-contaminated aquifer that has been studied for more than 25 years. Opportunities for additional collaborative projects whose approaches and goals align with omics-augmented microbial ecology and evolution are also possible.

Required Qualifications:

* Ph.D. in Microbiology, Computational Biology, Bioinformatics, Microbial Genomics, or a related field.

* Demonstrated experience and a publication record in microbial ecology, computational biology or bioinformatics approaches to characterizing bacterial communities and populations.

* Strong analytical and communication skills are essential as are experience with common bioinformatics

methods, tools, websites and data resources.

This is a full-time position. Support (salary and benefits) is available for up to 2 years; the initial appointment is for one year with the opportunity to extend pending performance.

Please apply via Academic Jobs Online: <https://academicjobsonline.org/ajo/jobs/11524> Qualified applicants should submit (1) a curriculum vitae, (2) a letter of interest providing, including a brief description of how this position relates to her/his career plans, and (3) the names and contact information of three references.

The Department of Microbiology (micro.cornell.edu) within the College of Agriculture and Life has eleven active research laboratories. It serves as the home department for the Graduate Field of Microbiology (with more than 40 affiliated faculty members). Research is focused on prokaryotic biology, environmental microbiology, and host-microbe interactions and includes specific expertise in molecular genetics, population genetics, gene regulation, genomics, microbial cell biology, bioremediation, symbionts, pathogens, and ecosystems.

Cornell University is an innovative Ivy League university and a great place to work. Our inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement. Located in Ithaca, NY, Cornell's global presence includes the medical college's campuses on the Upper East Side of Manhattan and Doha, Qatar, as well as the Cornell Tech campus to be built on Roosevelt Island in the heart of New York City.

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

"Esther R. Angert" <era23@cornell.edu>

CornellU TeachingPostDoc OrganismalBiodiversity

Teaching Postdoctoral Associate 'V Organismal Biodiversity (University Title 'V Instructor) College of Agriculture and Life Sciences Cornell University Ithaca, New York

The Laboratories of Chelsea Specht, Patrick O'Grady, and Kelly Zamudio, in collaboration with Cornell's

College of Agriculture and Life Sciences Active Learning Initiative, invite applicants for a full-time Teaching Postdoctoral Associate (University Title 'V Instructor) with interest in developing skills and experience in Biology Education Research and Evidence-Based Pedagogy in preparation for an academic career. Specifically, the postdoc will play a key role in supporting the transition of our courses in Herpetology, Entomology, and Plant Morphology from a traditional lecture course format to active learning format, focusing on student participation and group problem solving.

The Teaching Postdoctoral Associate will be appointed for a one-year period renewable for second year contingent upon performance. The successful candidate will collaborate with the three faculty towards the following goals: formulate learning goals, develop active learning-based modules that align with the learning goals and are transferable among the three courses, provide feedback on course teaching practices, evaluate and assess learning gains, and publish the results. We expect that successful candidates will devote 30% of their effort to organizing the active learning transition process, 50% effort to developing active learning material and activities pertaining to the goals and content of the courses, and 20% effort to assessment of the implementation of active learning.

* Qualifications * Candidates should hold a doctoral degree in Organismal Biology, Biology Education, or a related field and have excellent organizational, interpersonal communication, team building and collaboration skills. Experience in developing active learning curricula and coaching educators is highly desirable.

* Terms of Appointment * The annual salary for this 1-year appointment with the possibility of extension will be \$48,000. The anticipated start date for the appointment is January 1, 2019.

* Applications * To ensure full consideration, applications must be received by September 1, 2018. To apply: Applicants should submit (as a single pdf file) their CV, a statement of teaching philosophy/experience, a statement of research experience, and the names, phone numbers, and email addresses of three individuals who can serve as references to Professor Kelly Zamudio at kelly.zamudio@cornell.edu

Cornell University is an innovative Ivy League and Land Grant university and a great place to work, teach, and learn. Our inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement. Located in Ithaca, NY, Cornell University is an equal opportunity educator and employer.

Kelly Zamudio <krz2@cornell.edu>

CRG Barcelona CancerEvolution

Postdoctoral researcher position in cancer evolution modeling, Centre for Genomic Regulation (CRG), Barcelona, Spain.

The Centre for Genomic Regulation (CRG) is an international research institute of excellence, based in Barcelona, Spain, with more than 400 scientists from 44 countries. The CRG shares principles of an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies and a flexible and efficient administration.

CRG has been conferred a badge of 'HR Excellence in Research' by the European Commission, in recognition of its progress in implementing the European Charter for Researchers and the Code of Conduct for Recruitment of Researchers, that among others consists of transparent, merit-based recruitment procedures and attractive work-life balance working conditions.

We seek to hire a postdoctoral researcher to work in the research group "Evolutionary Processes Modeling" of Dr. Donat Waghorn at the CRG in Barcelona. The position is to be filled no earlier than October 1, 2018. The research focus in the group will be on developing new mathematical models and computational tools to describe cancer evolution. We mainly use published sequencing datasets to infer selection on coding and non-coding somatic variants. These questions are connected to the study of mutational processes and their signatures in cancer DNA sequencing data.

We are looking for a highly motivated postdoctoral researcher with a background in genetics, physics, mathematics, bioinformatics, computer science or a related field. Fluency in one or more programming languages and experience with sequencing and other biological data analysis are preferable. The successful candidate will be driving individual projects and will work in a highly collaborative environment.

More information can be found at: <http://www.crg.eu/en/programmes-groups/evolutionary-processes-modeling>. Please submit your applications (including a detailed CV, list of publications, two references and a brief statement of research interests) to dweghorn@research.bwh.harvard.edu.

dweghorn@posteo.net

Eawag Switzerland EvolutionaryEcol

A postdoctoral position in evolutionary ecology is available in the research group of Blake Matthews, at Eawag's Center for Ecology, Evolution, and Biogeochemistry, near Luzern Switzerland.

The position is part of an SNF funded project entitled 'Eco-evolutionary dynamics in aquatic ecosystems', whose aim is to understand the interactions between rapid trait evolution, community dynamics, and ecosystem functions. The project focuses on stickleback as a model system, and involves a combination of genomics and quantitative genetics of functional traits, large-scale experiments in mesocosms and ponds, and field-work in natural populations in Southern Greenland.

We are interested in candidates with broad interest in evolutionary community ecology. Interest and prior experience with field ecology would be an asset, as would experience with fish ecology, ecosystem dynamics, and/or the genomics of adaptation. Independently developing research within the framework of the project is encouraged.

Eawag's Center for Ecology, Evolution & Biogeochemistry (CEEB) is located on the shore of Lake Lucerne and is a strong nucleus of Eawag research groups aimed at integrating evolutionary biology, community ecology, and ecosystem science <http://www.eawag.ch/forschung/cc/-ceeb/index.EN>. The Postdoc will interact with a diverse range of researchers studying community ecology, evolutionary biology, ecological genetics, ecosystem science, and applied environmental science.

The project is led by Blake Matthews, and involves collaborations with other research groups at CEEB, including Ole Seehausen, Jakob Brodersen, and Philine Feulner. The starting date is flexible, although early 2019 is preferred. The position is for 2 years, and there is potential for an extension.

Screening of applicants will begin immediately, with a closing date of 1 Sept 2018.

For further information please contact Blake Matthews by email, blake.matthews@eawag.ch. Lab homepage: <http://homepages.eawag.ch/~matthebl/Welcome.html> Publication list: https://scholar.google.ch/citations?user=KPOcG_sAAAAJ&hl=en We look forward to receiving your application. Please submit your application (including CV, motivation letter, and

the names and contact information for three references) via the Eawag Jobs & Career webpage, any other way of applying will not be considered. The link below will take you directly to the application form.

<https://apply.refine.ch/673277/0618/pub/1/-index.html> Matthews, Blake blake.matthews@eawag.ch
<http://homepages.eawag.ch/~matthebl/Welcome.html>

Eawag, Aquatic Ecology Department Center for Ecology, Evolution & Biogeochemistry Seestrass 79 6047, Kastanienbaum Switzerland

"Matthews, Blake" <Blake.Matthews@eawag.ch>

Edinburgh PlantBreeding

A 3 year post-doctoral research position is available the research group led by John Hickey at The Roslin Institute. We seek a highly motivated, enthusiastic, creative and independent researcher to work in the area of genomics-assisted plant breeding to produce new knowledge for scientific publication and practical application. The projects objectives are to develop and implement advanced breeding strategies using genomic selection in order to accelerate the rate of improvement in key agricultural traits in groundnuts. The project will involve extensive collaborations with Dr Rajeev Varshney and Dr Manish Pandey at ICRISAT (The International Crops Research Institute for the Semi-Arid Tropics) in India.

The successful candidate will be working alongside computational biologists, animal and plant breeders, quantitative geneticists and software engineers and have access to high performance computing clusters. Working to derive solutions at the interface between academia and industry, the post-holder will lead on research planning and management of key projects, guided by the group's outputs and deadlines.

The post-holder will join the Genetics and Genomics department at The Roslin Institute, a world-class centre for research on quantitative genetics of populations, particularly in managed populations such as livestock, companion animals, forests and crops.

For more information about the group please visit <http://www.alphagenes.roslin.ed.ac.uk>. Informal enquires can be made to John Hickey, while formal applications must be completed via the website of The University of Edinburgh (Vacancy reference = 044728).

Salary: 32,548 - 38,833

Closing date for applications: 27 August

1. Job Details

Job title: Post doctoral researcher in quantitative genetics

School/Support Department: The Roslin Institute

Unit (if applicable): Division of Genetics and Genomics

Line manager: John Hickey

2. Job Purpose

To contribute to a high-quality research programme in plant breeding by conducting original research and producing new knowledge for publication and dissemination. The post-holder will work on a research project that involves developing algorithms and tools for imputation in groundnut breeding programs. Embedded in a fast-paced team of researchers, the post-holder is expected to develop computational solutions and novel heuristic imputation strategies that harness the crossing structures in plant breeding schemes to ensure accurate imputation from low- to high-density.

3. Main Responsibilities Approx. % of time

To design innovative genomics-assisted plant breeding strategies that harness state-of-the-art computational technologies for implementation in practical breeding programs. 25%

To analyse large genomic and phenotypic data sets using innovative, newly developed methods and evaluate them by comparison with established approaches. 45%

To engage with industry partners to specify breeding goals and develop concepts to optimise current breeding programs by harnessing the abovementioned strategies. 5%

To maintain accurate records and liaise with partners, producing reports on the project and contributing to the planning and development of the set objectives. 10%

To contribute to the dissemination and publication of research by taking a leading role in writing up the findings for peer reviewed journals. 10%

4. Planning and Organising

Be responsible for a program of applied research to develop and implement innovative breeding technologies and strategies in practical breeding programs. Work duties encompass the entire range of planning and managing data generation, analysis and evaluation of experimental results. The post holder is expected to successfully complete the project targets in close collaboration with industry partners. Independent organisation and conduct of research work with subsequent publication of scientific findings are required. The post holder is

also expected to work well in a fast-paced environment and schedule workflow according to set milestones and deliverables.

5. Problem Solving / Decision Making

The post holder is expected to resolve problems using their own experience and by engaging with senior members of the lab. The post holder is expected to be largely independent and to demonstrate creativity and initiative to solve standard issues. The post holder is expected to ensure that the project milestones are delivered.

6. Key Contacts/Relationships

The post holder will work closely with Prof. John Hickey and his team and will involve interactions with some external industrial partners. For more information on the group, please see <http://www.alphagenes.roslin.ed.ac.uk/alphagenes-group/>.

Knowledge, Skills and Experience Needed for the Job

Essential

- PhD (or near completion) in an area related to genetic improvement of

— / —

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>

George Washington U Evolution Primate Cognition

The George Washington University: Post-Doc in Neural and Genetic Factors Underlying Evolution of Primate Communication and Cognition

Job Description Summary:

This position is for an NSF-funded Postdoctoral Scientist to participate in interdisciplinary research on a project titled “Neural and Genetic Factors Underlying Individual and Phylogenetic Variation in Communication”. This research is based in the GW Evolutionary Neuroscience and Primate Genomics Labs. The postdoc will conduct multi-disciplinary analyses of many types of data, including genomic/DNA sequence data, brain histological data, MRI data, and behavioral data.

Duties & Responsibilities:

- Generate genomic sequence data or neuroanatomical

data, and optimize related protocols.

- Statistical analysis of data, including phenotypic data.
- Write up results of experiments and present results to other researchers.
- Develop and manage the project pipeline together with collaborators, and curate project samples.
- Develop and test laboratory protocols.
- Help oversee student research in the lab.
- Performs other work related duties as assigned. The omission of specific duties does not preclude the supervisor from assigning duties that are logically related to the position.

Minimum Qualifications:

Qualified candidates will hold a PhD in a related discipline. Degree must be conferred by the start date of the position

Preferred Qualifications:

- PhD in anthropology, biology, neuroscience, genetics, or a related field, and expertise in neuroscience techniques, sequence data analysis and bioinformatics, or molecular bench skills (nucleotide isolation, PCR, qPCR, electrophoresis).
- Experience with research techniques in neuroscience, genetics, or bioinformatics.

To apply - <https://www.gwu.jobs/postings/54829> Chet Sherwood <sherwood@email.gwu.edu>

HarvardU EOWilson Biodiversity

Through a generous founding gift from Edward O. Wilson, Faculty-Curator Emeritus and University Research Professor Emeritus, the Museum of Comparative Zoology (MCZ) at Harvard University has established the Edward O. Wilson Biodiversity Postdoctoral Fellowship Program. This fellowship opportunity supports postdoctoral researchers at MCZ to pursue the discovery and formal taxonomic description of Earth's animal species. Fellows will work under the supervision of one or more MCZ faculty-curators, who will provide office space, access to lab facilities and necessary research support.

Eligibility * Fellows need to solicit the support of at least one faculty- curator who will supervise the work and provide a letter of recommendation as part of the initial application. The letter should indicate the kind

and amount of research support that the faculty-curator mentor can provide the candidate beyond what the fellowship provides. * Where appropriate, research should emphasize an integrative approach that combines several data types in crafting solutions to taxonomic problems. * Ph.D. with relevant research experience in taxonomy and/or systematics. * All formal requirements for the Ph.D. must be completed before the start of the fellowship, though degree receipt may be forthcoming. * Open to U.S. and non-U.S. citizens. Applications will be reviewed by a committee of Harvard faculty. The likelihood that the proposed work will result in the discovery and formal taxonomic description of animal species will be a critical consideration in the selection process. Preference will be given to applicants not currently affiliated with Harvard University, and to those who have received their doctoral degree within the previous three years.

Please note that a given faculty-curator may sponsor no more than two applicants per application cycle.

Terms & Conditions * Stipend of \$55,000/year * Benefits-eligible * Research and travel allowance of \$4,000/year * Start date flexible, but within 12 months of extended fellowship offer * Maximum two-year appointment, with funding for year 2 contingent upon successful performance during year 1 * Residence in the Cambridge area required * Relocation allowance negotiable after fellowship awarded

Application * Cover letter * A research proposal, no longer than 4 pages and single-spaced, should describe: * likely products (publications, etc.) to be completed by the end of the fellowship period. * laboratory and equipment requirements; and * how MCZ collections would be utilized; * the approach and methods to be employed; * the nature and scope of the proposed research project; * Research budget: Include a simple, 1-page budget that itemizes anticipated research and travel costs, not to exceed the fellowship allowance. * Curriculum vitae: Maximum length, 3 pages. * Up to 5 pertinent publications. * References: Three letters of recommendation are required, including one from a supporting MCZ faculty-curator. Include the names and contact information of the three references with the application. The letters will be submitted separately from the application through online system (Harvard ARieS) but are due by the application deadline. The application is only complete when all three letters are received. * Interview: A subset of applicants may be asked to further discuss their proposals with the selection committee via videoconference. * Submission through Harvard Academic Recruiting Information eSystem (ARieS).

Deadline: September 19, 2018

“Lopes, Maggie Tabach” <mlopes@fas.harvard.edu>

Hawaii CoralReefConservation

Subject: Two postdoc fellowships available at the Hawaii Institute of Marine Biology

Content:

Hello EvolDir people, Two postdoc fellowships are available in the Madin Labs at the Hawaii Institute of Marine Biology. 1) Applying emerging technologies to understand human impacts on coral reefs (<http://ow.ly/HFys30lw7zy>) 2) Quantitative coral reef ecology & biomechanics (<http://ow.ly/uiOv30lw82L>) Applications are due on the 20th of October, 2018. We'd appreciate your spreading this message broadly.

Elizabeth M.P. Madin, Ph.D. Assistant Research Professor Hawaii Institute of Marine Biology University of Hawaii at Manoa PO Box 1346 (for US Postal Service) 46-007 Lilipuna Road (For all other carriers) Kaneohe, HI 96744 USA email: emadin@hawaii.edu twitter: @ElizMadin web: www.oceansphere.org Elizabeth Madin <emadin@hawaii.edu>

HebrewUJerusalem BeeEvolution

Postdoctoral position at the Hebrew University of Jerusalem. Regulation of body size-based social organization in bumblebees

Social bees provide an excellent system for studying the evolution of sociality. Diversity in body size underlies two of the organization principles of bumblebee societies: worker division of labor and caste determination, but little is known on the proximate mechanisms regulating body size and how they are socially regulated. This project explores how social cues such as pheromones, behavior, and queen regurgitates, interact with endocrine and epigenetic processes to regulate genes involved in larva development in the bumblebee *Bombus terrestris*. To meet these goals we integrate sociobiological, behavioral, physiological, and molecular approaches. The molecular methods include but are not limited to RNAseq and RNAi. The position will be located at the Hebrew University of Jerusalem, with opportunities to travel to the US for training and research.

Required qualifications

- A PhD degree pending or obtained within the last three years in molecular biology, genetics, entomology, developmental biology, neurobiology, or related fields.
- Relevant lab expertise in developmental biology, neuroanatomy, bioinformatics, or molecular biology techniques. Experience with RNAseq, bioinformatics, RNAi, or CRISPR-Cas9 DNA editing, or with bees is advantageous.
- An outstanding academic record
- Experience in organismal biology (e.g., animal behavior, neuroethology, or ecology) is advantageous.
- Fluent spoken and written English
- Excellent communication and interpersonal skills, ability to work in a team.

The position is for 2-3 years but appointment is initially for one year and renewable based on performance. Salaries are commensurate with experience and based on standard postdoc fellowships in Israeli universities.

We offer a strong, internationally recognized and interdisciplinary working environment with an open academic atmosphere. Location in the beautiful city of Jerusalem. The project is part of a collaboration with the Woodard and Yamanaka Labs in the Department of Entomology at the University of California, Riverside and is supported by the US-Israel Agricultural Research and Development Fund, and the US-Israel Binational Science Foundation. The position will start on 1 September 2018 or as soon as possible thereafter. To apply, please send a cover letter, current CV, and names and contact information for three

references to Guy Bloch (guy.bloch@mail.huji.ac.il). The application deadline is September 1st, 2018. For more information on our research please visit our lab page at <https://guybloch.huji.ac.il/> or contact Guy.

Guy Bloch (PhD) Professor of Biology Dept. of Ecology, Evolution, and Behavior The Hebrew University of Jerusalem, Jerusalem, 91904 Israel Website: <http://guybloch.huji.ac.il/> Guy Bloch <guy.bloch@mail.huji.ac.il>

HebrewU VenomChannelEvolution

Two postdoc positions funded up to 3 years are available in the Moran lab at the Department of Ecology, Evolution and Behavior at the Hebrew University of Jerusalem, Israel (HUJI). The projects will focus on: (1) the evolution of animal venom and toxins in ecological, developmental and genomic context and (2) the evolution and of a family of understudied ion channels in animals with diverse ligands and gating mechanisms. In our lab we use the sea anemone *Nematostella vectensis* as a model and employ a wide array of biochemical, genetic, microscopic and computational approaches to answer our questions. The fellowships associated with these projects are at the high end of Israeli standards and the successful candidates will also receive additional funds for attending relevant international workshops and conferences on a yearly basis for career development.

The Hebrew University of Jerusalem (HUJI) is one of Israel's premier universities. HUJI has been ranked among the top universities in the world in two comprehensive surveys conducted by The Times Higher Education Supplement of London and Shanghai University. The host lab is located at the Natural Sciences campus at Givat Ram, where a wide range of available technical services and research facilities enable the cutting-edge research in various fields of Life Sciences. Our department is highly international and the working language in the lab is English.

The suitable candidate should have a Ph.D. in life sciences or a related field and experience in standard biochemical and molecular biology techniques. Training in protein biochemistry, molecular evolution, ion channels and/or developmental biology is desirable. Having prior experience in microscopy and/or computational analysis of high throughput sequencing data is an advantage. More details about our research group can be found online at <http://yehumoran.com>. Interested candidates are welcome to contact Yehu Moran (yehu.moran@mail.huji.ac.il). Please send a CV, list of publications and contact details of 2-3 referees

“yehu.moran@mail.huji.ac.il”
<yehu.moran@mail.huji.ac.il>

HongKong AcclimationClimate-ChangeMarineOrganisms

Acclimation and Adaptation to Climate Change in Marine Organisms.

Applications are invited for an appointment as Postdoctoral Fellow in

Molecular Ecology in the School of Biological Sciences at the University of Hong Kong (<https://www.hku.hk/>), to commence any time after October 2018, for two years, with the possibility of a one year extension. The University is a long-standing English-speaking institution and counts as one of the top Universities in Asia.

The new lab led by Dr. Celia Schunter works on different aspects of acclimation to climate change*. Research topics span from molecular, neuronal and behavioural impacts of climate change to parental effects and trans-generational acclimation in fishes and other marine organisms*. The lab is associated with the Swire Institute of Marine Science also known as SWIMS (<http://www.swims.hku.hk/>), a beautiful research station in a remote area of the Island of Hong Kong.

Applicants should possess (or be close to submitting) a Ph.D. in *Genetics/Bioinformatics/Molecular Ecology* or similar with experience in computational biology. In this role you will be able to lead experiments, collect and analyze the data. Large-scale, highly collaborative, international projects are already underway, ensuring a quick and productive start. The successful candidate will take a lead role in preparing manuscripts for publication and disseminating the research at international conferences.

Required criteria: - Ph.D. in Genetics/Bioinformatics/Molecular Ecology (or related topics) - If the background is ecological/molecular then strong bioinformatic skills are needed. - Experience with Next-Generation Sequencing - Good problem-solving skills - Excellent publishing record

Desirable: - Experience in neurobiology - Knowledge in marine ecology, fish biology/physiology - Experience in managing collaborative projects - Experience and/or willingness to work in aquarium systems and/or field work in the marine environment.

A highly competitive salary commensurate with qualifications and experience will be offered, in addition to

annual leave and medical benefits.

Interested candidates should send their CV, a cover letter summarizing research interests, professional experience, career goals and contact information for three references to Dr. Celia Schunter (celiaschunter@gmail.com). Review of applications will begin immediately and continue until the position is filled. The start date is flexible.

Celia Schunter <celiaschunter@gmail.com>

IndianaU Reproduction Evolution Disease

Postdoc: IndianaU.Reproduction.Evolution.Disease

The COMMON THEMES IN REPRODUCTIVE DIVERSITY PROGRAM (a multi-disciplinary program within The Indiana University College of Arts + Sciences) has 2 open positions for 2-year postdoctoral fellowships to support broadly integrative training on reproduction. Training will focus on animal or human behavior/physiology and will address key questions centering around one or more of the following themes: (1) evolutionary, genetic, epigenetic, environmental, and parental contributions to reproductive and social behavior; (2) evolutionary or developmental origins of sex differences; and (3) sex and immunity in health and disease. Indiana University's excellent support for research and its globally recognized strengths in animal behavior, evolutionary biology, endocrinology, human sexual health, and neurobiology will ensure high quality and broad training. A PhD in biology, psychology, neuroscience, anthropology, gender studies, or a related field is required. Funding is from an NIH T32 training grant, "Common Themes in Reproductive Diversity."

Applicants should make initial contact with one or more members of the 20+ training faculty (<http://www.indiana.edu/~reprodiv/who-we-are/faculty/>), who will serve as mentors, to develop possible research/training projects. Additional information about applying is available on the CTRD website (<http://www.indiana.edu/~reprodiv/how-to-apply/>).

Positions begin as early as *June 2019*. Review of applications will begin as soon as *1 October 2018*. Consideration of applications will continue until positions are filled. Applicants from groups underrepresented in science are encouraged.

Bloomington is a vibrant college town located in scenic southern Indiana, close to several natural parks and

wilderness areas, and it enjoys a local culture exceptionally rich in music, art, and theater. The Indiana University College of Arts and Sciences is committed to building and supporting a diverse, inclusive, and equitable community of students and scholars. Indiana University is an Equal Employment and Affirmative Action Employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status or veteran status.

Kimberly Rosvall, Ph.D. Assistant Professor Indiana University Jordan Hall A318A, 812-856-2375 <http://www.indiana.edu/~krosvlab/> kimrosvall@gmail.com

JYU Finland SpermEvolTardigrade

EVOLDIR: JYUFinland.SpermEvolTardigrade

Postdoc position on Tardigrade Sperm Evolution

We are looking for a highly-motivated postdoctoral researcher for a two-year position starting in January 2019, at the Department of Biological and Environmental Science, University of Jyväskylä, Finland. This position is part of a Academy of Finland Research Fellowship to Dr. Sara Calhim to study 'Sperm evolution across reproductive and fertilization modes'. The project uses tardigrades as the model system, taking advantage of their unparalleled diversity in reproductive, ecological and life-history traits. This position will focus on compiling a phylogeny and gathering new and literature-based data on species-specific reproductive (morphological, behavioural) and ecological traits. The main objective is to conduct comparative analyses to tackle major reproductive trait evolution questions.

Requirements: A PhD/postdoc in evolutionary or molecular biology, with considerable experience in phylogenetic methods and working with sequence databases. Molecular and microscopy laboratory skills are an advantage. The candidate must demonstrate considerable written and verbal communication skills in English, independent and creative thinking, and an ability to work collaboratively (including mentoring junior group members).

The application should contain a CV, publication list, two reference letters, and a short cover letter. The cover letter (1-2 pages) should include a description of your research history and interests, highlighting your suit-

ability for the position. The University of Jyväskylä promotes equal opportunities.

Apply online: https://rekry.saima.fi/certiahome/-open_job_view.html?did=5600&jc=12&id=-00006007&lang=fi Deadline: 30.09.2018

For more information:

Website: <https://www.jyu.fi/science/en/bioenv/-research/biosciences/calhim-group/open-vacancies>

Email: sara.calhim@jyu.fi Twitter: @SaraFirebolt

“Calhim, Sara” <sara.calhim@jyu.fi>

Kiel Ploen Evolution Antibiotic Resistance

Postdoc Position on Antibiotic Resistance Evolution - Kiel/Ploen, Germany

The postdoc position will be based in the Schulenburg group, located at both the University of Kiel and the Max-Planck-Institute for Evolutionary Biology, Ploen. The position is for 3 years with the possibility of an extension for another 1 year. It is available from 1.12.2018 onwards or soon afterwards. The salary is at level TV-L E13 or E14 (approx.. euro 51.000 - 58.000 per year before tax reduction).

Area of work:

Dissection of antibiotic resistance evolution using experimental evolution, genomics analysis, ideally functional genetics and/or microfluidics. Through several collaborations, we have access to clinical material, for example from cystic fibrosis patients. The postdoc is expected to develop a new project on the dynamics of antibiotic resistance evolution, including the underlying selection processes and/or the involved molecular mechanisms of resistance.

Expectations and Requirements:

PhD in the area of evolutionary biology or microbiology. Comprehensive experience in microbiological techniques and statistical data analysis. Ideally experience in the performance of evolution experiments, microfluidics, bacterial genome sequence analysis, and/or bacterial functional genetic analysis. High competence in English and writing of manuscripts. We are looking for someone with creative ideas, enthusiasm for research, and the ability of performing large-scale experiments.

The Max-Planck Institute for Evolutionary Biology and

Kiel University aim at a higher proportion of women in research and education, and, therefore, specifically encourage qualified female scientists to apply. Female scientists will be preferentially considered in case of equivalent qualification, competence and achievements. The Max-Planck Institute for Evolutionary Biology and Kiel University specifically support employment of severely handicapped people. Therefore, severely handicapped applicants will be preferentially considered in case of suitable qualification. The Max-Planck Institute for Evolutionary Biology and Kiel University specifically welcome application from people with migration background.

Applications should include a motivation letter (max. 2 pages long), CV, publication list, names and contact details of two referees (who are familiar with the applicant's work), and copies of certificates (only PhD). Deadline for applications is 31.08.2018. Applications should be sent as a single pdf-document by email to:

Prof. Dr. Hinrich Schulenburg, hschulenburg@zoologie.uni-kiel.de Further information can be obtained from Prof. Dr. Hinrich Schulenburg (hschulenburg@zoologie.uni-kiel.de). Please also check: <http://www.uni-kiel.de/zoologie/evoecogen/> Or: <http://www.evolbio.mpg.de/3248501/antibioticresistance>
Hinrich Schulenburg

Evolutionary Ecology and Genetics Christian-Albrechts-Universität zu Kiel Am Botanischen Garten 9 24118 Kiel Germany Tel: +49-431-880-4143/4141 Fax: +49-431-880-2403 Email: hschulenburg@zoologie.uni-kiel.de

www.uni-kiel.de/zoologie/evoecogen/
www.evolbio.mpg.de/3248501/antibioticresistance
www.kec.uni-kiel.de www.metaorganism-research.com
www.evolbio.mpg.de/imprs evolung.fz-borstel.de

Hinrich Schulenburg <hschulenburg@zoologie.uni-kiel.de>

Kunming Institute Of Zoology Biodiversity Sciences

The Chinese Academy of Sciences offers 1-to-2-year postdoctoral fellowships (Category C) and 2-to-9-month visiting fellowships for faculty (Categories A & B), under its PIFI program (Presidential International Fellowship Initiative).

All fellowships come with an internationally competitive salary and round-trip airfare.

<http://international-talent.cas.cn/front/index.html#/-bicsite/pifiIntroduce/pifi> My lab at the Kunming Institute of Zoology welcomes environmental scientists from anywhere in the world who are working with environmental DNA, metabarcoding, and/or mito/metagenomic data for biodiversity conservation. This includes scientists working in statistical ecology, who would like use these new data sources. My lab is fully funded for coffee and sequencing, and we have lots of datasets for exploration.

We are particularly interested in collaborations in these areas: The biodiversity impact of the One Belt One Road Programme and of climate change. The integration of remote-sensing data, joint species distribution modelling, and high-throughput data for monitoring biodiversity and ecosystem functions and services. See this article for more detail: <https://www.nature.com/articles/s41559-017-0176> Metagenomics of meiofauna (e.g. nematodes, mites from soil), especially as it relates to agriculture

The Kunming Institute of Zoology is very active in evolutionary biology, especially in evolutionary and functional genomics. KIZ also has an active DNA barcoding center. PIFI applicants interested in these areas can also contact me for introductions to other KIZ faculty.

Kunming, in Yunnan province, China, is a very pleasant place to live and visit, with several microbreweries and great weather (see gokunming.com)

Doug Yu

– Prof. Douglas W. Yu School of Biological Sciences, University of East Anglia, Norwich, Norfolk NR4 7TJ UK, mob +44-7510-308-272 Kunming Institute of Zoology, 21 Qingsong Lu, Kunming, Yunnan 650201 China ofc +86-871-519 9178, mob 1860-871-7369

www.uea.ac.uk/bio/People/Academic/Douglas+Yu, eastanglia.academia.edu/DouglasYu/Papers for pdfs

Douglas Yu <dougyu@mac.com>

MNH UFlorida ScanningSpecimens

CLASSIFICATION TITLE: Postdoctoral Associate
 JOB DESCRIPTION: The openVertebrate (oVert) Thematic Collection Network (TCN)–funded by the US National Science Foundation–is seeking a postdoctoral scientist that will work with the oVert team to develop and fine-tune protocols for imaging using x-ray com-

puted tomography (CT-scanning) and workflows for sharing digital anatomical datasets using on-line depositories. A portion of this position will be dedicated to project management and grant administration.

The successful applicant will be based at the University of Florida (Gainesville, FL) and work directly with Dr. David Blackburn and Dr. Edward Stanley, both faculty at the Florida Museum of Natural History.

This will be a highly collaborative environment with interactions with PIs, staff, and students at the 18 participating US institutions, including staff for the on-line depository MorphoSource (based at Duke University). The successful applicant will work with oVert PIs to develop written workflows and on-line tutorials related to accessing and using CT data by the research and educational communities. They will be expected to facilitate on-site training / workshops for students and visitors and engage in some travel for similar training at other institutions in the US. In addition, they will participate in regular in-person and virtual project meetings on a bi-weekly meeting for the oVert TCN. A portion of time will also be dedicated to pursuing independent research related to the CT data generated from the oVert TCN.

Following the guidance of the National Academies of Science and Engineering on how to best enhance post-doctoral experiences (<http://bit.ly/NASEpostdoc>), the PIs will provide: clear communication about the nature of the work to be performed and evaluation processes; career counseling; training in preparation of grant proposals, publications, and presentations; guidance on ways to improve teaching and mentoring skills; guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas and with members of the local community; and training in responsible professional practices ADVERTISED SALARY: Minimum salary is \$48,000 annually; commensurate with qualifications and experience.

MINIMUM REQUIREMENTS: PhD required.

PREFERRED QUALIFICATIONS: Applicants should have experience with microCT-scanning, including using contrast agents for soft-tissues, segmenting datasets using software like VGStudioMax / Avizo, and mesh-editing with software like meshlab, Maya or Netfab. Python coding, app development and video editing experience as well as a familiarity with research in natural history museums would all be preferred.

Applicants should have strong writing and presentation skills and be highly collaborative.

SPECIAL INSTRUCTIONS TO APPLICANTS: In order to be considered, you must upload your cover letter, resume and the names and contact information for three

references.

This is a time-limited position.

Application must be submitted by 11:55 p.m. (ET) on 1 October 2018.

The University of Florida is an equal opportunity institution dedicated to building a broadly diverse and inclusive faculty and staff. If an accommodation due to a disability is needed to apply for this position, please call 352/392-2477 or the Florida Relay System at 800/955-8771 (TDD). Hiring is contingent upon eligibility to work in the US.

Searches are conducted in accordance with Florida's Sunshine Law.

Final candidate will be required to provide official transcript to the hiring department upon hire. A transcript will not be considered "official" if a designation of "Issued to Student" is visible.

Degrees earned from an education institution outside of the United States are required to be evaluated by a professional credentialing service provider approved by National Association of Credential Evaluation Services (NACES), which can be found at <http://www.naces.org/>. Applications must be submitted on-line via: <http://explore.jobs.ufl.edu/cw/en-us/job/-508535/postdoctoral-associate> For questions, please contact David C. Blackburn, Associate Curator, Florida Museum of Natural History <dblackburn@flmnh.ufl.edu>

"Blackburn, David C" <dblackburn@flmnh.ufl.edu>

conceptual understanding of relevant life history theory and have a demonstrated track record in producing high quality publications.

The Centre for Geometric Biology is developing and testing a new theory for how and why organisms grow. Our particular focus is on how the net flux of energy (the energy acquired

through food, photosynthesis, or chemosynthesis minus the energy lost to metabolism) changes with size, whether it be cell size or total body size. We are using a range of approaches and systems to test these predictions. For example we work on yeast, bacteria, phytoplankton and animals. We use artificial selection, experimental evolution, ecological experiments, comparative analyses and theoretical models, as well as different types of bioenergetics measurements to explore a wide range of specific questions about organismal growth.

For more information about the Centre please visit our website <https://cgb.org.au/> To apply please go to <http://careers.pageuppeople.com/513/cw/en/job/-580504/research-fellow-biological-sciences> Enquiries

Dustin Marshall, Professor, School of Biological Sciences, +61 3 9902 4449

– Dr. Liz Morris Administration Manager Centre for Geometric Biology School of Biological Sciences Monash University Clayton, Vic 3800 Australia Mob: +61 3 404 069 210 Email: Liz.Morris@monash.edu

Liz Morris <liz.morris@monash.edu>

MonashU Melbourne LifeHistoryTheory

Postdoctoral Position: Experienced ecologist specialising in life history theory

Professor Dustin Marshall is seeking an experienced Ecologist, specialising in life history theory and with strong analytical skills, to explore patterns in life histories. This position will be with the Centre for Geometric Biology (www.cgb.org.au) within the School of Biological Sciences at Monash University in Melbourne, Australia.

As the successful candidate, you will be expected to use existing datasets to investigate evolutionary patterns both within and across species, but more importantly demonstrate a strong

MortonArboretum Illinois Biogeography

The Morton Arboretum invites applications for a two year postdoctoral researcher to work on an NSF-supported Advances in Biological Informatics project, "Quantifying biogeographic history: a novel model-based approach to integrating data from genes, fossils, specimens, and environments" (described here). The successful applicant will join an international team of researchers working in mathematics/ statistics, ecology, biogeography, distribution modeling, and population genetics. The postdoctoral researcher will collaborate with the project team to design, develop and implement novel methods for integrating datasets which have different characteristics and resolution (environmental, paleoecological, and genetic data) to make inference about shifts in species ranges and population sizes throughout the

past 21,000 years (since the last Ice Age).

Applicants should have a Ph.D. (or Ph.D. defense scheduled in very near future) in the quantitative sciences (i.e., mathematical biology, statistics, theoretical ecology, or related fields), or in an ecological field plus experience with ecological modelling, species distribution or population modelling, or quantitative ecology. Interest or experience in Bayesian statistics, spatial modeling, state-space modeling, or data-driven modeling is beneficial but not required. Some experience in computer programming is beneficial. Other desired qualifications include a strong work ethic, problem-solving and time management skills, and experience communicating scientific results (oral and written). Applicants should be interested in working at the interface of statistics and ecology, and interested in contributing to a growing open-source project.

In addition to the main goal of model development, the postdoctoral researcher will be provided mentoring and opportunities for professional development, depending on their interests, including attending international scientific meetings, and mentoring in code development and scientific ethics. Other opportunities could include involvement in outreach (e.g., curriculum development, workshop implementation), supervising undergraduate researchers, guest lectures, networking, and participation in workshops and short courses (internally and externally). The postdoctoral researcher will have freedom to identify and attend relevant scientific meetings and professional development opportunities, for which funding will be provided.

The position is funded for two years, with possibility for continuing support pending future funding success. The postdoctoral researcher will be based at The Morton Arboretum and will primarily work with Dr. Sean Hoban, Dr. Andria Dawson (Mount Royal University, Calgary), and Dr. Adam Smith (Missouri Botanical Garden). The position will require some travel to work with collaborators at Mount Royal University and the Missouri Botanical Garden, as well as attend team meetings and workshops. All travel costs are covered by grant funds.

The Morton Arboretum is a world-class plant science research institute and public botanic garden near Chicago, USA, with research strengths in ecology, conservation, and genomics. The Morton Arboretum has ongoing collaborations with scientists at the Field Museum, University of Illinois Chicago, two National Laboratories, the Brookfield Zoo, and Chicago Botanic Garden.

Application materials must include four documents concatenated into two PDFs as follows:

One document to include: * 1-2 page cover letter describ-

ing your qualifications and your interest in the project (project is described here) * evidence of scientific outputs (e.g. writing samples such as publications, dissertation, unpublished manuscripts, technical reports) * names and contact information for three references

Second document to include: * CV/Resume

Applications may be submitted until the position is filled, with applications received by October 15 to be guaranteed full consideration. A start date in winter 2018/2019 is preferred. Applicants must apply through The Morton Arboretum job system by clicking here. For inquiries, please contact Dr. Sean Hoban (shoban@mortonarb.org), Dr. Adam Smith (adam@earthskysea.org), or Dr. Andria Dawson (andria.dawson@gmail.com).

The Morton Arboretum is an equal opportunity employer committed to achieving a diverse workforce. [MortonArbLogo-Green_transparent%2520bkgrd.jpg]
Colleen Emrick | Human Resources Specialist
The Morton Arboretum | 4100 Illinois Route 53 | Lisle, Illinois 60532 T 630-719-7997 | F 630-725-2040 | cemrick@mortonarb.org | mortonarb.org [18EXH_TrollHunt_Email-Signature-FIN.jpg]

Colleen Emrick <cemrick@mortonarb.org>

MPI Ploen ModellingCancerEvolution

The Department for Evolutionary Theory at the Max-Planck Institute for Evolutionary Biology in Ploen, Germany, is looking for a

Senior PostDoc in Cancer Evolution

The candidate will be a team player who contributes to different research projects in the context of mathematical modeling of cancer evolution. While some projects are already defined, candidates are also encouraged to develop their own research agenda.

Requirements for the position include a strong record of self-motivated research (supported by peer-reviewed publications), a PhD in applied mathematics, theoretical biology, theoretical physics, or a related area, and first PostDoctoral experience. In addition, we ask for excellent analytical and computational skills and a strong interest in cancer evolution.

We offer initially a 3 years position. Start date is negotiable; salary will be according to expertise following

the German TVöD.

Highly motivated applicants of any nationality are encouraged to send i. a motivation letter including a statement of research interests ii. a CV and iii. up to three selected publications in a single pdf file to traulsen@evolbio.mpg.de until September 18th, 2018. Please also provide two reference addresses.

The Max-Planck Institute for Evolutionary Biology is located in Plön, a small town in a beautiful lake area with all the amenities of a touristically active area. The Baltic sea and the major university cities Kiel and Lübeck are only 30 minutes away. Frequent train connections allow commuting from either city. We offer state of the art facilities and an interdisciplinary and international environment driven by scientific curiosity and not by funding or administrative restrictions. The institute consists of 160 employees in three departments and several independent groups and is offering a broad approach to evolutionary biology. The working language at the institute is English, <http://www.evolbio.mpg.de/2169/en> The Max Planck Society wishes to increase the participation of women wherever they are underrepresented; therefore, applications from women are particularly welcome. Following its commitment to an equal opportunities employment policy, the Max Planck Society also especially encourages persons with a disability to submit their applications.

Arne Traulsen <traulsen@evolbio.mpg.de>

NorthCarolinaStateU AppliedEvolModeling

Postdoc: Modeling Gene Drive and Evolution of Insecticide Resistance in Mosquitoes

OVERVIEW: We recently received funding from NIH for a project titled “Combining *Aedes aegypti* genomics and modeling to improve gene drive strategies and our understanding of insecticide resistance evolution”. *Aedes aegypti* is the primary vector of dengue, Zika, chikungunya, and urban yellow-fever. This project will fund two postdocs; one who will do the genomics and bioinformatics (individual already identified), and a second to work on the modeling aspects (this position).

PROJECT DESCRIPTION: Although the idea of using selfish genetic elements to drive specific transgenes into populations was proposed over 40 years ago, it is only recently with the advent of CRISPR-based gene

editing technology that this approach has gained broad attention from researchers and the news media.

The most straightforward approaches for building gene drives using CRISPR/Cas9 technologies are theoretically expected to result in spread of the gene drive to individuals in all populations that are connected by even minimal gene flow. These approaches are appropriate in some cases, but detailed mathematical models are needed to understand the dynamics of spread and the potential for resistance evolving to the gene drive mechanisms. More complex approaches have been proposed for developing gene drives that are spatial and/or temporally limited. More novel molecular approaches accompanied by modeling are needed for development of these limited gene drives.

We have funding from the NIH to build mathematical models aimed at assisting the design and deployment of gene drives for suppressing or altering the characteristics of *Aedes aegypti*, the main vector of dengue virus that impacts over 100 million people a year. *Ae. aegypti* has substantial fine scale population structure but detailed parameter estimates are lacking. Other work within the project is focused on accurately estimating these parameters through genomic approaches.

We currently have a detailed model that simulates the population dynamics and population genetics of *Ae. aegypti* in a city on the Amazon river, Iquitos, for which there are rich data sets on both mosquito dynamics and dengue epidemiology. The first main goal of our NIH grant will be to incorporate the parameter values from the genomic analysis into the detailed model, and to use the model for assessing the expected performance of a variety of gene drive mechanisms in Iquitos and similar cities.

Insecticides have been used to suppress *Ae. aegypti* in Iquitos since 2001. The mosquitoes have responded by evolving resistance. We are fortunate to have samples of *Ae. aegypti* from the year 2001 to the present and have already begun molecular analysis of signatures of selection. The second main goal of our NIH grant is to use the detailed mathematical model to evaluate hypotheses about the spatial and temporal dynamics of insecticide resistance evolution that involves multiple genes. This work will break new ground in efforts to control the evolution of insecticide resistance and will also be informative about the spread of resistance to gene drives.

JOB DESCRIPTION: The postdoc in this position will lead modeling efforts to achieve both of the project goals. In addition to working with our detailed model, the postdoc will have the option of developing more general models to evaluate novel approaches to spatially/temporally

limited gene drives and examine impacts of specific gene drives on dengue virus epidemiology. Our project is strengthened by collaborations with a number of labs in the US and in Peru. The postdoc will interact with members of these other research groups. There will be an opportunity for some work in Peru. The initial appointment is for two-years with the potential for extension beyond that period.

QUALIFICATIONS: We are looking for a postdoc with a solid background in population biology and population genetics who has experience with modeling and who wants to do applied research. Experience with C++ or related languages is desirable. Ability to work independently and as a member of a team is essential.

TO APPLY: email a cover letter and CV to Fred.Gould@ncsu.edu AND Alun Lloyd@ncsu.edu

“fgould@ncsu.edu” <fgould@ncsu.edu>

Norwich SingleCellBioinformatics

The Earlham Institute (EI) is seeking an enthusiastic and dedicated Bioinformatician to join the Core Bioinformatics Group.

The role:

This position provides an opportunity to gain expertise in new sequencing technologies and their application in an exciting and emerging field. The successful candidate will work closely with our technical development team to develop and apply new technology to a variety of single cell applications.

The post-holder will analyse data from cutting edge technologies, establish and implement pipelines and methods for the analysis of single cell genome, epigenome and transcriptome data across a wide variety of biological systems. The post holder will deliver single cell data analysis in conjunction with faculty groups, the genomic pipelines team and external collaborators.

This is a collaborative project with the successful candidate joining the group of Dr. David Swarbrek < <http://www.earlham.ac.uk/david-swarbrek> > and working closely with wet and dry lab scientists in the groups of Dr. Iain Macaulay < <http://www.earlham.ac.uk/iain-macaulay> > and Dr. Wilfried Haerty < <http://www.earlham.ac.uk/wilfried-haerty> >.

Required qualifications and experience:

The successful candidate will possess a PhD or equivalent experience in computational biology, bioinformatics or similar, with a strong background in large scale data analysis, and will have demonstrated experience of transcriptomics, genomics or epigenomics data analysis. They will also possess a high level of skill and demonstrable experience of Python (preferable), Java, or C++, along with R and Bash scripting.

The ideal candidate will also be highly collaborative and have demonstrable experience of successfully managing their time to deliver analyses and input into multiple projects.

Additional information:

Salary on appointment will be within the range pounds 31,250 to pounds 38,100 per annum depending on qualifications and experience. This is a fulltime post for a contract for a period of 2 years.

To apply: Please complete the application form by September 16th

<http://jobs.earlham.ac.uk/Details.asp?vacancyID=-13751> Wilfried Haerty Group Leader Norwich Research Park Norwich Norfolk NR4 7UG +44 (0) 1603 450 974 wilfried.haerty@earlham.ac.uk www.earlham.ac.uk “Wilfried Haerty (EI)” <Wilfried.Haerty@earlham.ac.uk>

NTNU Norway Hologenomics

The NTNU University Museum is looking for an energetic and ambitious postdoctoral researcher for a period of up to 3 years, as part of a newly funded EU Research Innovation Actions project awarded to University of Copenhagen, NTNU, and colleagues in Spain, UK and Germany. Starting date 1st of January 2019. The project will explore the interactive effect of the genome and microbiome on salmon and chicken health (HoloFood). This project is built around an international consortium of universities and private industry (LerÅ©Åy Seafood Group (Norway), Chr. Hansen A/S (Denmark), Piast Group (Poland)) that will extract and bioinformatically characterise host and gut microbial communities using a combined genomics and transcriptomics approach, so as to decipher the interactions between the two. The ultimate aim is to help tailor the industrial production of both systems through feed manipulation.

Specifically, this three-year postdoctoral position is in

salmon hologenomics, and will be exploring the co-interaction of salmon with their gut microbiota, and how this may affect/condition growth and health under the influence of different feed types. Thus we are looking for a motivated, highly organised and collaborative postdoc, whose role will be to lead the generation of the data and its subsequent analysis. This will involve: close coordination with the team at LerÅ©Åy A/S who will undertake tank-based feeding experiments; leading the sampling of salmon and microbiota samples from the salmon; generation of genomic, transcriptomic and microbiomic data from the samples; and data analysis in state-of-the-art computational framework.

While the position is principally based in Trondheim at NTNU with Associate Professor Mike Martin, the data generation phase will be in the project's centralised laboratory facilities at the University of Copenhagen. There Professor Tom Gilbert's team will coordinate the overall project, establish laboratory and informatics pipelines for the postdoc, and provide onsite training in the laboratory methods. Thus the position will require a 6-12 month stay abroad at the University of Copenhagen during the data generation phase.

Main tasks - Coordinate field sampling of salmon genomes, transcriptomes and microbiomes in Norway - Conduct high-throughput data generation on genomes, transcriptomes, and microbiomes in Denmark - Perform bioinformatics analyses on the data and lead scientific papers - Attend annual project meetings and contribute towards scientific reports as required by the EU

Mandatory Qualifications - Relevant scientific background: PhD in a topic related to Biology and/or Genetics and/or Microbiology and/or Animal Science, completed by the employment start date - Documented evidence (in form of published papers and/or PhD thesis) of experience using state-of-the-art methods in molecular biology - Knowledge of the principles of genomics and metagenomics - Fluency in English (written, reading, spoken)

Other Qualifications of Considerable Interest - Experience with analysing NGS data using Unix command-line tools - Ability to collaborate on a large project alongside senior researchers at both academic and industrial partners excellent organizational skills - Experience supervising students in NGS laboratory methods - Experience with liquid handling robots and NGS sequencing - Experience in field work - Excellent teamwork and communication skills, both verbal and written

The evaluation of candidates will be based on: - Submitted documents - Scientific publications - Application/cover letter including a description of how this position fits the career plan and interests of the appli-

cant - Collaborative skills (references) - An interview (of short-listed candidates)

Information about the working environment The Department of Natural History at the NTNU University Museum has 16 faculty positions, 12 PhD students and 16 technical and administrative positions. The department's research activity is facilitated through two research groups: the Systematics and Evolution Group and the Conservation Biology Group. The Department cooperates formally with the NTNU Department of Biology and is also responsible for teaching biosystematics (systematics, taxonomy, biogeography, floristics, faunistics) at the university.

Further information about the department is available at <http://www.ntnu.edu/inh>. 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 can be found here. Information about Norway's consistent top

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

OhioStateU AntVenomics

Postdoctoral researcher in Ant Venomics Department of Evolution, Ecology and Organismal Biology The Ohio State University, Columbus, OH USA

The Adams lab broadly aims to understand the evolution of traits that drive community assembly in ant-centric symbiotic species networks. This position focuses on comparative questions relating to venom evolution in *Megalomyrmex* ants.

The 1-2 year project will explore the variation in transcripts expressed in the venom glands of free-living and parasite species. Social parasites exploit ant societies by invading and stealing resources. *Megalomyrmex* ants enter host nests using chemical weaponry made from alkaloid-based venom (e.g., pyrrolidines, pyrrolizidines, piperidines, and pyrrolines). We have characterized the

venom alkaloids of many species and would now like to explore and compare transcriptomes to understand the underlying genes responsible for venom toxicity.

Dr. Adams leads a collaborative team in a supportive research environment at the Museum of Biological Diversity at The Ohio State University. She is committed to creating a diverse and inclusive team that is productive, happy and will attain their career goals.

Interested candidates should have a strong publication record appropriate for your career stage and ideally experience in -omics techniques (e.g., transcriptome sequencing, genome assembly, comparative genomics and evolution). Top candidates will have excellent communication skills, enthusiasm for symbiosis research and a compelling argument that explains how their skillset will advance this line of work while also proposing additional projects of interest.

The successful applicant will work closely with Dr. Adams and her students in research design; field collections in Panama and/or Costa Rica; the establishment and maintenance of laboratory experiments and bioassays; data collection, management and statistical analyses; and possibly the supervision of live ant colonies.

Applications are encouraged from motivated individuals who have a Ph.D. or are nearing completion of their Ph.D. Please send a single pdf including 1) your CV, 2) a letter of motivation (your interests, past experience, and why you want to work with venomics), and 3) the names, addresses and phone numbers of three references. Women and underrepresented minorities are particularly encouraged to apply. Review of applications will begin by 15 September 2018 and will continue until the position is filled. Starting date is flexible.

Send material to:

Dr. Rachelle M. M. Adams: adams.1970@osu.edu

The Ohio State University

Learn more about the lab: megalomyrmex.osu.edu

Thank you in advance for posting my AD.

Please let me know if you have any questions! Sincerely,

Rachelle

The Ohio State University Rachelle M. M. Adams, PhD
Assistant Professor Department of Evolution, Ecology
and Organismal Biology Museum of Biological Diversity
MBD 1500, 1315 Kinnear Road, Columbus, OH 43212
614-292-6980 Office / 614-688-4222 Lab

<https://megalomyrmex.osu.edu/> adams.1970@osu.edu

“Adams, Rachelle” <adams.1970@osu.edu>

OklahomaStateU MacroevolFunctionalMorphology

Postdoctoral researcher in Comparative Biology: Department of Integrative Biology, Oklahoma State University, Stillwater, OK, U.S.A.

The Moen lab at the Department of Integrative Biology at Oklahoma State University is seeking a postdoctoral researcher for an NSF-funded project examining the drivers of macroevolutionary transition rates between different anuran (frog and toad) ecomorphs (e.g. aquatic, arboreal, fossorial, terrestrial). Key duties will focus on collecting morphological data from museum specimens of anurans, conducting large-scale phylogenetic comparative analyses, presenting the results at conferences, and leading publication of the research. Additional research opportunities are available, particularly those that focus on functional morphology in anurans, evolutionary biomechanics, and macroevolution. While data collection for this position will primarily focus on museum specimens, it will involve some travel to U.S. museum collections and local fieldwork. In addition to research, the post-doc will be responsible for mentoring undergraduate and graduate students during the academic year and mentoring undergraduates as part of an eight-week summer Research Experience for Undergraduates program. Appointment will be for one year with competitive salary and benefits. The position has an anticipated start date of 15 October 2018, although this is negotiable.

The minimum qualification for this position is a Ph.D. in a relevant field. Competitive candidates will have a strong background in phylogenetic comparative biology (specifically analyses of phenotypic evolution) and data analysis in R. In addition, experience collecting data on frog morphology and knowledge of frog biology and evolution will be beneficial for working on this project.

To apply please email a single PDF of (a) a cover letter summarizing research experience and interests, (b) a curriculum vitae (CV), and (c) contact information (email and phone) for three references, preferably including your Ph.D. advisor and most recent postdoctoral advisor, if applicable. Please send in an email with the subject line as “Postdoctoral application <your name>” to Daniel Moen at daniel.moen@okstate.edu. For full consideration, apply by 15 September 2018. However, applications will be accepted until the position is filled.

Please direct any questions about the position to Daniel Moen (daniel.moen@okstate.edu; 405-744-6815). More information about the Moen lab can be found at moenlab.okstate.edu.

Oklahoma State University is an Affirmative Action/Equal Opportunity/E-verify employer committed to diversity and all qualified applicants will receive consideration for employment and will not be discriminated against based on age, race, color, religion, sex, sexual orientation, genetic information, gender identity, national origin, disability, protected veteran status, or other protected category. OSU is a VEVRAA Federal Contractor and desires priority referrals of protected veterans for its openings. OSU will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information. 41 CFR 60-1.35(c).

DANIEL S. MOEN Assistant Professor Dept. Integrative Biology, Oklahoma State University 517 Life Sciences West Stillwater, OK 74078, USA Tel: (+1) 405-744-6815 Email: daniel.moen@okstate.edu Website: moenlab.okstate.edu

Daniel Moen <daniel.moen@okstate.edu>

OxfordU 2 ViralEvolution

Dear all,

We are recruiting a postdoctoral researcher in statistical genetics and pathogen dynamics in the group of Christophe Fraser at the Big Data Institute at Oxford University. Grade 7: 31,604 - 38,833 with a discretionary range to 42,418 per year.

This is an exciting opportunity for a postdoctoral researcher in statistical genetics and pathogen dynamics to join a team dedicated to developing a system for processing samples from viral outbreaks all the way from

taking samples to real time epidemiological analysis that can be used for decision making by public health bodies.

The successful candidate will be an integral member of the Pathogen Dynamics group based at Oxford, led by Christophe Fraser. Members of the group study the dynamics of several human infectious diseases using both modelling and pathogen genetics and the post offers substantial opportunities for career development.

This work involves developing new algorithms for phylogenetic analysis, analysis of complex data, and communication with a wide variety of stakeholders involved in the project. You will develop new and adapt existing analysis methods, simulation methods and computer code for phylogenetic analysis and perform analyses, including active management of programs on high performance cluster. In addition, you will test hypotheses and analyse data from a variety of sources, reviewing and refining working hypotheses and contribute to bioinformatics pipelines.

You must have a PhD in quantitative biology, applied mathematics, statistical genetics, theoretical physics, or another relevant and related subject and have the ability to manage own academic research and associated activities, and to work to deadlines

This full-time position is fixed-term for 5 years.

Further particulars, including details of how to apply, can be obtained at https://www.recruit.ox.ac.uk/pls/hrsliverecruit/erq_jobspec_details_form_jobspec?p_id=-136632 Applications for this vacancy should be made online and you will be required to upload a CV and supporting statement as part of your application.

The closing date for this post will be 12.00 noon on Wednesday 19 September 2018.

For any further questions, don't hesitate to contact me.

Best wishes, Lucie

Lucie Abeler-Dörner Nuffield Department of Medicine | University of Oxford Big Data Institute | Li Ka Shing Centre for Health Information and Discovery Old Road Campus | Headington | Oxford | OX3 7LF | United Kingdom lucie.abeler-dorner@bdi.ox.ac.uk

Dear all,

We are recruiting a senior researcher in statistical genetics and pathogen dynamics in the group of Christophe Fraser at the Big Data Institute at Oxford University. Grade 8: 39,992 - 47,722 per year.

This is an exciting opportunity for a senior postdoctoral researcher in statistical genetics and pathogen dynamics

to join a team dedicated to discovering the causes of variation in virulence in HIV-1 infected patients. The postholder will report to Professor Christophe Fraser, and be based in the Pathogen Dynamics group at the new Oxford Big Data Institute.

You will develop innovative methods, combining statistical genetics, phylogenetics and/or phylodynamics, and mathematical modelling. You will be driven by biological and epidemiological aims. HIV-1 genomic data are unusual, with short genomes that are highly variable, both at the population level, but also within each patient; there is thus substantial scope for you to learn new biology and develop novel methods of public health utility.

This work involves developing new algorithms for simulation and inference, analysis of complex data, and communication with a wide variety of stakeholders involved in the project.

You will have a PhD in statistical genetics, applied computing, statistics, infectious disease epidemiology, applied mathematics, data sciences, or relevant quantitative science, together with relevant experience in genetics or statistics. You will also possess sufficient specialist knowledge in genetics or pathogen dynamics, epidemiology or simulation science to work within established research programmes.

An appointment for a Postdoctoral Researcher at Grade 7 (31,604 - 38,833 p.a.) with appropriate adjustment in the duties, will be considered based on the applicant's skills and experience.

This full-time position is fixed-term for 2 years in the first instance.

Further particulars, including details of how to apply, can be obtained here: https://www.recruit.ox.ac.uk/pls/hrsliverecruit/-erq_jobspec_details_form_jobspec?p_id=136621

Applications for this vacancy should be made online and you will be required to upload a CV and supporting statement as part of your application.

— / —

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>

PennsylvaniaStateU PopGeneticsPhylogenetics

The DeGiorgio Lab, at The Pennsylvania State University, is seeking to hire a highly motivated postdoctoral scholar to work on a broad set of NIH- and NSF-supported projects on developing statistical methods either for studying adaptation from population-genetic data or for inferring phylogenies under violations of the standard multispecies coalescent model. The position requires a Ph.D. degree in statistics, computer science, bioinformatics, genetics, or a related field. The DeGiorgio lab is solely computational, and so knowledge of at least one programming language (C, C++, Java, Python, etc), familiarity with either R or Matlab, and experience using a Unix or Linux environment is highly preferred. Interested applicants should submit a cover letter describing their research interests, a current CV, and contact information for three references. To learn more about the DeGiorgio lab please visit: (<http://www.personal.psu.edu/mxd60/>). This is a fixed-term appointment funded for one year from date of hire, with possibility of re-funding. Review of applications will begin immediately and continue until the position is filled.

Please visit <https://psu.jobs/job/82194> to formally apply. Informal inquiries by email are also welcome.

Michael DeGiorgio <mxd60@psu.edu>

Portugal YeastExpEvol

Dear evol dir community,

We are looking for an enthusiastic post-doctoral researcher to join a multi-disciplinary project on experimental evolution. The ideal candidate would have experience in yeast genetics and experimental evolution. The full add is here:

<http://eu-life.eu/job/international-call-recruitment-phd-researcher> The Instituto Gulbenkian de Ciência (IGC) is a very diverse biomedical institution, both in research themes and in culture. We are located

very close to the capital, Lisbon, and even closer to the beach. <http://www.igc.gulbenkian.pt/> informal inquiries can be send to me at lilia.perfeito@gmail.com. Actual applications need to follow the instruction on the website.

Lília Perfeito

lilia.perfeito@gmail.com

RoyalBotanicGardens Kew Phylogenomics

Job: RoyalBotanicGardens_Kew. Phylogenomics Post-doctoral.Researcher

Applications are invited for the position of Phylogenomics Postdoctoral Researcher on the Plant at Fungal Trees of Life (PAFTOL) Project at the Royal Botanic Gardens, Kew, London, U.K.

Kew is the world's leading botanic gardens, at the forefront of plant and fungal science, a UNESCO World Heritage Site and a major visitor attraction. We want a world where plants and fungi are understood, valued and conserved 'V because our lives depend on them. We use the power of our science and the rich diversity of our gardens and collections to provide knowledge, inspiration and understanding of why plants and fungi matter to everyone.

The successful candidate will be an active member of PAFTOL's multi-disciplinary team led by the Head of Comparative Plant and Fungal Biology. This role is critical to the delivery of phylogenomic research on angiosperms. The post holder will participate in all aspects of phylogenomic research in PAFTOL, including lab-work, analysis and paper writing. She/he will take a leading role in at least one major subproject within PAFTOL (to be decided following appointment), as well as playing an important role in the project's major collective research outputs and collaborating with other participating scientists.

You will be an excellent phylogeneticist with a relevant Ph.D and a demonstrated ability to efficiently publish excellent scientific research. You will have experience of producing and analysing genomic data to generate phylogenetic hypotheses, with sufficient specialist knowledge to help improve upon existing tools and methodologies, including lab based procedures and techniques. You will be a proven team player, with the ability and appetite to help deliver project outputs, outreach, and to train

and support researchers and students as required.

Closing Date: 16th September 2018

If you are interested in this position, Details can be found here: <https://careers.kew.org/vacancy/-phylogenomics-postdoctoral-researcher-plant-fungal-trees-of-life-project-362980.html> The Royal Botanic Gardens, Kew is a non-departmental public body with exempt charitable status, whose principal place of business is at Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, United Kingdom.

Vanessa Barber <V.Barber@kew.org>

RoyalVetCollege London AnimalEvolGenomics

Location: Camden, North London Salary: 33,739 per annum including London weighting Closing Date: Friday 07 September 2018 Interview Date: To be confirmed Reference: CBS-0084-18A

We wish to recruit a highly motivated, postdoctoral scientist to carry out a BBSRC funded project in the laboratory of Dr. Denis Larkin. The project is focused on developing and applying new methods and algorithms to study genome and chromosome evolution in mammals and other animals using whole-genome sequences and existing algorithms (e.g., Damas et al. *Genome Res.* 2017. 27(5):875-884; Kim et al., *Proc Natl Acad Sci USA.* 2013. 110 (5)). The post holder will use cutting edge computational and laboratory approaches to generate chromosomal assemblies for sequenced genomes, study chromosomal structures and differences between mammalian and other vertebrate genomes in attempt to identify species- and clade-specific genome signatures.

Applicants must have a Ph.D. and a track record of success, as indicated by first-author publications in international journals. They must possess excellent organisation skills and be capable of individual initiative and of interacting as part of a team. Applicants with extensive practical experience in bioinformatics or computer science, programming, visualization, handling of large data sets, high-performance computing are encouraged to apply. The post will involve collaboration with a wide range of academic partners both within the EU and worldwide.

Experience in programming, bioinformatics and comparative genome analysis is essential. Applicants should have a minimum of a degree and preferably a higher

degree in a relevant subject.

The Royal Veterinary College has the largest range of veterinary, para-veterinary and animal science undergraduate and postgraduate courses of any veterinary school in the world and is one of the largest veterinary schools in Europe.

Prospective applicants are encouraged to contact Dr. Denis Larkin, Comparative Biomedical Sciences Department on +442071211906 or email: dlarkin@rvc.ac.uk

We offer a generous reward package.

For further information and to apply on-line please visit our website: <https://jobs.rvc.ac.uk/Vacancy.aspx?ref=CBS-0084-18A> Job reference CBS-0084-18A

Deadline for applications September 7th, 2018 [RVC Logo - link to RVC Website] < <http://www.rvc.ac.uk> > [Twitter icon - link to RVC (Official) Twitter] < <http://twitter.com/RoyalVetCollege> > [Facebook icon - link to RVC (Official) Facebook] < <http://www.facebook.com/theRVC> > [YouTube icon - link to RVC YouTube] < <http://www.youtube.com/user/RoyalVetsLondon?feature=mhee> > [Pinterest icon - link to RVC Pinterest] < <http://pinterest.com/royalvetcollege/> > [Instagram icon - link to RVC Instagram] < <http://instagram.com/royalvetcollege> >

[RVC Clearing - link to RVC Clearing Website] < <http://www.rvc.ac.uk/clearing> >

dlarkin@rvc.ac.uk

SanDiegoStateU ArthropodHybridization

Postdoc in Arthropod Introgressive Hybridization and Phylogenomics, San Diego State University

Overview - An NSF funded research postdoctoral position is available in the laboratory of Dr. Marshal Hedin (<https://marshalledinlab.com/>) to conduct population and phylogenomic studies of introgressive hybridization in a species-rich clade of jumping spiders. This position is potentially funded for three years, with an opportunity to spend Y3 in the lab of Dr. Wayne Maddison at the University of British Columbia (<https://waynemaddisonlab.wordpress.com/>). The postdoctoral associate will also be expected to interact closely with the collaborative team of behavioral biologists at UC Berkeley, in the Damian Elias lab (<https://nature.berkeley.edu/eliaslab/>).

Position Description 'V This research seeks to understand how introgressive hybridization (IH) has impacted phylogeny (deep and shallow) and character evolution in *Habronattus* jumping spiders, and how IH itself reflects <> affects mating system evolution. *Habronattus* represents a diverse and intriguing system where prezygotic isolation via female mate choice appears to be a primary isolating mechanism, facilitated by high visual acuity and complex, multimodal courtship ornaments and behaviors. However, instead of paradigmatic "strong sexual selection acting to isolate", female preferences in *Habronattus* appear "open" to greater or lesser degrees across species and over time (ancient to contemporary). A consequence is the sharing of both genes and phenotypes across divergent populations and species boundaries. In driving the evolution of additional genetic and phenotypic novelty, this IH potentially fuels a creative feedback loop involving mate choice evolution, phenotypic evolution, and species diversification.

A postdoctoral associate working in the Hedin lab will lead genus-wide phylogenomic studies, conduct population genomics experiments, and potentially work with Maddison (Y3 @ UBC) on character evolution and hemiplasy analyses. Applications will be accepted until the position is filled; review will begin on September 21, 2018.

Qualifications - Minimum qualifications include a Ph.D. in Evolutionary Biology, Entomology, Computer Sciences, or a related field, with demonstrated experience in fieldwork, collection of next generation sequence data (e.g., RNASeq, sequence capture, RADSeq, genomics) and associated bioinformatics, and interest in hybridization. Ability to mentor, communicate clearly, work independently, and interact collaboratively is essential.

To Apply 'V Follow this link: <https://careers-sdsurf.icims.com/jobs/7739/postdoctoral-research-fellow/job?mode=view&mobile=false&width=1000&height=500&bga=true&needsRedirect=false&jan1offset=-480&jun1offset=-420> The online application form will require a cover letter, current CV, PDFs of 3 representative publications, and names of three references. Please contact Dr. Hedin (mhedin@sdsu.edu) with additional questions.

About SDSU & SDSU Biology 'V The SDSU Biology Department (<http://www.bio.sdsu.edu/>) includes over 40 faculty members devoted to an integrative, teacher 'V scholar faculty model. Research expertise spans all areas of biology, with focal areas (and six separate graduate programs, MS and PhD) in cell & molecular biology, ecology, and evolutionary biology. The Evolutionary Biology group includes faculty members with strengths in integrative biodiversity biology, evolutionary compu-

tational biology, and evolutionary genomics / genetics. SDSU (<http://www.sdsu.edu/>) is a large, diverse, urban, research university and a Hispanic-Serving Institution with a commitment to diversity, equity, and inclusive excellence. Our campus is located in the beautiful and megadiverse San Diego region, with beaches, mountains, and untouched deserts all within a short drive's distance.

Dr. Marshal Hedin (mhedin@sdsu.edu) Professor and Associate Chair Department of Biology San Diego State University <https://marshalhedinlab.com/>
 - Marshal Hedin, Ph.D. Professor and Associate Chair Department of Biology, NLS 204E 5500 Campanile Drive < <https://maps.google.com/?q=5500+Campanile+Drive&entry=gmail&source=g> > MC 4614 San Diego State University San Diego, CA 92182 Web <https://marshalhedinlab.com/> Marshal Hedin <mhedin@sdsu.edu>

SantaFeInst EvolutionaryBiol

The Complexity Postdoctoral Fellowships, comprising the Omidyar and ASU-SFI Fellowships, at the Santa Fe Institute are unique among postdoctoral appointments. The Fellowships offer early-career scholars the opportunity to join a collaborative research community that nurtures creative, transdisciplinary thought in pursuit of key insights about the complex systems that matter most for science and society. The Institute rejects compartmentalized thought common in academia. Instead, SFI scientists transcend boundaries between fields, freely synthesizing ideas spanning many disciplines 'V from math, physics, and biology to the social sciences and the humanities 'V in pursuit of creative insights that advance our scientific frontiers.

The application form, requirements and program for both fellowships are identical it is only the funding source that differs. The applicant does not have to choose which fellowship to apply for, SFI will determine the fellowship that is awarded.

The SFI Complexity Postdoctoral Fellowships offers you: transdisciplinary collaboration with leading researchers worldwide up to three years in residence in Santa Fe, New Mexico discretionary research and collaboration funds competitive salary, generous benefits and paid family leave a structured leadership training program unparalleled intellectual freedom

The Institute has no formal programs or departments.

Research is collaborative and spans the physical, natural, and social sciences. Most research is theoretical (SFI does not have lab facilities) and/or computational in nature, although some research includes an empirical component. SFI averages 16 postdoctoral fellows, 13 resident faculty, 100 external faculty, and 1000 visitors per year. SFI's research themes and interests of its faculty and current fellows can be found at [research](https://www.santafe.edu/research/). < <https://www.santafe.edu/research/> > As thought leaders who shape the future of science, SFI Postdoctoral Fellows participate in a provocative training program < <http://www.santafe.edu/media/files/-omidyarprogramleadershipmanifesto.pdf> > structured to develop leadership skills throughout their three-year residencies and beyond. The program focuses on sustained mentoring relationships with SFI resident and external faculty, skill development workshops, off-campus research and teaching experiences, and the variety of scholarly leadership and science management opportunities at SFI.

Requirements: a Ph.D. in any scientific discipline (granted within 6 years of the application deadline or expect to receive one by September 2019) strong computational and quantitative skills an exemplary academic record a proven ability to work both independently and collaboratively a demonstrated interest in multidisciplinary research evidence of the ability to think beyond traditional paradigms

Applications are welcome from: candidates from any country candidates from any scientific discipline with strong quantitative skills women and members of underrepresented groups are strongly encouraged to apply

SFI is an Equal Opportunity Employer and is committed to fostering a diverse and inclusive academic global community. SFI considers applicants for employment without regard to, and does not discriminate on the basis of gender, race, protected veteran status, disability, or any other legally protected status.

Application Materials: Interested candidates must submit the following: Curriculum vitae (including publications list). Statement of research interests (max. 2 pages) including a short description of the research you would like to pursue and why.

Description of interest in SFI (max. 1 page) that describes your potential contribution to the SFI community and also explains the potential impact of SFI on your research. Consider addressing one or more of the following: What kind of input from other fields would most improve your future research? What type of multidisciplinary workshop might you want to organize during your Fellowship? What aspects of your present or future research are difficult to pursue in a traditional academic

environment?

Three letters of recommendation from scholars who know your work. (The letters should be sent independent of the application. When you complete the online application, please be prepared to provide e-mail addresses of the three individuals who will recommend you. SFI will contact them directly with instructions for submitting letters.)

(Optional) A copy of one paper (or draft) relevant to your application that you have written in English, either published or unpublished.

To apply: <http://www.santafe.edu/sffellowship> For additional information or assistance please email: sffellowship@santafe.edu

Applications for the 2019 Complexity Postdoctoral Fellowships will be

— / —

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>

SGN Frankfurt PhylogenomicsMetagenomics

Deadline is approaching for the Translational Biodiversity Genomics postdoc position in Soil Invertebrate Phylogenomics - Metagenomics (100%): 31. August 2018.

PostDoc (m/f) - Soil Invertebrate Phylogenomics - Metagenomics (100%)

https://tbg.senckenberg.de/wp-content/uploads/2018/05/ref12-18007_postdoc_soil_invertebrate.pdf Job offer ref. #12-18007 The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. LOEWE Centre for Translational Biodiversity Genomics (LOEWE-TBG) is a joint venture of the Senckenberg Gesellschaft für Naturforschung (SGN),

Goethe-University Frankfurt, Justus-Liebig-University Giessen and Fraunhofer Institute for Molecular Biology and Applied Ecology IME aiming to intensify biodiversity genomics in basic and applied research.

We will establish a new and taxonomically broad genome collection to study genomic and functional diversity

across the tree of life and make genomic resources accessible for societal-demand driven applied research.

The Senckenberg Gesellschaft für Naturforschung and the LOEWE-TBG invite applications for a PostDoc (m/f) - Soil Invertebrate Phylogenomics - Metagenomics (100%)

Your tasks - Assembly of high-copy genes from shallow genome sequencing data - Phylogenomic inferences - Inference of phylogenetic trait conservatism - Taxonomic / functional assignment of invertebrate metagenomes

Your profile - PhD in bioinformatics, evolutionary studies or related areas - Experience in de novo mitogenome (and other high-copy gene) assembly - Experience in phylogenomics / phylogenetics - Ability to assemble / troubleshoot bioinformatic pipelines and to deal

with large amount of data (i.e. ability for shell and script programming) - Excellent communication skills in written and oral English - Team player who successfully interacts with graduate students and colleagues - Interdisciplinary training and background is welcome

What is awaiting you? - A dynamic team of scientists at the new LOEWE Centre Translational Biodiversity Genomics (including ecologists, evolutionary biologists, bioinformaticians, applied scientists, etc.) - Close collaboration with scientists working on a similar project at the Laboratoire d'Écologie Alpine (LECA Grenoble, France) - Interdisciplinary networking with biodiversity and climate scientists at the Senckenberg Research Institute - Possibility to co-supervise undergraduate and graduate students and to

gain teaching experience - Flexible working hours - annual special payment - company pension scheme - Senckenberg ID card for free entry in museums in Frankfurt - a holiday of 30 days/year

Place of employment: Frankfurt am Main Working hours: Full time (40 hours/week) Type of contract: initially limited for 2 years Salary: according to the German collective agreement TV-H (pay grade E 13)

Salary and benefits are according to a full time public service position

in Germany (TV-H E13). The position is available as of January 1st, 2019, but can begin later if necessary.

The Senckenberg Gesellschaft für Naturforschung supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung.

Please send your application, mentioning the reference of this job offer

(ref. #12-18007) by e-mail (attachment in a single pdf document) until August 31st, 2018 (or until the position is filled), and include a cover

letter detailing your research interests and experience, a detailed CV, copies of your certificates (transcripts and grades), a list of publications, contact details of two referees to: Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main E-Mail: recruiting@senckenberg.de

For more scientific info: Miklos.Balint@senckenberg.de.

– PD Dr. Miklós Bálint Senckenberg Gesellschaft für Naturforschung Biodiversity and Climate Research Centre Senckenberganlage 25 60325 Frankfurt Germany

Tel. +49 (0)69 7542 1856 web: http://www.bik-f.de/root/index.php?page_id=238 <http://scholar.google.co.uk/citations?user=NeS7d8oAAAAJ>
@MikiBalint Senckenberg Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß Â§22 BGB) Senckenberganlage 25 60325 Frankfurt www.senckenberg.de Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger, Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof. Dr. Katrin Böhning-Gaese, Prof. Dr. Uwe Fritz, PD Dr. Ingrid Kröncke;

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

SGN Frankfurt SpeciationGeneFlow

Job offer ref. # 11-18009 The Senckenberg Gesellschaft für Naturforschung (SGN) is a member of the Leibniz Association and is based in Frankfurt am Main, Germany. SGN conducts natural history research with almost 800 employees and research institutions in six federal states. Within SGN, the Senckenberg Biodiversity and Climate Research Centre (BiK-F) explores the interactions between biodiversity, climate, and society.

The Senckenberg Gesellschaft für Naturforschung invite applications for a

PostDoc position Mammalian genomics: speciation and gene flow (100%)

Your tasks: - Sequencing, assembly, and annotation of mammalian genomes - Evolution, gene flow, network and population genomic analyses of multispecies data sets - Involve classic taxonomy, biogeography and related fields with comparative genomics - Managing a massive-RAM server and genomics software - Acquiring third-party funding

Your profile: - PhD in Biology, Genetics, Bioinformatics or related subjects - Experience with de novo genome assembly and mapping of mammalian genomes - Exceptional interest in mammalian evolution - Experience and solid understanding of comparative genomics or evolutionary biology research - Teamwork oriented and excellent communication skills with proficiency in written and oral English

What is awaiting you? - An interesting task in a dynamic team of researchers in an international Senckenberg research group and collaborate with the new LOEWE excellence genomics centre with its 20 new projects - The opportunity to habilitate at Goethe University or get teaching experience - The possibility to create a network with scientists in interdisciplinary fields in biodiversity genomics

Salary and benefits are according to a full time public service position in Germany (TV-H E13, 100 %). The contract should start on November 1st, 2018 and will initially be limited for two years. The Senckenberg Gesellschaft für Naturforschung support equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The place of employment is in Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung.

Please send your application, mentioning the reference of this job offer (ref. #11-18009) before September 15th, 2018 by e-mail (attachment in a single pdf document) and including a cover letter detailing research interests and experience, a detailed CV and a copy of your certification to:

Senckenberg Gesellschaft für Naturforschung Senckenberganlage 25 60325 Frankfurt am Main

E-Mail: recruiting@senckenberg.de

For more information contact Prof. Axel Janke, axel.janke@senckenberg.de

Mit freundlichen Grüßen /Best Regards

Jessica Helm Personalsachbearbeiterin

SENCKENBERG Gesellschaft für Naturforschung (Rechtsfähiger Verein gemäß Â§22 BGB) Senckenberganlage 25 60325 Frankfurt am Main

Besucheradresse: Mertonstraße 17-19, 60325 Frankfurt
am Main (1. OG)

Telefon/Phone: 0049 (0)69 / 7542 -

Leiterin Personal & Soziales - 1458 Loke, Uta

Stellv. Leiterin Gruppe Personal & Soziales - 1319 Elsen,
Carina

Mitarbeiter/in Personalbeschaffung (Recruiting) - 1313
di Biase, Maria - 1313 Helm, Jessica - 1478 Gajcevic,
Isabel

Fax: 0049 (0)69 / 7542-1467 Mail: recruiting@senckenberg.de

Direktorium: Prof. Dr. Dr. h.c. Volker Mosbrugger,
Prof. Dr. Andreas Mulch, Stephanie Schwedhelm, Prof.
Dr. Katrin Böhning-Gaese, Prof. Dr. Karsten Wesche

Präsidentin: Dr. h. c. Beate Heraeus Aufsichtsbehörde:
Magistrat der Stadt Frankfurt am Main (Ordnungsamt)

Senckenberg forscht für Ihr Leben gern!
www.200jahresenckenberg.de recruiting
<recruiting@senckenberg.de>

Southampton UK PDF Tech EvolutionPlasticity

Dear Evoldir,

We are looking to recruit a postdoc and technician for our recently funded project looking at the role of plasticity in adaptive divergence. We intend to use a new model system to test previous theory surrounding the importance of plasticity. A full advert will follow shortly but we are both at the Evolution meeting in Montpellier so please come up and have a chat if you think this is something you might be interested in.

Best wishes,

Mark Chapman and Tom Ezard

markchapman4774@gmail.com

SpelmanC Atlanta GenomeEvolutionOfAmoebozoa

Postdoc Position in: Genome Evolution of Amoebozoa

Location: Atlanta, Georgia, USA

A postdoc position (2 years) is available to conduct experimental and computational research on small eukaryotic amoeboid microbes relating to their evolution and behavior. Candidates should have an inter-disciplinary training and familiarity with molecular (e.g. next generation sequencing) and computational (bioinformatics, phylogenetics) skills. Experience with genome sequencing, assembly and annotation are a plus.

The main focus of the project is inferring the tree of Amoebozoa through analysis of whole genome data from selected lineages. The project also will use cellular proteomics and other genome feature to study major evolutionary events in the group. Other potential research topics include (i) evolution of phenotypic traits in cryptic species, (ii) evolution of sexual-like behavior and development in amoeboids, (iii). evolution of amoeboid movement and cytoskeleton architecture. Other projects under similar topics related to genomics can be also considered based on individual experience and interest. For additional information contact: ytekle@spelman.edu

This position offers competitive salary and benefit. Candidates should complete Ph.D. training before starting this position. Screening of applicants will begin immediately and continue until the position is filled.

Spelman College is a private four-year liberal arts college located in Atlanta, GA, and ranked one of the top 100 liberal arts colleges by the US News. Spelman College is a member of Atlanta University Center Consortium <mailto:<http://aucenter.edu/members/>>. Please email a copy of curriculum vitae, a short statement of research interest, names and contact information of at least three individuals familiar with your research to Dr. Yonas Tekle by email: ytekle@spelman.edu

350 Spelman Ln SW, Box 1183, Department of Biology,
Spelman College, Atlanta, GA 30314-4399

LOCATIONS Office: AFM Science Center 271; Lab:
AFM Science Center 247 Phone: 404-270-5779 (office);
Fax: 404-270-5725

Yonas Isaak Tekle <yonastekle@gmail.com>

UAlabama MusselBiodiversity

A NSF Dimensions of Biodiversity funded postdoc position examining the linkages among phylogenetic, genetic, and functional diversity is available in Dr. Carla Atkinson's lab in the Department of Biological Sciences at the University of Alabama (<http://atkinsonlab.ua.edu/>). The position will involve the study of biodiversity within freshwater mussels (Family: Unionidae) across multiple dimensions of biodiversity within streams in the Mobile and Tennessee River Basins. This project will address basic ecological principles related to niche vs neutral based models across levels of biodiversity in both freshwater mussels and their associated gut microbial community. This is a highly interdisciplinary project to understand ecological and evolutionary associations among the environment, genetic diversity, functional traits, and community assembly across both host and microbiome phylogenies. In addition to being housed within the Atkinson lab, the selected applicant will work closely with Jeff Lozier at the University of Alabama and will collaborate with researchers at the University of Mississippi. More information about the project can be found at <http://mussels.ua.edu/>. The position is for a highly motivated postdoctoral research associate whose primary objective will be to oversee fieldwork and conducting functional trait analyses, but will also be involved in integrating phylogenetic, genetic, and functional trait data. Responsibilities will include leading fieldwork, setting up a field experiment, laboratory work, statistical analysis, and interfacing with a postdoc based at University of Mississippi. The ideal candidate should have experience conducting fieldwork in streams in difficult conditions, a background in basic ecological principles including ecological stoichiometry, familiar with conducting basic water chemistry analyses, excellent computational skills, SCUBA certified (or willingness to get certified), and the ability to effectively manage large data sets. Additional sought-after skill sets include familiarity with methods for high throughput genomic analyses and laboratory genetics skills. The applicant should be creative and independent, have excellent organizational, communication, and writing skills, an exemplary publication record in ecology or other related fields, and an interest in working as part of a large collaborative team. A general interest in freshwater mussel biology and related field experience would be advantageous, but applicants with diverse research

backgrounds are encouraged to apply. Candidates must have received a Ph.D. in a relevant field by the start date.

Applicants interested in the position should contact Carla Atkinson (clatkinson@ua.edu).

Applicants must apply by submitting an application to the Biological Sciences Departmental postdoctoral pool at facultyjobs.ua.edu (requisition number 0811250 for Fall 2018 or search for Keyword 'Biology' for most recent posting): <https://facultyjobs.ua.edu/postings/search>. Materials should include: 1. Cover letter mentioning the 'Linking scales of biodiversity in freshwater mussels' position, a description of past research accomplishments and future research goals, and the names and contact information for 3 references (maximum of two pages).

2. Curriculum vitae

About the University of Alabama: The University of Alabama is the flagship campus of the University System of Alabama, with an enrollment of over 35,000 students. The University is committed to achieving excellence as one of the country's primary centers of research and education. It is located in the vibrant college town of Tuscaloosa, AL, which boasts many cultural and athletic activities. The campus also benefits from the close proximity to the Birmingham metropolitan community.

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

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

UArizona FungalGenomics

Postdoc Position Fungal Endophyte Genomics - U'Ren lab

A postdoctoral position is available in the lab of Jana U'Ren at the University of Arizona to study the ecology and evolution of plant-endophyte symbioses. The project centers on enriching genomic, transcriptomic, and metabolomic knowledge of phylogenetically diverse endophytic fungi in collaboration with the DOE Joint Genome Institute. The start date is flexible, but anticipated to be in Fall/Winter 2018 or when the suitable candidate is identified. The position has an initial appointment for one year with a strong likelihood of extension to a second year pending performance review.

The ideal candidate will be skilled in bioinformatics,

molecular biology, and microbiology with a background in plant-microbe interactions, ecology, and evolution. Minimum requirements: a PhD in ecology, evolutionary biology, microbiology, mycology, plant pathology, or a related discipline. Preference will be given to candidates with proficiency in both bioinformatics and molecular biology. Preferred candidates will have excellent communication skills, high motivation, and a strong willingness to work independently and as part of an integrative team. Potential duties include (but are not limited to) comparative genomic and transcriptomic analyses, functional trait assays, and plant inoculation experiments, with potential for the development of independent research projects related to plant-fungal interactions.

As part of the UA Ecosystem Genomics Initiative and the BIO5 Institute, the successful candidate will have extensive opportunities to collaborate across departments at UA, as well as with collaborators at other universities. This collaborative environment is conducive to development of a pathway to independence in academic research. The position also includes opportunities to mentor graduate and undergraduate researchers from diverse backgrounds.

Home to the world-class University of Arizona, Tucson is a vibrant southwestern city with a rich and distinctive heritage, fabulous access to outdoor activities, and diverse opportunities for cultural engagement. Outstanding UA benefits include health, dental, vision, and life insurance; paid vacation, sick leave, and holidays; UA/ASU/NAU tuition reduction for the employee and qualified family members; access to UA recreation and cultural activities; and more!

Applicants should submit a cover letter, CV, contact information for three references, and copies of three recent publications. All application materials should be submitted in a single email to Dr. Jana U'Ren (juren@email.arizona.edu).

Jana M. U'Ren, PhD Assistant Professor, The University of Arizona BIO5 Institute, Dept. of Biosystems Engineering Keating Bldg., 1657 E. Helen St. Tucson, AZ 85719 Office Rm. 221; Lab Rm. 202 Phone (520) 626-0426

“U'Ren, Jana M - (juren)” <juren@email.arizona.edu>

UArizona VertebrateTraitInformatics

The BIO5 Institute at the University of Arizona is seeking a postdoctoral researcher in Biodiversity Informatics, to work under the direction of Dr. Ramona Walls. The post-doc will join the NSF-funded Functional Trait Resource for Environmental Studies (FuTRES) project for up to three years. FuTRES is a collaborative project among four universities (University of Oregon, University of Arizona, University of Florida, and Howard University), and it includes investigators with expertise in biodiversity, bioinformatics, cyberinfrastructure, vertebrate neo- and paleontology, and zooarchaeology. The key deliverables of FuTRES are a workflow for assembling functional trait data measured at the specimen level, a database to serve that data, and scientific publications demonstrating the utility of the assembled data. FuTRES is based on a semantic model, which is being developed at UA and to which the post-doc will contribute extensively. The post-doc is also expected to lead a research project that utilizes data integrated by FuTRES. As a member of the FuTRES project, the post-doc will experience interdisciplinary collaboration at the intersection of biological, archeological, paleontological, and computer sciences.

At UA, the post-doc will be exposed to the unique collaborative research environment of the BIO5 Institute, which houses Walls's home organization CyVerse, as well as UA's new Data7 Institute and the Tripods project. These three organizations are co-located on the same floor of the brand new BioSciences Research Laboratory, offering daily interactions with a world-class collection of life scientists, data scientists, and developers. In addition to BIO5's physical resources, the post-doc will be able to take advantage of multiple seminar series and a large community of faculty, students, and post-docs. More broadly, UA offers a rich environment for early career researchers and a number of support programs for post-docs.

Salary is commensurate with experience and consistent with NIH recommended support levels (<https://www.niaid.nih.gov/grants-contracts/salary-cap-stipends>). Reasonable relocation funds are available.

The ideal candidate will be committed to collaborative, open science and should enjoy working as part of a dis-

tributed team. The ideal candidate should have a strong desire to work in the fields of semantic data integration and data reuse, and must be motivated to pursue a scientific study using aggregated trait data. We are looking for someone who enjoys learning new tools and techniques and who wishes to engage with a community of researchers to promote novel approaches to science.

The ideal candidate will have experience working with functional trait data in vertebrates (preferably mammals), some computational experience (e.g., analyzing data with R, coding in Python, comfort working on the command line), and a commitment to collaborative, open science. Experience with ontologies is a plus. Training in the technical aspects of this project can be provided, if the candidate does not have extensive experience in those areas, but at a minimum, technical competence must be demonstrated, and they must have some experience with R. Strong writing and speaking skills are required. The candidate should enjoy working as part of a distributed team. More information at <https://uacareers.com/postings/31001>. Ramona L. Walls, Ph.D. Senior Scientific Analyst, CyVerse, University of Arizona Research Associate, Bio5 Institute, University of Arizona

Ramona Walls <rlwalls2008@gmail.com>

UArkansas EvolutionaryEcol

Postdoctoral Research Associate in Evolutionary Ecology The Siepielski Lab < <https://-asiepielski.wordpress.com/> > invites applications for a Postdoctoral Associate in Evolutionary Community Ecology. As part of NSF CAREER project < https://www.nsf.gov/awardsearch/showAward?AWD_ID=-1748945&HistoricalAwards=false >, the incumbent will work with Dr. Adam Siepielski on several projects focused on understanding how adaptive evolution affects species coexistence in damselflies.

Primary responsibilities: Developing and running large spatial scale field experiments and observational studies in lakes and ponds, authorship of peer-reviewed articles, communication of findings at professional meetings, and management of existing research projects. Ample opportunity exists to develop additional projects under the general themes of community ecology and evolutionary ecology. The incumbent would work out a postdoctoral research and mentoring plan in collaboration with Dr. Siepielski.

Qualifications: Candidates must have a Ph.D. in biology, ecology, evolutionary biology or a closely related field, experience and expertise with ecological models and statistical analyses using R, and excellent written and verbal communication skills. Preferred candidates additionally will have some of the following strengths: experience working with arthropod taxa in the lab and field; experience in evolutionary ecology and/or community ecology; experience with large-scale field experiments, and with development of theoretical models; demonstrated commitment to reproducible and open science; prior success in working with teams and an interest in mentoring students; and a strong track record of peer-reviewed publication.

Application Details: This position is based in the Department of Biology < <https://fulbright.uark.edu/-departments/biology/> > at the Main Campus of the University of Arkansas and includes competitive salary (based on relevant experience) and health benefits. This is a full-time, 12-month, 1-yr position. Reappointment is potentially available for up to 5 years, conditional on satisfactory performance and the availability of funds. Review of applicants will begin immediately. The start-date for the position is flexible. For a complete position announcement and information regarding how to apply, visit <http://jobs.uark.edu/postings/28130>. Applicants must submit a curriculum vitae and a cover letter/letter of application. The cover letter should contain a brief description of experience in evolutionary ecology/community ecology. This position requires a national criminal background and registered sex offender check, and will initially close on October 1, 2018, but remain open until a suitable candidate is found.

For more information, please email Adam Siepielski at amsiepie@uark.edu

I will be at the ESA meeting in New Orleans this and am happy to meet with any interested folks to discuss the project and the position.

The University of Arkansas, Fayetteville, AR, is a RI research university located in the Ozark Mountains. The faculty and graduate students at UARK are highly interactive and include an excellent group of evolutionary biologists and ecologists. We are located in an ideal setting for field-based projects (AR has more than 2,300 lakes and thousands of smaller ponds, and equally impressive numbers of rivers, streams and creeks). Fayetteville, located in northwest Arkansas, offers a high quality of living at a low cost, an excellent climate, and is a large enough city to offer diverse activities and amenities. It has consistently been ranked as one of the best places to live in the US < <https://realestate.usnews.com/realestate/articles/best-places-to-live-in-the-us> >. Rock

climbing, hiking, kayaking, canoeing, and mountain biking opportunities are in close proximity.

The University of Arkansas is an equal opportunity, affirmative action institution. The university welcomes applications without regard to race/color, sex, gender, pregnancy, age, national origin, disability, religion, marital or parental status, protected veteran or military status, genetic information, sexual orientation, gender identity or any other characteristic protected under applicable federal or state law. Persons must have proof of legal authority to work in the United States on the first day of employment. All applicant information is subject to public disclosure under the Arkansas Freedom of Information Act

Adam M. Siepielski Assistant Professor Department of Biological Sciences University of Arkansas Fayetteville AR, 72701 Ph: 1-479-575-6357

— / —

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>

UCalifornia Berkeley DiseaseEvolution

Description: From infectious disease ecology, we know that the magnitude of vertical (from parent to offspring) vs. horizontal (among unrelated individuals) transmission can predict pathogen virulence (the harm caused to the host) and the strength of selection for host resistance or tolerance against pathogens. Despite this, there has been little focus on how transmission of microbiota occurs, is maintained, and impacts upon (co)evolution. This is especially true in the plant literature, despite decades of evidence for a role of plant-associated microbiota in shaping plant health. An idea that has been gaining traction in recent years is that interrupted vertical transmission (for example through C-section delivery and antibiotic use in infancy) can lead to irreversible change and/or loss of human microbiome diversity over time. We are seeking to extend this concept to the plant microbiome, where common agricultural practices such as seed treatment, tillage, crop rotation, and chemical antimicrobials almost certainly result in disrupted microbiome transmission and could therefore have similar short and long-term impacts on the host-microbiome association.

We are seeking a postdoctoral researcher to lead an NSF-funded project exploring the importance of microbiome transmission mode in shaping adaptation and community assembly. The work will take place in the laboratory of Dr. Britt Koskella, at UC Berkeley, and will be in collaboration with Profs Steven Lindow (UC Berkeley, Plant and Microbial Biology) and Jessica Metcalf (Princeton). The project will include a combination of experimental evolution and bacterial/fungal community profiling/omics approaches, using tomato plants as a model system.

Responsibilities: Responsibilities include microbiological culturing, plant inoculations, extraction and analysis of both amplicon and metagenomic data sets, statistical analyses, and preparation of manuscripts for publication. There also exists ample opportunity to design and implement additional projects of mutual interest.

Minimum/Basic Qualifications Required (At the time of application): Candidates must have completed all degree requirements except the dissertation or be enrolled in an accredited Ph.D. or equivalent international degree program

Additional Required Qualifications (By start date): Ph.D. or equivalent international degree with a track record of publication in peer-reviewed journals.

Preferred Qualifications (By start date): Preference will be given to applicants with experience in bioinformatics, microbial ecology, molecular biology, statistics, and/or disease ecology, as well as excellent writing and communication skills.

Appointment: This position reports to Dr. Britt Koskella. The initial appointment will be at 100% time for one year with the possibility of extension for up to 3 years based on satisfactory performance. The approximate start date of this position will be September 2018, although a later start date could be negotiated for the right candidate.

Salary: \$49,188-V \$59,736 depending on qualifications. This position provides full postdoctoral scholar benefits.

To Apply: <https://aprecruit.berkeley.edu/apply/-JPF01841> Interested individuals should submit application documents as PDFs, which includes, an updated curriculum vitae (required), and names with contact information for 3-5 individuals who have agreed to provide a reference for this specific position (required) and a cover letter (required). (Letters of reference may be requested of the finalists).

Specific questions regarding the recruitment can be directed to Terri Leong, HR Partner, terri.leong@berkeley.edu

Next review date: August 15th, 2018 Apply by this date to ensure full consideration by the committee. Final date: September 30th, 2018 Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

Britt Koskella <bkoskella@berkeley.edu>

UCalifornia Berkeley StatPopGenetics

Recruitment Period Open date: April 17th, 2018 Next review date: June 6th, 2018 Apply by this date to ensure full consideration by the committee. Final date: June 6th, 2018 Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

Description Description: The Moorjani Lab (<https://moorjanilab.org/>) at University of California, Berkeley has a post-doctoral position available for motivated candidates with background in statistical population genetics and/or data science.

Our lab focuses on using statistical and computational approaches to study questions in human genetics and evolutionary biology. A central aim in the lab is to understand the impact of evolutionary history on genetic variation and to apply this knowledge to learn about human history and biology. To this end, we use genetic data from ancient specimens and present-day species to learn about: (1) when key events (such as introgression and adaptations) occurred in human history, (2) how different evolutionary processes such as mutation rate evolve across primates, and (3) how we can leverage these patterns to identify genetic variants related to human adaptation and disease. The research in the lab involves both development of new methods and large-scale genomic data analysis.

Responsibilities: A successful candidate will develop and apply computational approaches to large genomic datasets to characterize patterns of population history and evolution. The main responsibilities include conducting research, attending regular lab meetings and journal clubs, and preparing research results for publication and presentations at scientific meetings. Opportunities may also exist for mentoring graduate and undergraduate students.

Minimum/Basic Qualifications required at the time of application: - Completion of all doctoral degree requirements except the dissertation in genetics, computational biology, biostatistics, population genetics or related fields.

Additional Qualifications (required by start date): - PhD or equivalent degree in genetics, computational biology, biostatistics, population genetics or a related field.

- Knowledge of statistics and population genetics theory.
- Demonstrated record of research productivity and publications.
- Programming experience (e.g. C/C++, Python/ Perl, R or other programming languages) Preferred Qualifications: Experience with large-scale genomic data analysis.

Salary: This is a full-time position. Salary is commensurate with qualifications and experience.

How to apply: To apply, please go to the following link: <http://apptrkr.com/1275793> Applicants should submit the following materials: - A cover letter - A curriculum vitae - Statement of Research (One-page summary of research interests) - Contact information for 3 references Letters of reference are not required at this time. We will seek your permission before contacting your references. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality: <http://apo.berkeley.edu/evalltr.html> . This position will be open until filled. The anticipated start date is June 2018. The appointment is for a duration of one year with the possibility of annual renewal up to three years. Please address inquiries to Maria Ruiz, <mailto:maruiz@berkeley.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: <http://policy.ucop.edu/doc/4000376/-NondiscrimAffirmAct> . Job location Berkeley, CA Requirements Documents - Curriculum Vitae - Your most recently updated C.V.

- Cover Letter - Statement of Research - One-page summary of research interests References 3 references required (contact information only) Copyright ©2017

Jobelephant.com Inc. All rights reserved.

<https://www.jobelephant.com/>
beb60d9595072346b18a903e479cecac

Job Elephant Logo Jessica Godoy JobElephant.com
| 800.311.0563 | jessica@jobelephant.com Online Ads-
Print Ads-Analytics-Automation-Expert Consultation.

Recruitment Advertising. SolvedÂ

Jessica Godoy <jessica@jobelephant.com>

jeid-

Lohmueller/ The position is available for 1 year and may be continued for an additional year contingent on successful progress and available funding. Salary will be competitive. The University of California offers a competitive benefits package including medical, dental, vision, life insurance, accidental death and dismemberment insurance, and short and long term disability insurance.

Candidates should have a recent Ph.D. (2015 onwards) in biology, genetics, computer science, bioinformatics, statistics, computational biology, or a related field. Knowledge of theoretical population genetics (e.g. coalescent theory, diffusion theory, or forward simulations) is required. As this is a computational position, proficiency in programming in R, Perl, or Python, and shell scripting is essential. Programming experience in C/C++ is highly desired. Preference will be given to candidates with a strong publication record, evidence of substantial research productivity, and ability to successfully communicate scientific information.

Review of applications will begin immediately and will continue until the position is filled. The position is expected to start in early 2019, though specific dates and salary are negotiable.

Interested candidates should send a CV, short (1-2 pages) description of research interests and ideas for possible projects, and contact information for 3 references to Kirk Lohmueller at klohmueller@ucla.edu. Please put "Postdoc position" in the subject line. Informal inquiries are also welcome.

The University of California is an equal opportunity/affirmative action employer.

"klohmueller@g.ucla.edu" <klohmueller@g.ucla.edu>

UCalifornia LosAngeles PopulationGenetics

Postdoctoral research position at UCLA in population genetics

A postdoctoral research position is available in the lab of Dr. Kirk Lohmueller in the Department of Ecology and Evolutionary Biology and the Department of Human Genetics at the University of California, Los Angeles. The Lohmueller lab studies genetic variation to address a variety of questions in evolutionary, medical, and forensic genetics. The lab focuses developing new statistical methods, deriving novel insights from theoretical models, and applying these methods and models to interpret genetic variation data from a variety of organisms.

The successful candidate will have substantial input in the specific nature of this research project. However, the project should broadly fit within the lab's goals of learning about demographic history from genetic variation data, understanding natural selection and deleterious mutations, or applying population genetic concepts to the analysis of complex traits. Opportunities are available to analyze cutting edge next-generation sequencing data from a variety of organisms.

The Lohmueller lab is imbedded within a vibrant research community in population and medical genetics at UCLA. We enjoy interactions with many other labs in human genetics (Pasaniuc, Eskin, Freimer, Pajukanta, Sinshemer, Sul), population genetics (Kruglyak, Sankararaman), functional genomics (Ernst), and evolutionary genomics of non-model organisms (Wayne, Smith, Shaffer, Sork). Further, we are part of the Institute for Quantitative and Computational Biosciences at UCLA (<https://qcb.ucla.edu>).

Additional information about our lab and research can be found at: <https://www.eeb.ucla.edu/Faculty/>-

UCalifornia SanDiego BacterialPhysiologyEvolution

Kryazhinskiy lab (<http://sklab.science/>) at UC San Diego is looking for a postdoc who is interested in bacterial evolution and physiology to work jointly with Terry Hwa (<https://matisse.ucsd.edu/>).

Required qualifications: - Solid quantitative background
- Experience with high-throughput OR quantitative experiments
- Interest in bacterial evolution and physiology
- At least one solid publication from PhD (preprint okay)
- Curiosity and drive
- Resilience

Desired qualifications: - Familiarity with the experimental evolution and bacterial physiology literature - Experience with Illumina sequencing - Experience with cloning

If you are interested and qualified, please contact Sergey Kryazhimskiy (skryazhi@ucsd.edu) and Terry Hwa (hwa@ucsd.edu) with your CV, your best publication and a brief description of your background and interests.

Best regards,

Sergey Kryazhimskiy

Assistant Professor Section of Ecology, Behavior and Evolution Division of Biological Sciences University of California San Diego

“skryazhi@ucsd.edu” <skryazhi@ucsd.edu>

UExeter antiviral RNAi across species

Postdoc position to look at mechanisms underlying differences in susceptibility across species of *Drosophila*. The project will examine why viruses can successfully infect some hosts and not others by examining the cellular and immune factors underlying these differences in susceptibility - specifically antiviral RNAi immunity.

The position will be based at the University of Exeter's Cornwall Campus but will collaborate with and spend time in the lab of Prof Ronald Van Rij (Radboud Institute for Molecular Life Sciences, Nijmegen, the Netherlands) and also collaborate with Dr Darren Obbard (University of Edinburgh, UK).

The post will include carrying out molecular and biochemistry assays to examine antiviral RNAi immunity in different species of *Drosophila*. Experience with molecular procedures (RNA work including: RNA extractions, qRT-PCR, siRNA isolation and denaturing gel electrophoresis/native PAGE, RNAi assays) is essential. Experience in working with insects/*Drosophila*, viruses and R is desirable.

Full info and application details: https://-jobs.exeter.ac.uk/hrpr_webrecruitment/wrd/-run/ETREC107GF.open?VACANCY_ID=-603442MTZj&WVID=3817591jNg&LANG=USA

- Ben Longdon University of Exeter Penryn Campus Cornwall TR10 9FE +44 (0) 1326 259460 <https://benlongdon.com/> “Longdon, Ben” <B.Longdon2@exeter.ac.uk>

UGrenobleAlpes ExptEvolution

Dear evol dir community,

We are looking for an enthusiastic post-doctoral researcher to join a multi-disciplinary project on experimental evolution. The ideal candidate would have experience in bacterial genetics and experimental evolution. The position will last for two years and will start between March and June 2019. Here is the summary of the project:

Although the last decades witnessed many victories against *infectious diseases*, the spread of multidrug-resistant bacteria is now challenging these past successes. Species that were previously well controlled are now becoming health threats. For instance, *Escherichia coli*, which caused minor trouble 15 years ago, is now a major concern in the hospital owing to increased antibiotic resistance and extra-intestinal virulence. This pattern is partly driven by the worldwide expansion of clone ST131. It was undetected in the collections sampled in humans in the 1980s but represents now about 7% and up to 18% of strains isolated in commensal conditions in France and in extra-intestinal pathologies in the UK, respectively. The fast emergence and evolutionary success of multi-resistant clones with some ecological specificity in the *E. coli* species raises both medical and fundamental interests. How can a clone or phylogroup propagate and conserve its specificity despite the presence of genetic exchanges that may transmit its genes to other species members. Experimental evolution suggests that adaptation selects rapidly for mutations scattered on the chromosome that interact epistatically with one another. We suggest that this form of Genome Wide Epistasis (GWE) may explain the diversification within *E. coli* species. GWE may limit genetic transfers from and to a given clone as disruption or partial transfer of a successful combination of alleles will be costly and result in recombinants with low fitness. To test our hypothesis, we will use two unique, unprecedented and complementary strain collections that both evolved over the last 30 years. The Long-Term Experimental Evolution (LTEE) from Richard Lenski with now 70,000 generations of asexual evolution in a perfectly controlled laboratory environment is a unique analytical material to unravel the genomic consequences of adaptation. The emergence, 30 years ago, of two antibiotic resistant clades of ST131 provides an alternative well-

documented system of evolution that occurred this time in the wild, in the presence of genetic exchange. Moreover, ST131 is a public health concern owing to ST131 high virulence and antibiotic resistance. To uncover the emergence and extant of GWE, we will perform crosses between strains and study the fitness of the recombinants. Recent developments in synthetic biology tools and sequencing technologies allow now the production at high rates of recombinants and the precise measurement of their fitness in bulk through barcoding sequencing. We therefore propose to evaluate precisely the distribution of fitness effects of recombinants in the two previous systems. Their comparison and integration in a theoretical model of speciation will provide an unprecedented quantitative approach to GWE in a bacterial species. To validate this phenomenological approach, we will uncover the molecular determinants of GWE using new developments in millifluidics and microfluidics. With a method akin to quantitative trait loci analysis, our aim will be to detect regions that are restrictive to genetic exchange and to precisely measure the fitness of recombinants involving the transfer of these regions. For a subset of identified combinations of mutations, we will use a combinatorial approach coupled to microfluidic genotyping to reconstruct the precise adaptive landscapes composed of mutations or regions selected in different populations/clades. This ambitious project tackles the fundamental question of the emergence of stable genetic specificities in a sexual bacterial species of medical relevance, and addresses it using recent technological revolutions in the fields of synthetic biology, sequencing, millifluidics and microfluidics.

The TIMC-Imag is a very diverse biomedical institution, both in research themes and in culture. We are located in Grenoble, in the middle of the Alps mountain chains. The GEM team is headed by Dominique Schneider and is working since several decades on experimental evolution. The current project will be in close collaboration with Richard Lenski at Michigan State University.

Informal inquiries can be send to me at dominique.schneider@univ-grenoble-alpes.fr

Dominique Schneider

dominique.schneider@univ-grenoble-alpes.fr

– Dom Schneider Laboratoire TIMC-IMAG CNRS UMR5525 Université Grenoble Alpes Institut Jean Rogot Domaine de la Merci BP170 38042 Grenoble Cedex 9 France Phone: +33 (0) 4 76 63 74 90 Fax: +33 (0) 4 76 63 74 97 E-mail: dominique.schneider@ujf-grenoble.fr

— / —

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

UIdaho Modeling Transmissible Vaccines

A postdoctoral position is currently available in at the University of Idaho developing and analyzing mathematical models on the epidemiology and evolution of transmissible vaccines as well as developing statistical tools for estimating key parameters from experimental data. The postdoc will have the freedom to choose their specific questions and topics within this broad area. The work is part of an ongoing collaboration between Scott L. Nuismer, Chris Remien, and Jim Bull but will soon extend to a broader, multi-university collaboration. Although the project is to develop theory, possibly including computational analysis, the postdoc will have access to a rich stream of data emerging from experiments evaluating the performance of live transmissible vaccines targeting Ebola and Lassa fever in their animal reservoirs. The position is available October 1 of 2018 and will be based at the University of Idaho. The post-doc will be co-supervised by Scott L. Nuismer (Departments of Biology and Mathematics) and Chris Remien (Departments of Mathematics and Biology); numerous opportunities exist for interaction with our empirical collaborators. Jim Bull (U. of Texas) will be joining the group in mid-late 2019. Applicants should have a PhD in evolutionary biology, ecology, mathematics, or a related field and a demonstrated ability to develop, analyze, and publish mathematical models of biological processes. To apply, e-mail a CV and the names and contact information of three references to Scott L. Nuismer (snuismer@uidaho.edu) and Chris Remien (cremien@uidaho.edu). The initial appointment will be one year with the possibility of renewal for an additional year. Review of applications will begin immediately and continue until the position is filled.

“Nuismer, Scott (snuismer@uidaho.edu)”
<snuismer@uidaho.edu>

UJyvaskyla Finland HostParasiteEvol

Postdoctoral researcher position at University of Jyvaskyla, Department of Biological and Environmental Science, Finland

EVOLUTIONARY ECOLOGY OF HOST-PARASITE RELATIONSHIPS

We are looking for candidates to fill a postdoctoral position for 2.5 years in a project "Environmental effects on complex parasite interactions". The position is funded by the Academy of Finland.

The main aim of the project is to explore how co-infections of unrelated parasites are shaped by different conditions of environmental variation at within-host, among-host and host-external levels. Study organisms include bacterial pathogens and trematode parasites of salmonid fishes. Specific questions will look into effects of factors such as temporal variation in host exposure, natural and human-induced genetic variation of hosts, and chemical and physical changes in the environment surrounding the host-parasite interaction. The project will present novel results for basic research on evolutionary ecology of multiple parasite infections and has applied implications for management of key disease-issues in aquaculture.

We are looking for a highly motivated and enthusiastic member to our research group. Candidates should have a PhD or be about to obtain a PhD in ecology, evolutionary biology, molecular biology, microbiology, or another relevant discipline. A successful candidate will have good problem solving and communication skills, and ability to supervise bachelor and master's level students. Previous experience of microbiology/molecular biology and experimental research is considered beneficial.

We offer stimulating working environment in an international Department that houses several internationally recognized research groups.

- Application deadline: 30 September 2018
- Starting date: 1.1.2019 or as agreed
- Duration of the position: 2.5 years
- Salary: The job-specific salary component of a postdoctoral researcher is based on the job demands level 5-6 (2893,95 euro/Month - 3374,18 euro/Month) according to the salary system concerning teaching and

research staff at universities. In addition, a personal performance-based salary component amounting to the maximum of 46,3% of the job-specific salary component is also paid.

For more information and how to apply visit: https://rekry.saima.fi/certiahome/open_job_view.html?did=-5600&jc=12&id00006025&lang=fi Applications should be submitted using the online application form accessible through the above link.

Dr. Anssi Karvonen

anssi.t.karvonen@jyu.fi

<http://users.jyu.fi/~anskarv/> "Karvonen, Anssi"
<anssi.t.karvonen@jyu.fi>

UKentucky 2 GenomeEvolutionEpigenetics

Postdoc:UKentucky.2.GenomeEvolutionEpigenetics

* Post-Doctoral Position Investigating Genomics and Epigenetic Mechanisms *

We anticipate hiring several postdoctoral positions (2-4) or postdoc-level technical positions over the next year. Individuals recruited to these positions will have the opportunity to work collaboratively between the Voss and Smith labs at University of Kentucky under one or more federally funded projects (NIH, DOD, NSF) that are related to epigenetics, evolution and genome reprogramming. The successful candidates will investigate the mechanisms and outcomes of epigenetic changes during development and tissue regeneration in salamander and/or lamprey systems.

The training environment (spanning the biology department and college of medicine) is exceptional for those seeking to learn how to extract biological meaning from large-scale genomics data, and the positions provide flexibility to gain empirical experience while pursuing independent projects. Ideal candidates will be highly motivated, have excellent communication skills, and have experience in performing genetics/genomics/bioinformatics research.

Please submit a CV and contact information for three references to Randal Voss (srvoss@uky.edu) for those with primary interest in amphibians regeneration and Jeramiah Smith (jjsmit3@uky.edu) for those interested in programmed genome rearrangement and evolution of vertebrate epigenetic mechanisms.

Jeramiah Smith Department of Biology University of Kentucky Email: jjsmit3@uky.edu

Jeramiah Smith <jeremiahsmith@gmail.com>

UKonstanz EcoEvolutionaryDynamics

We are seeking a highly motivated and enthusiastic postdoc to work on eco-evolutionary dynamics in a coevolving host-virus system.

Deadline: September 30th, 2018 Inquiries and application: lutz.becks@uni-konstanz.de

Project Description: There is a continuing interest to characterize the pace of adaptive evolution and a need for a better understanding of the factors influencing the rate of evolution. Especially, we lack a detailed understanding on how evolutionary dynamics at the genomic level relate to the distribution of fitness in populations evolving together in complex environments. In this project, we aim to identify rapid adaptive genomic changes in coevolving host-virus populations and to determine how multiple stressors for the host and virus alter the rate and trajectory of rapid adaptation. In previous experiments combined with genomic analyses we showed how demographic changes of host and coevolution between the host and virus affected adaptive changes at the genome level of both, host and virus. We now aim testing the hypothesis that abiotic stressors and species interactions interactively affect the pace of adaptive evolution. Overall, we aim to identify if and how environmental complexity introduced by abiotic stressors constrains the pace of resistance evolution even when the mutation rate is high.

This project is in close collaboration with colleagues from Eawag (Dr. Philine Feulner; <https://www.eawag.ch/en/aboutus/portrait/organisation/-staff/profile/philine-feulner/show/>) and is part of the DFG funded priority program Rapid Adaption (<https://dfg-spp1819.uni-hohenheim.de/>).

Highly motivated candidates holding a PhD degree in evolutionary biology or ecology are welcome to apply. Applicants should have a background in evolutionary theory or population dynamics and ideally experience in working with plankton or microbial systems and show an enthusiasm for basic research. Experience in flow-cytometry and advanced imaging analyses are welcome. The successful candidate should be able to communi-

cate effectively with individuals from a wide range of disciplines.

Location: The Aquatic Ecology and Evolution group recently started at the Limnological Institute of the University Konstanz. The collaborative research environment in the lab is highly integrative, very international, and operates in English. Therefore, the ability to speak German would be a plus, but is not essential. Further information on researchers and research in the Becks lab can be obtained here: <https://www.limnologie.uni-konstanz.de/becks/>, by contacting Lutz Becks (lutz.becks@uni-konstanz.de), or at meet us at EVOLUTION 2018 in Montpellier.

Konstanz is a very beautiful and pleasant place to live as it borders the third largest lake in Central Europe and lies at the foothills of the Alps. The University of Konstanz is an equal opportunity employer and is rated as one of the best universities in Germany.

– Prof. Dr. Lutz Becks Limnological Institute University of Konstanz Mainaustraße 252 78464 Konstanz / Egg Germany

Mail: lutz.becks@uni-konstanz.de Phone: 07531 88 2828/-3531

Join us at: Experimental Evolution and Community Dynamics Symposium <https://eed2018.wordpress.com/> Lutz Becks <lutz.becks@uni-konstanz.de>

ULausanne EvolutionOfNeuralCircuits

Dear colleagues,

The Benton Lab (www.unil.ch/cig/benton) at the University of Lausanne, Switzerland, is looking for post-doctoral researchers interested in studying the evolution of neural circuits and behaviour in drosophilids.

We are developing the ecological specialist *Drosophila sechellia* (a close cousin of *D. melanogaster*) as a model system for evolutionary neurobiology (see *Neuron* 2017 93(3):661-676 and *Nature* 2016 539(7627):93-97) and, through candidate and QTL analyses, identifying genes underlying neural and behavioural adaptations. Several potential projects in this area are available, according to the interests of candidates.

To apply, please send - as a single PDF file - a cover letter describing your background and why you are interested in joining our group, a CV, your best publication

(or pre-print), and contact details for 2 or more referees to Richard.Benton@unil.ch.

Best wishes,

Richard Benton

Richard Benton, PhD Center for Integrative Genomics
Génopode Building, Room 3031 University of Lausanne
CH-1015 Lausanne Switzerland

Richard.Benton@unil.ch <http://www.unil.ch/cig/-benton>
tel: ++41 21 692 3932 Skype: bentonlab
Twitter: @bentonlab

Richard Benton <richard.benton@unil.ch>

UManitoba LampreyGenomics

Hello,

We have a 2 year postdoctoral position available to test for a genetic basis for sex determination in sea lamprey. There also be opportunities to explore additional questions of interest. Please send any and all questions! Our ad with details is below.

Cheers, Colin

POSTDOCTORAL FELLOW POSITION IN BIOINFORMATICS: POSITION NUMBER 26364 DEPARTMENT OF BIOLOGICAL SCIENCES, UNIVERSITY OF MANITOBA, CANADA POSITION START DATE: January 1, 2019, for 2 years CLOSING DATE FOR APPLICATIONS: October 15, 2018, or until position is filled RANK: Post-doctoral fellow

SALARY RANGE: \$45,000-\$55,000 per annum (plus benefits), commensurate with qualifications and experience

PROJECT OVERVIEW: We are using a genome-wide association study (GWAS) in combination with linked-read whole-genome resequencing in 30 males and 30 females to test for and identify the genetic basis sex determination in sea lamprey. Sex determination mechanisms in fishes are highly variable, ranging from genotypic (GSD) to environmental (ESD) sex determination. Male-biased sex ratios under conditions of high population density or slow growth have led to suggestions of ESD in lampreys, but there is no conclusive evidence in lampreys of ESD, and no fish species with exclusively ESD are known. Understanding the genetic basis of sex determination in lampreys is important given their phylogenetic position as one of only two surviving groups

of jawless vertebrates. Furthermore, the sea lamprey is a significant pest in the Laurentian Great Lakes and genetic manipulation of sex determination could be a powerful tool for control. The Principal Investigators on the project are Drs. Margaret Docker and Colin Garroway (Department of Biological Sciences, University of Manitoba) and Dr. Alison Wright (Department of Animal and Plant Sciences, University of Sheffield).

JOB DESCRIPTION: The primary task of this position will be to test for a genetic basis for sex determination in the sea lamprey. However, the PDF will also have the opportunity to develop and pursue his or her own research questions within the context of sea lamprey evolutionary genomics.

RESPONSIBILITIES:

- * To undertake research on the genomics of sex determination in sea lamprey. To contribute significantly to experimental design, data interpretation and statistical analysis.
- * To trial new techniques and assay systems as required and keep abreast of the research literature relevant to the project.
- * Disseminate research through publications in peer reviewed journals.
- * To attend and contribute to research seminars, departmental meetings and international conferences.
- * Carry out administrative roles as required, e.g. organising physical or remote meetings with collaborators, arranging travel to consortium meetings.
- * Perform professional activities such as refereeing papers, editing journals, refereeing research grants, external examining, organising conferences, committee membership and involvement with professional bodies on accreditation.

QUALIFICATIONS:

- * PhD in evolutionary biology, computational biology, or genetics or successful PhD viva at commencement of contract.
- * Proven ability to process and analyse next-generation sequencing data. Experience with Chromium 10X technology is desired but not essential.
- * Proficiency with analysis software and programming languages, as well as ability to write or adapt scripts and pipelines for in silico genetic analysis.
- * Ability to work both collaboratively and independently
- * Well-developed leadership, management and influencing skills

CONTACT: Applicants should send their curriculum vitae, a cover letter expressing their research experience and research interests, and the names of three referees by email to

Dr. Margaret Docker, Professor Department of Biological Sciences, University of Manitoba Margaret.Docker@umanitoba.ca

The University of Manitoba is strongly committed to

equity and diversity within its community and especially welcomes applications from women, racialized persons/persons of colour, Indigenous peoples, persons with disabilities, persons of all sexual orientations and genders, and others who may contribute to the further diversification of ideas. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Application materials, including letters of reference, will be handled in accordance with the protection of privacy provision of The Freedom of Information and Protection of Privacy (Manitoba). Please note that curriculum vitae may be provided to participating members of the search process

Colin Garroway Assistant Professor Department of Biological Sciences University of Manitoba Winnipeg, Manitoba tel: (1) 204-4748267 tel: (1) 204-4748267

UMaryland ComparativePhylogenomicsPollination

Post-Doctoral Associate in Comparative Phylogenomics - University of Maryland, College Park

Job Summary: The EspindoLab, in the Department of Entomology at the University of Maryland, is opening a Post-Doctoral Associate position to work on the phylogenomics of the specialized pollination interaction between the plant genus *Calceolaria* and its oil-bees *Chalepogenus*, with a negotiable start date.

Qualifications: We are seeking a motivated, independent, collaborative, and creative post-doctoral associate to join our lab. The ideal candidate owns a PhD in Biology, Entomology, Botany, Ecology, Evolution or similar, and has expertise with the production, treatment, and analysis of genomic data for phylogenetic purposes. Fluency in R and the use of phylogenetic softwares, and familiarity with geospatial, phylogenetic, biogeographic and/or trait analyses will represent additional strengths. The ideal candidate can fluently read, write, and communicate in English. Women and members of minority groups are encouraged to apply.

Application Details: We offer a dynamic, supportive, intellectually motivating, and collaborative environment, with many opportunities for professional and career development. This position is based at the College Park campus of the University of Maryland and includes competitive salary (\$47,476/yr) and comprehensive benefits (<https://uhr.umd.edu/>). This is a full-time, 12-month, 1-yr position, with reappointment available for another

year, conditional on performance and the availability of funds. If interested, email Prof. Anahí Espíndola ([anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)) a single PDF including: i) a motivation letter explaining your research interests and qualifications, ii) your CV, iii) one-two representative publications, and iv) contact information of three references. The position will remain open until the appropriate candidate is found, but applications received before October 12th, 2018 will be given full consideration. For questions, email Prof. Espíndola ([anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

Learn about the lab: <http://anahiespindola.github.io>
Contact: Prof. Anahí Espíndola, [anahiesp\[at\]umd.edu](mailto:anahiesp[at]umd.edu)

Anahi Espindola <anahiesp@umd.edu>

UMunich EvolutionOfOsmundaceae

The evolution of Osmundaceae: Combining phylogenetics with fieldwork, genomics, cytogenetics, palaeobotany, and niche modeling

A postdoctoral position is open for application, starting immediately and until filled. Starting date is 1 October 2018, and the salary scale is A13. The research will combine phylogenetics with fieldwork, genomics, cytogenetics, palaeobotany, and niche modeling. Expertise and relevant unpublished data are available in our team, which includes an expert in the systematics and evolution of ferns, an expert in the palaeobotany of Osmundaceae, and expertise in chromosomal studies and molecular clock calibration. We have access to greenhouses, a large herbarium, relevant microscopes, 3D tomography, and funding. The postdoc will benefit not only from the broad range of methods and expertise available in the biology faculty of the University of Munich (LMU, Germany's top-ranking university, The

Times World University Ranking 2018) but in addition will spend time at the University of Münster and the Tropical Botanical Garden of the Chinese Academy of Sciences in Xishuangbanna. Our team consists of Harald Schneider, Macro-Evolution Group and Center of Integrative Conservation, Xishuangbanna, Benjamin Bomfleur, Institute of Geology and Palaeontology, University of Münster, and Susanne S. Renner, University of Munich.

Papers on Osmundaceae from our team that this project will build on are:

Bomfleur B., McLoughlin S., Vajda V. 2014a. Fossilized nuclei and chromosomes reveal 180 million years of genomic stasis in royal ferns. *Science* 343:1376-1377.

Bomfleur, B., Grimm, G.W., and McLoughlin, S. (2017): The fossil Osmundales (Royal Ferns) – a phylogenetic network analysis, revised taxonomy, and evolutionary classification for anatomically preserved trunks and rhizomes. <https://doi.org/10.7717/peerj.3433> Clark, J., Hidalgo, O., Pellicer, J., Liu, H., Marquardt, J., Robert, Y., Christenhusz, M., Zhang, S., Gibby, M., Leitch, I., Schneider, H. 2016. Genome evolution of ferns: evidence for relative stasis of genome size across the fern phylogeny. *New Phytologist* 210:1072-1082

Grimm, G. W., P. Kapli, B. Bomfleur, S. McLoughlin, and S. S. Renner. 2015. Using more than the oldest fossils: Dating Osmundaceae with three Bayesian clock approaches. *Systematic Biology* 64: 396-405.

Schneider, H., Liu H., Clark J., Hidalgo O., Pellicer J., Zhang S., Kelly L.J., Fay M.F., Leitch I.J. 2015. Are the genomes of royal ferns really frozen in time? Evidence for coinciding genome stability and limited evolvability in the royal ferns. *New Phytologist* 207: 10-13.

Participation in basic botany courses taught in German is desired. To apply, please send your letter of motivation, CV, and the names of two referees to renner@lmu.de

For more details email on our research: <https://scholar.google.com/citations?user=uzOGmTgAAAAJ&hl=de> <https://scholar.google.de/citations?user=5WLSy4IAAAAAJ&hl=ja> <https://scholar.google.de/citations?user=BkOLAKoAAAAJ&hl=de>

Susanne Renner <renner@lmu.de>

UNevada Reno BioinformaticsGenomics

POSTDOCTORAL POSITION IN BIOINFORMATICS AND GENOME EVOLUTION AT THE UNIVERSITY OF NEVADA, RENO

The Alvarez-Ponce lab at the University of Nevada, Reno invites applications for a postdoctoral position in Molecular Evolution. As part of a NSF-funded project, the successful candidate will investigate how protein evolution is shaped by different factors, in collaboration with the groups of David Liberles (Temple University) and Krisztina Varga (University of New Hampshire).

The successful candidate will have: - A PhD in Biology, Computer Science or a related field. - A strong interest in Molecular Evolution. - Experience with bioinformatics analyses, including programming in any scripting language (e.g. PERL or Python). - Evidence of excellence in research and high productivity. - Good communication and interpersonal skills.

Experience in the following areas would be a plus: - Molecular evolution analyses, and in particular natural selection analyses. - Network analyses. - Computer simulations. - Next Generation Sequencing.

Candidates should e-mail the following information to Dr. David Alvarez-Ponce (dap@unr.edu), as a single PDF: - An application letter, addressing the applicant's motivation for the position, and how their experience and skills fulfill the requirements listed above. - A full CV. - Contact information for 2 or 3 potential references.

More information about the lab can be found at www.genomeevol.wordpress.com The University of Nevada, Reno is a Tier I institution offering a highly productive research environment, including outstanding core facilities in genomics and bioinformatics. The Biology Department has a growing and highly interactive evolutionary genomics research community. Reno is located in the Sierra Nevada mountains near Lake Tahoe, and has been recently rated as one of the best small cities in the US for outdoor recreation and overall quality of life.

Please circulate this post among suitable candidates.

- David Alvarez-Ponce, PhD Assistant Professor Department of Biology University of Nevada, Reno Max Fleischmann Agriculture Building, office 140B

Tel.: (775) 682-5735 www.genomeevol.wordpress.com
 david.alvarez.ponce@gmail.com

UNotreDame PDF PhD EvolutionPfalciParum

Postdoc & PhD position: Evolution of *P. falciparum* hrp2 deletion

A postdoc position is available at the Department of Biological Sciences and Eck Institute for Global Health at the University of Notre Dame, USA, in the lab of Cristian Koepfli (<https://biology.nd.edu/people/cristian-koepfli/>, <https://globalhealth.nd.edu>). A PhD/T.A. position within the same project is also available.

Rapid diagnostic tests (RDTs) are an indispensable tool for clinical malaria diagnosis and community surveys. The most sensitive class of RDTs for *P. falciparum* relies on the detection of the Histidine Rich Protein 2 (HRP2). Recent reports of parasites lacking hrp2 have alerted clinicians and endanger elimination efforts. The evolutionary forces resulting in hrp2 deletion, and the impact of malaria control activities, are not understood. Molecular monitoring of parasite populations is required to understand this process and to select the optimal use of diagnostic tools for diagnosis.

We will use a novel, highly sensitive and high throughput method to diagnose hrp2 deletions in parasite isolates from different countries and time-points, and apply genome-wide analysis to understand the emergence and spread of hrp2 deletion.

Requirements: We are looking for an enthusiastic candidate with a Ph.D. in microbiology, evolution, population genetics, or a related field. Knowledge of common laboratory methods, e.g. DNA/RNA extraction, PCR, etc, good organizational skills and an interest to interact with researchers in malaria endemic countries are essential.

The postdoc position is initially available for one year, with the potential for extension.

If interested, please contact [ckoepfli AT nd.edu](mailto:ckoepfli@nd.edu)

Cristian Koepfli, PhD Assistant Professor Department of Biological Sciences Eck Institute for Global Health 319 Galvin Life Sciences University of Notre Dame Notre Dame, IN, 46556-0369 USA Phone: +1 574-631-7515

UOxford EvolutionBacterialCooperation

Theory Postdoc in Evolution of Bacteria Behaviour

Department of Zoology/Department of Biochemistry, Oxford

Grade 7: pounds 31,604 - pounds 38,833 p.a.

The Foster lab is offering a 3-year Postdoctoral Research Assistant in the Department of Zoology to study the evolution of bacterial behaviour. The goal is to develop evolutionary and ecological models to better understand bacterial behaviours - both competitive and cooperative - in the same way as such models have been applied to understand animal behaviour over the last decades. The research group - the lab of Professor Kevin Foster - includes both theoretical and empirical postdocs and students giving the opportunity to work closely with other theorists but also empiricists in order to test and develop models. For recent publications from the lab, see <https://zoo-koepfli.zoo.ox.ac.uk/publications>. This post is ideally suited for applicants with a PhD/DPhil that provided a strong quantitative training, ideally with experience of modelling biological systems using a diverse set of methods. Previous experience in microbiology, ecology and evolution is an asset, but is not required for this post.

The closing date for this position is 12.00 noon on Wednesday 12 September 2018.

For more details on this and other jobs, see: <https://zoo-koepfli.zoo.ox.ac.uk/node/52> Many thanks indeed!

Kevin

Professor of Evolutionary Biology Department of Zoology South Parks Road University of Oxford Oxford OX1 3PS

Office: + 44 (0) 1865 613298

Website: <http://zoo-koepfli.zoo.ox.ac.uk/> Kevin Foster <kevin.foster@zoo.ox.ac.uk>

UPennsylvania HumanPopGen

Post-Doctoral Position University of Pennsylvania - Perelman School of Medicine The Voight lab invites applications for a computational Post-Doctoral position at the University of Pennsylvania School of Medicine, within the Department of Systems Pharmacology and Translational Therapeutics and the Department of Genetics. The lab focuses on translating discoveries from human genetics data into insights about the biological basis and genetic architecture of human disease and understanding selection during recent human evolution.

Objectives: The candidate will have the opportunity to work with large collections of human genetic data sets, focused around population genetics problems, i.e., inference of mutation rates and signatures of selection in the genome. In particular, projects will be built around (i) machine learning methods to models for mutation rate across the human genome, integrating large-scale functional annotations of the genome, (ii) applying developed, cutting-edge models for mutation rate at high resolution to infer natural selection in the genome and apply them to existing and newly-generated human genomic data sets, and/or (iii) develop novel methods that utilize these models and insights generated therein in a disease association context.

The applicant will focus their efforts on the methodological development in these areas. However, this will also include large-scale analysis and applications to human genomics data numbering in the tens of thousands, sequenced across the entire genome. The applicant also will work to develop approaches that translate any insights into actionable information in clinical and bench-lab experimental settings.

Qualifications: 1. The candidate will have a MD, PhD, or equivalent doctorate, with a strong background in one or more of the following areas: statistics, biostatistics, population genetics, human genetics, genetic epidemiology, computational biology and/or genomics, bioinformatics.

2. The ideal candidate will have a track record of scientific productivity and leadership.

3. The ideal candidate will demonstrate a working proficiency in programming, scripting, and statistical computing (i.e., C/C++, Python, PERL, R, etc.), will have experience handling large data sets in the UNIX/LINUX

operating environment, experience in high-performance cluster computing.

Application Instructions: To apply, please send (i) a cover letter that includes the names and contacts for three references and a short statement of research interests, and (ii) a current CV to: Benjamin Voight, PhD (bvoight@penmedicine.upenn.edu). Further information about the lab can be found at: <http://coruscant.itmat.upenn.edu> Benjamin F. Voight, Ph.D.

University of Pennsylvania - Perelman School of Medicine Associate Professor, Systems Pharmacology and Translational Therapeutics Associate Professor, Genetics Tel: (215) 746-8083, Twitter: @bvoight28 Web: <http://coruscant.itmat.upenn.edu> Ben Voight <bvoight@penmedicine.upenn.edu>

UPittsburgh HostParasiteDynamics

Graduate (PhD) student in host-parasite eco-evolutionary dynamics

I am looking for PhD students to join the lab, particularly those with demonstrated interest in host-parasite co-evolutionary dynamics, and infectious disease transmission dynamics. Specifically, the student will address the role of individual variation between hosts in their response to infection on transmission dynamics and evolutionary trajectory of the parasite. Within this remit is ample possibility of developing your own research direction. Approaches can include lab experiments (transmission, behaviour, breeding), field surveys and experiments (in the fish/parasite native range of the Caribbean and northern South America), combined with modeling. I have developed key resources with which to tackle a variety of outstanding questions: selected lines of the guppy *Poecilia reticulata* that differ in their resistance and tolerance to infection with the ectoparasitic monogenean *Gyrodactylus turnbulli*; and a recently assembled good quality draft genome of the parasite

All graduate students in the Biosciences department at the University of Pittsburgh are provided with a competitive stipend and benefits for 5 years through a combination of fellowships, TAs, and research assistantships. Although funding from the lab itself is available, I expect all prospective students to apply for external funding.

The details on how to apply to the Pitt graduate

programs are here: <https://www.biology.pitt.edu/graduate/how-apply>, along with more details on the graduate programs in the department. Before applying, please send me an up to date CV, including three references, and a brief research statement of the types of questions you'd be interested in developing in my lab. I also like to see a writing sample - a peer-reviewed publication being ideal.

Email me! jess.stephenson@pitt.edu

“Stephenson, Jessica F” <jess.stephenson@pitt.edu>

UPittsburgh HostParasiteEvolution

Post-doc in host-parasite eco-evolutionary dynamics

I am hiring a postdoc to experimentally investigate the role of rapid evolutionary change on host-parasite dynamics. Although I have some projects in mind, this position is independent of current grants and thus allows you to develop your own research questions. Approaches can include lab experiments (transmission, behaviour, breeding), field surveys and experiments (in the fish/parasite native range of the Caribbean and northern South America), combined with modeling. I have developed key resources with which to tackle a variety of outstanding questions: selected lines of the guppy *Poecilia reticulata* that differ in their resistance and tolerance to infection with the ectoparasitic monogenean *Gyrodactylus turnbulli*; and a recently assembled good quality draft genome of the parasite. Start date is flexible but I would prefer the candidate to begin in 2018 or early 2019.

The Department of Biological Sciences at Pitt is a dynamic and growing team of enthusiastic researchers and educators (6 new Assistant Prof. hires in E&E in the last 1.5 years).

Requirements: Candidates must have a PhD in Ecology, Evolution, Genetics, or related topics. The position is for 1 year with the option to extend for up to 2 more years. Although funding from the lab itself is available, I will be particularly interested in candidates who will apply for and be competitive in obtaining external funding for this extension. A valid drivers license (and passport, if planning fieldwork!) is required.

To apply for the position please send an email to me (jess.stephenson@pitt.edu) including a cover letter stating why you are interested in the lab, the research you propose to develop in the lab, and your past research

experience. Please include your C.V., the contact information for three references, and up to 3 of your relevant publications or manuscripts in prep. Applicants should submit their materials by November 30, 2018 to ensure full consideration.

Graduate (PhD) student in host-parasite eco-evolutionary dynamics

I am looking for PhD students to join the lab, particularly those with demonstrated interest in host-parasite co-evolutionary dynamics, and infectious disease transmission dynamics. Specifically, the student will address the role of individual variation between hosts in their response to infection on transmission dynamics and evolutionary trajectory of the parasite. Within this remit is ample possibility of developing your own research direction. Approaches can include lab experiments (transmission, behaviour, breeding), field surveys and experiments (in the fish/parasite native range of the Caribbean and northern South America), combined with modeling. I have developed key resources with which to tackle a variety of outstanding questions: selected lines of the guppy *Poecilia reticulata* that differ in their resistance and tolerance to infection with the ectoparasitic monogenean *Gyrodactylus turnbulli*; and a recently assembled good quality draft genome of the parasite

All graduate students in the Biosciences department at the University of Pittsburgh are provided with a competitive stipend and benefits for 5 years through a combination of fellowships, TAs, and research assistantships. Although funding from the lab itself is available, I expect all prospective students to apply for external funding.

The details on how to apply to the Pitt graduate programs are here, along with more details on the graduate programs in the department. Before applying, please send me an up to date CV, including three references, and a brief research statement of the types of questions you'd be interested in developing in my lab. I also like to see a writing sample - a peer-reviewed publication being ideal.

Email me! jess.stephenson@pitt.edu

Share this:

* Press This * Twitter * Facebook * Google *

IFRAME: [like-post-frame-58426196-303-5b7ad97dc543a](https://www.facebook.com/sharer/sharer.php?u=https://www.biology.pitt.edu/graduate/how-apply)

EDIT

MY NEWS FROM TWITTER

“Stephenson, Jessica F” <jess.stephenson@pitt.edu>

UPittsburgh MolecularEvolution

The Chikina and Clark labs in Computational and Systems Biology (CSB) at the University of Pittsburgh are seeking a postdoctoral researcher with a computational background to develop phylogenetic methods for identifying genomic regions driving convergent phenotypes. Ideal candidates should have some knowledge of molecular evolution and strong programming skills including C/C++. Candidates will have an opportunity to develop translational applications through our ongoing collaborations with physicians, and to procure new genomic data through our wet lab and collaborators. <https://careers.iscb.org/jobs/view/6199> Our work in convergent evolution has a strong publication record: -Ancient convergent losses of Paraoxonase 1 yield potential risks for modern marine mammals. *Science*. 2018 <http://science.sciencemag.org/content/361/6402/591> -Subterranean mammals show convergent regression in ocular genes and enhancers, along with adaptation to tunneling. *eLife*. 2017. <https://elifesciences.org/articles/25884> -Hundreds of Genes Experienced Convergent Shifts in Selective Pressure in Marine Mammals. *MBE*. 2016. <https://academic.oup.com/mbe/article/33/9/2182/2579331> - Evolutionary Signatures amongst Disease Genes Permit Novel Methods for Gene Prioritization and Construction of Informative Gene-Based Networks. *PLOS Genetics*. 2015. <http://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1004967> Our department has excellent computational resources and a close relationship with Computational Biology at CMU through our joint graduate program and seminars. We also actively participate in the highly collaborative and rapidly expanding evolutionary research community in Pittsburgh through initiatives such as the Molecular Evolution Lab Discussion group, the Center for Evolutionary Biology and Medicine, and the Three Rivers Evolution Event. The University of Pittsburgh School of Medicine is an excellent research environment that is ranked #5 in NIH funding.

Pittsburgh is a vibrant but still affordable city which is undergoing a major renaissance with a younger-shifting demographic driven by biomedical and tech ventures (Google, Uber, Amazon, and Facebook all have offices here). You can read more about life in Pittsburgh here: <https://www.nytimes.com/2017/07/22/style/pittsburgh-tech-makeover.html>

<https://www.nytimes.com/2016/03/16/dining/-pittsburgh-restaurants.html> Please send your CV and contacts for three references to: mchikina@pitt.edu and nclark@pitt.edu We offer competitive salaries and benefits commensurate with experience.

“nclark@pitt.edu” <nclark@pitt.edu>

UppsalaU SpeciationGenomics

Post-doc in Speciation Genomics

A two-year post-doc is available in the Karrenberg group at the Department of Ecology and Genetics, Evolutionary Biology Centre, Uppsala University, Sweden. Processes that govern speciation and divergence are of vital importance for most other areas of biology. Yet, our understanding of organismal and genomic processes generating such divergence is still limited. Progress is expected from research that incorporates both experimental work and modeling. This post-doc provides an excellent opportunity to engage in such an integrated approach starting with extensive, preexisting ecological and genomic data.

The main project for this post-doc aims at 1) identifying genomic regions associated with extrinsic and intrinsic reproductive barriers (i.e. adaptive divergence and segregation distortion) and 2) understanding their role in the divergence process with respect to demographic history. We study the hybridizing sister species *Silene latifolia* and *S. dioica* (campions) from the carnation family. These two species have separate sexes and evolutionarily young sex chromosomes. Various reproductive barriers have been characterized, including differential habitat adaptation (Favre et al. 2017, *New Phytologist*). In this system, reproductive barriers appear to have a complex but coupled genetic architecture with an important contribution of the sex chromosomes (Liu & Karrenberg, 2018, *Molecular Ecology*). *Silene* is a non-model system with developing genomic resources such as a partial genome sequence (Papadopulos et al., 2015, *PNAS*), high-density linkage maps (Liu & Karrenberg, 2018, *Molecular Ecology*) and transcriptomes (e.g., Zemp et al., 2016, *Nature Plants*). For this post-doc project, extensive ddRADseq data is already available, such that data analysis can start directly. Available data are from a transplant experiment with recombinant hybrids (Favre et al. 2017, *New Phytologist*), from recent crossing experiments and from range-wide sampling of the two species. The post-doc is very welcome

to develop follow-up experiments or analyses depending on his/her interests and/or to join further ongoing projects and collaborations.

Qualifications The successful candidate has a Ph.D. degree in evolutionary biology, genetics or in a related field and a genuine interest in speciation. Experience in the following areas is needed: bioinformatics, population genomics, general statistics with R and R programming. We are looking for a dedicated, creative and productive scientist and expect the post-doc to engage in close teamwork, as well as in independent work.

The environment The Evolutionary Biology Centre (EBC) hosts one of the largest aggregations of evolutionary biologists in the world and Uppsala University was recently ranked 7th in the world in evolutionary biology (CWUR 2017). The Department of Ecology and Genetics is a highly international working environment and our research spans from evolutionary ecology and genetics to studies of ecosystems. A number of high-profile projects address natural and sexual selection, local adaptation, speciation, molecular evolution, microbial diversity, and ecosystem processes. Uppsala University is the oldest university in Scandinavia and the city of Uppsala is a vibrant college town with beautiful surroundings conveniently situated 40 minutes by train from Stockholm.

Position The postdoc is funded by a tax-free 2-year scholarship from the Carl Tryggers Foundation, amounting to 23,000 SEK per month. It is a requirement from the funding agency that you are an incoming postdoc (in other words, that your Ph.D. is not from Uppsala University).

The starting date is as soon as possible, but at the latest in November/December 2018.

How to apply Please contact Sophie Karrenberg (sophie.karrenberg@ebc.uu.se) if you would like to apply or have questions about the position. Applications will be reviewed as they come in.

Applications should be submitted via e-mail to sophie.karrenberg@ebc.uu.se with the following documents combined into one pdf file: 1) A cover letter describing your research interests and suitability for the position

2) A detailed CV with a list of publications and other scientific merits and description of your experience and education in bioinformatics, population genomics and R programming

3) Contact details of two to three references, who are available via telephone or e-mail

Prospective candidates will be invited for interviews in person or via Skype in late August/early September

2018; I will also be happy to meet prospective candidates at the Evolution congress in Montpellier.

Contact: sophie.karrenberg@ebc.uu.se Group page: <https://karrenberg.weebly.com/> Institute page: <https://www.ieg.uu.se/> Related publications: Liu X, Karrenberg S. (2018) Genetic architecture of traits associated

— / —

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>

UPuertoRico EvolutionButterflyColour

REQUISITES The applicant must have a recent obtained (five year or less) PhD or equivalent in a biological sciences discipline and significant experience in molecular genetics and developmental biology, bench techniques including PCR, cloning, and sequencing library prep. Strong preference will be given to applicants with any of the following skills: analysis of short-read data in a Linux environment, construction and implementation of enhancer-reporter constructs, and CRISPR/Cas9 genome editing.

JOB DESCRIPTION Postdoc in evolutionary and functional genomics. We are seeking to hire a postdoctoral fellow for up to three years to work at the intersection of functional genomics and evolutionary developmental biology. The postdoc will work as part of a collaborative effort to determine what kind of genomic changes drive color pattern diversity in butterflies. The successful candidate will join the Riccardo Papa lab and be hired through the University of Puerto Rico, but will be physically based in the Robert Reed Lab at Cornell University. The postdoc will join a large group of researchers and directly interact with an international collaborative team that includes the Arnaud Martin Lab at George Washington University, the Owen McMillan Lab at the Smithsonian Tropical Research Institute, and the Brian Counterman Lab at Mississippi State University. The postdoc's research will specifically focus on regulatory evolution of the wing pattern morphogen gene *WntA*, which underlies development of the major central wing patterns. The regulation of this gene has diversified dramatically within and between species, and population genetic work shows that variation in

expression can be traced to regulatory regions adjacent to WntA. We are now working to ask the questions (1) what are the cis-regulatory elements that drive the evolution of WntA expression, (2) how did these regulatory elements first arise, and (3) how are these elements evolving to produce morphological variation? We are asking this question both within species (*Heliconius* mimicry) and between species (the family Nymphalidae). Our primary experimental approach is to combine whole-genome comparative assays of regulatory element activity (ATAC-seq) with functional validation (CRISPR and reporter constructs). The successful candidate will be encouraged to visit and work in collaborating labs depending on specific experimental goals. The postdoc will produce first-author publications representing their own intellectually independent work.

TO APPLY Please submit IN A SINGLE PDF FILE: (i) a cover letter including motivation and research interests, (ii) a full CV that includes all requisites for the position, and (iii) contact information for two references electronically, and (iv) copies of all academic degrees** (diplomas and certifications) to butterflypostdoc@gmail.com and rpapa.lab@gmail.com. Review of applications will start immediately and will continue until the position is filled. Inquiries about the position can be directed to butterflypostdoc@gmail.com and rpapa.lab@gmail.com. APPLICATIONS SUBMITTED WITH INCOMPLETE INFORMATION WILL NOT BE CONSIDERED.

**The selected candidate must present an official copy of all academic records

Riccardo Papa Associate Professor, Department of Biology Director of High Throughput Sequencing Facility University of Puerto Rico - R o Piedras Julio Garz a D az (JGD) 213 Rio Piedras, San Juan PR 00931 tell: 787-764-0000 ext 4827(office) or 7764(lab) fax: 787-764-3875 Lab WebPage (under construction): <http://www.wix.com/ricpapa/> Papa-Riccardo-Lab Topics 2013 (Genomic Frontiers in Modern biology): <http://biotopicsuprrp.weebly.com/index.html>

Riccardo Papa <rpapa.lab@gmail.com>

USDA-ARS Missouri MaizePopulationGenetics

Dear Colleagues,

I have an opening for a post-doc in my lab with

the USDA-ARS, located in Columbia, MO. The post-doc will conduct field, statistical, and computational research on quantitative genetics and population genetics in maize, related to our USDA Project Plan (see Objectives 3 through 6 of my project plan at <https://www.ars.usda.gov/research/project/?accnNo=434241>) and associated grant projects.

The post-doc must be a US citizen. The earliest potential start date is October 1, 2018; applications will be accepted until the position is filled. Please send CV and names/contact info for three references to me at Sherry.Flint-Garcia@ars.usda.gov.

Please feel free to forward to individuals who may be qualified.

Thank you, Sherry

Sherry Flint-Garcia USDA-ARS Research Geneticist
301 Curtis Hall University of Missouri Columbia, MO
65211 Phone: 573-884-0116 FAX: 573-884-7850 email:
Sherry.Flint-Garcia@ars.usda.gov

“Flint-Garcia, Sherry” <Sherry.Flint-Garcia@ARS.USDA.GOV>

USheffield PDF Tech PopGenStats

The Elhaik lab in the department of Animal and Plant Sciences at The University of Sheffield is looking to hire a postdoc and a technician for 3 years on an MRC funded project revolving around evolutionary biology.

The work will involve developing cutting edge Mendelian Randomization methods and population genomics methods and requires strong computation skills. The lab’s work focuses on modelling human population structure to gain a better understanding of human origins and how to use this information to carry out unbiased randomized control trials. This work will be done in a collaboration with the MRC unit at the University of Bristol.

For more information about the postdoc position see <https://www.jobs.ac.uk/job/BLM120/research-associate>. For more information about the technician position: <https://www.jobs.ac.uk/job/BLQ666/research-technician> Sheffield is consistently rated a top place to live and work in the UK!

Anticipated start date is flexible. Please get in touch (e.elhaik@sheffield.ac.uk) if you have any questions.

To apply, visit <https://www.sheffield.ac.uk/jobs> and

search for UOS019779 (postdoc) UOS019856 (technician) for more details.

Thank you,

Eran Elhaik, Ph.D. <http://www.eranelhaiklab.org/> - <http://bioinformatics.group.shef.ac.uk> Department of Animal & Plant Sciences, Alfred Denny Building University of Sheffield, Western Bank Sheffield, S10 2TN, UK Phone: 0114 222 2704 Fax: 0114 222 0002 Email: e.elhaik@sheffield.ac.uk

Eran Elhaik <e.elhaik@sheffield.ac.uk>

USouthFlorida-Tampa DemographicHistoryOfHumanPopulations

Postdoctoral Fellow - Inferring demographic history of human populations. A postdoctoral fellow position in computational population genomics is available at Liu Lab (www.liulab.science) at University of South Florida, Tampa, USA, from September, 2018. The postdoctoral fellow will engage in method development and application related to inferring population demographic history using large-scale DNA sequence data (see references below). A graduate level training in population genetics or molecular evolution is required. Previous experience in methodology development and/or Java programming experience is preferred. Contact: Xiaoming Liu (xm-liu.uth@gmail.com). Reference: Liu X and Fu YX. (2015) Exploring population size changes using SNP frequency spectra. *Nature Genetics*. 47(5):555-559.

“xiaoming.liu@uth.tmc.edu”

UVermont EvolutionaryGenomicsPhysiology

Postdoctoral Position in Evolutionary Genomics and Physiology

The Lockwood Lab at the University of Vermont invites applications for a postdoctoral position in evolutionary genomics and physiology. This is a unique position that it will integrate both research and teaching opportunities. The postdoc will participate in a set of NSF-funded projects to examine the genomics

and physiology of thermal adaptation in *Drosophila melanogaster*. The goal of this work is to integrate genomic mapping, transcriptomics, protein biochemistry, and confocal fluorescence microscopy to identify the genetic and physiological bases of divergence in embryonic thermal tolerance among temperate and tropical populations. See our recent work in the *Journal of Evolutionary Biology* (Lockwood et al. 2018, doi: 10.1111/jeb.13234). In addition, the postdoc will work with the principal investigator to design and co-teach a new course in ecological development and physiology.

The successful candidate will have a strong research record in evolutionary genetics and genomics and a strong interest in ecological physiology, as well as a background in computational and statistical analysis. Experience working with *Drosophila* is a plus, but not required.

The University of Vermont offers a stimulating research environment, with a diverse set of faculty in the life sciences and a collaborative atmosphere that bridges multiple departments. Burlington and the surrounding area offer a high quality of life, thriving on local food, music, international culture, and outdoor activities year-round.

Support (salary and benefits) is available for up to 3 years; the initial appointment is for one year with the opportunity to extend to additional years pending performance.

To apply, please send a single PDF document with cover letter, statement of research interests, CV, and contact information for three references to Brent.Lockwood@uvm.edu. Review of applications will begin immediately and continue until the position is filled. The start date is flexible, but the position can start immediately.

Brent L. Lockwood Assistant Professor Department of Biology University of Vermont

website: <http://www.uvm.edu/~bblockwo/> email: Brent.Lockwood@uvm.edu

“Brent.Lockwood@uvm.edu”

<Brent.Lockwood@uvm.edu>

UWashington ConservationGenetics

I am thrilled to announce two postdoctoral positions available as a collaboration between Rick Goetz (NOAA) and me (University of Washington).

1. One position addresses the amelioration of the environmental effects of sablefish net pens by sea cucumber polyculture as estimated by benthic meiofauna metabarcoding (<http://nrc58.nas.edu/RAPLab10/Opportunity/-Opportunity.aspx?LabCode=26&ROPCD=-260339&RONum=C0176&ROBaseMode=R101>).
2. The other project is broadly on the use of genomics and genetics to promote shellfish aquaculture (<http://nrc58.nas.edu/RAPLab10/Opportunity/-Opportunity.aspx?LabCode=26&ROPCD=-260339&RONum=C0141>).

Please contact Rick Goetz (rick.goetz@noaa.gov) or me (lhauser@uw.edu) for more information.

Many thanks

Lorenz

Dr Lorenz Hauser, Professor

School of Aquatic and Fishery Sciences, University of Washington 1122 NE Boat St, Box 355020, Seattle WA 98195-5020

Phone 206 685 3270

<http://fish.washington.edu/people/hauser/> <http://faculty.washington.edu/lhauser/> Lorenz Hauser
<lhauser@uw.edu>

WashingtonStateU Plant-Microbe-Eco-Evo

The Friesen lab at Washington State University (<https://plantpath.wsu.edu/people/faculty/maren-friesen/>) pursues research at the intersection of genomics, evolution, and ecology using plant-diazotroph interactions as a model system. Postdoctoral positions are available with the possibility of contributing to ongoing projects in legume-rhizobia and grass-associative nitrogen fixer in-

teractions, with the expectation that applicants will simultaneously develop independent lines of inquiry, apply for independent funding, and contribute to collaborative proposal preparation. Solid training in (at least one of) evolution, ecology, plant biology, microbiology, modeling and/or genomics is desired, with demonstrated facility in quantitative methods and written communication, as well as interest in interdisciplinary research and excitement for contributing to a collaborative and inspiring lab environment.

The lab has access to excellent facilities at WSU for plant growth, phenomics, and genomics, and is part of the vibrant intellectual community spanning WSU and U Idaho (7 miles away with a bike path). The Palouse is a stunning landscape with local hiking and outdoor adventures in WA, ID, and OR within a 2-3h radius of Pullman/Moscow.

Please contact me (maren.l.friesen@gmail.com) with CV and brief statement of interest and include "Friesen Lab" in the subject of your email; I will be at Evolution 2018 if you'd like to meet up to chat about opportunities in person.

Maren L. Friesen Assistant Professor, Departments of Plant Pathology ~&~ Crop and Soil Sciences Molecular Plant Sciences Graduate Program Washington State University 345 Johnson Hall, Pullman, WA USA 99164
<https://maren.github.io/friesenlab-website/> <https://plantpath.wsu.edu/people/faculty/maren-friesen/> Adjunct Assistant Professor, Department of Plant Biology Michigan State University phone: +1 (323) 454-3023

maren.l.friesen@gmail.com

WashingtonU EvolutionAvianBrainSize

Postdoctoral position on the Evolutionary Ecology of the Avian Brain

Start date: 1 November 2018

Duration: Three years

The Botero Lab at Washington University in Saint Louis (<https://boterolab.weebly.com>) is seeking a creative and self-motivated postdoctoral colleague to help develop our research program on the evolution of brain size variation in birds. The position will involve highly collaborative, multi-institutional work on a range of topics, including ecological niche theory and biogeography. In

year 1, the project will also involve three or four short visits to museum collections across the United States. The successful candidate will be expected to assist with training and mentoring of graduate students and undergraduates, develop synergistic projects, write grants, produce first-authored publications and contribute to co-authored papers.

Candidates are expected to have obtained a PhD degree in a relevant field by the anticipated starting date (Nov. 2018). Strong quantitative background and R programming skills are important, as well as a solid background in ecology and evolution. Experience in biogeography (e.g., ability to process and work with geographic data sets) is highly desired. Willingness to work collaboratively as part of a research team is a must.

This is a three-year position, but yearly contract renewal will depend upon satisfactory work. Inquiries and CVs should be addressed to Prof Carlos A. Botero (cbotero@wustl.edu). If possible, please set up an in-person meeting with me during the upcoming Evolution 2018 meeting in Montpellier. Starting salary will be \$50,245.

Postdoctoral position on the phylogeography of human culture in the New World

Start date: 1 October 2018 (an earlier start date is also possible).

Duration: One year

The Botero Lab at Washington University in Saint Louis (<https://boterolab.weebly.com>) is seeking a creative and self-motivated postdoctoral colleague to help develop evolutionary ecology models aimed at understanding the process of human colonization of the New World. The position will involve highly collaborative, multi-institutional work as part of the D-PLACE (d-place.org) research network. The successful candidate will be expected to develop synergistic projects, produce first-authored publications and contribute to co-authored papers.

Candidates are expected to have obtained a PhD degree in a relevant field by the anticipated starting date (Sep. 2018). Strong quantitative background and R programming skills are important, as well as a solid background in ecology and evolution. Experience in phylogeography is highly desired. Willingness to work collaboratively as part of a research team is a must.

While this is being advertised as a one-year position, interested candidates will be involved in current efforts to extend this timeline through the development of new grant proposals. Inquiries and CVs should be addressed to Prof Carlos A. Botero (cbotero@wustl.edu). If possible, please set up an in-person meeting with me during the upcoming Evolution 2018 meeting in Montpellier. Starting salary will be in \$50,245.

“Botero, Carlos” <cbotero@wustl.edu>

WorkshopsCourses

Berlin 2 SpeciationGenomicsDec3-7 PythonOct15-19 137	Edinburgh SearchForSelection Oct15-19 142
Berlin ComparativeGenomics Oct1-5 LastCall 138	HongKong IntroPhylogenetics Oct22-27 143
Berlin GWAS October22-26 139	IndianaU NovoTranscriptome Oct1-3 DeadlineAug6 143
Berlin scRNAseq Feb25-Mar1 139	Norway PolyploidPopulationGenetics Dec1-7 144
Crete IntroductionModelingR Nov26-30 140	Norwich UK 2 Metagenomics RNAseq Sep11-14 Dec3-7 145
CzechRepublic Genomics Jan20-Feb2 141	QueensU Belfast AnimalContests Aug29-30 146

TheWilds Ohio eDNA monitoring Nov5-9	146	UK PhylogeneticComparativeMethods Nov5-8	149
UBristol UK CerealsDB Sep18-19	147		
UGroningen EvolutionaryDynamics Oct21-26	147		
UK IntroductionToBioinformatics Oct28-Nov2v ..	148		

Berlin 2 SpeciationGenomicsDec3-7 PythonOct15-19

Dear all,

we still have a few places available for our Speciation Genomics course

in Berlin (03-07 December 2018) with Dr. Mark Ravinet (CEES, Univeristy of Oslo, Norway) and Dr. Joana I. Meier (University of Cambridge, UK).

Overview

This course will provide a thorough introduction to the growing field of speciation genomics. The course aims to take students from the initial steps required for handling raw sequencing data to demographic modelling and inference of genome-wide signatures of selection and introgression. Through a combination of lectures covering key theoretical and conceptual topics, alongside hands-on exercises, participants will learn the most important computational approaches used in speciation genomics. This will include a heavy emphasis on data visualization and interpretation. After completing of the course, the participants should be able to begin using NGS data to shed light on the genomic aspects of speciation in their study system of choice.

Format

This course is designed for researchers and graduate students with strong interests in applying novel high-throughput DNA sequencing technologies to study the population genomic basis of speciation. The course will mainly focus on the analysis of NGS data for study systems for which a reference genome is available. We will provide theoretical lectures and hands-on exercises drawing on examples of whole-genome resequenced and RAD-sequencing data. Participants will make use of the UNIX command line, R and Python throughout the course.

Assumed Background

The participants should have some basic background in evolution and genomics. No programming or scripting expertise is required. Previous experience in UNIX-based command line and R is an advantage but a stan-

dard introduction will be provided. All hands-on exercises will be run in a Linux environment on remote servers. Statistical analyses will be run in R using RStudio.

Learning Outcomes

Handling NGS data from raw reads to genetic variants
Applying basic population genetic statistics
Visualizing the genetic structure
Inferring demographic history
Identifying regions under divergent selection or barriers to gene flow
Understanding the potential and limitations of different methods to detect regions under selection

Please visit our website to have more information about the course content: <https://www.physalia-courses.org/-courses-workshops/course37/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> Should you have any questions, please feel free to contact us: info@physalia-courses.org

Best regards,

Carlo

Course: Introduction to Python for Biologists

Berlin, 15-19 October 2018

Instructor: Dr. Martin Jones (founder, Python for biologists)

Course overview This course 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 course, 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. 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 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. If in doubt, take a look at the detailed session content below or drop Martin Jones (martin@pythonforbiologists.com) an email.

Teaching format:

The course 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.

Please visit our website to have more information about the course content:

— / —

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>

Berlin Comparative Genomics Oct1-5 Last Call

Dear all,

we have the last places available for our course on “Comparative Genomics” (1-5 October 2018) at the Freie Universität Berlin, Königin-Luise-Str. 6-8, Berlin (Germany).

Application deadline is September 5th, 2018. Attendees are seated on a first-come, first-served basis.

Our instructors are :

Dr Fritz J. Sedlazeck (<https://fritzsedlazeck.github.io/>)
 Prof. Dr. Ingo Ebersberger
 (<https://scholar.google.com/citations?user=LOOY3kYAAAAJ&hl=en>) Course overview This

course will introduce biologists and bioinformaticians into the field of comparative genomics. Different techniques will be introduced to identify single nucleotide polymorphism (SNP) and structural variations (SVs) as well as the annotation of these variations and the assessment for their functional impact.

TARGETED AUDIENCE & ASSUMED BACKGROUND The course is aimed at researchers interested in learning how to compare genomes and what can be learned from genomic similarities as well as variations. It will include information useful for both beginners and more advanced users. We will start by introducing general concepts of comparative genomics. On this basis, we will then continue to describe all major analysis steps from the raw sequencing data via the identification of variations to an assessment of their impact on the phenotype. Attendees should have a background in biology. There will be a mix of lectures and hands-on practical exercises using command line Linux. We will therefore dedicate one session to introduce basic and advanced Linux concepts for processing data on Amazon cloud (AWS). Attendees should have also some familiarity with genomic data such as that arising from NGS sequencing experiments.

LEARNING OUTCOMES

- * Identification of SNPs and SVs using de novo genome assembly and read mapping strategies
- * Assessment of strengths and weaknesses of the different DNA sequencing technologies, Illumina, Pacific Bioscience, Oxford Nanopore, for the detection of variations
- * Strengths and pitfalls of de novo assembly and mapping approaches for comparative genomics
- * Hands on experience of state of the art methods to compare multiple genomes
- * Annotation of variations and comparative genomics analysis

For more information about the course, please visit our website: <https://www.physalia-courses.org/courses-workshops/course34/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/>
 Twitter: @physacourses mobile: +49 15771084054 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org”
 <info@physalia-courses.org>

Berlin GWAS October22-26

Dear all,

we still have a few places left for our course “GENOME-WIDE SIGNATURES OF SELECTION AND ASSOCIATION STUDIES”, that will take place in the beautiful botanical museum in Berlin from the 22nd to the 26th of October 2018.

Our INSTRUCTORS:

Dr. Pablo Orozco-terWengel (Cardiff University, Wales (UK))

<https://scholar.google.co.uk/citations?user=urqxLJgAAAAJ&hl=en> Dr. Filippo Biscarini (CNR, ITA)

<https://www.researchgate.net/profile/Filippo.Biscarini>
Overview

This course will introduce students, researchers and professionals into the field of using genomics data to identify meaningful genomic regions. The course comprises two approaches: one based only on genomic information, which will use population genetics techniques to detect signatures of selection (both natural and artificial); the other approach will combine genomic and phenotypic data to identify genetic associations for specific phenotypes (i.e. GWAS, genome-wide association studies).

Format

The course is structured in modules over five days. Each day will include an introductory lecture with class discussion of key concepts. The remainder of each day will consist of practical hands-on sessions. These sessions will involve a combination of both mirroring exercises with the instructor to demonstrate a skill as well as applying these skills on your own to complete individual exercises. After and during each exercise, interpretation of results will be discussed as a group.

TARGETED AUDIENCE & ASSUMED BACKGROUND

The course is aimed at advanced students, researchers and professionals interested in learning how to make use of genomic information to study how selection has shaped the genome and how the genome influences measurable phenotypes. It will include information useful for both beginners and more advanced users. We will start by introducing general concepts of population ge-

netics, which will take up most of the first half of the course; the second half of the course will be centered mainly on GWAS and related aspects.

Attendees should have a background in biology, specifically genetics. There will be a mix of lectures and hands-on practical exercises using R and the Linux command line, and bespoke software. Some basic understanding of R programming and the Linux environment will be advantageous. Attendees should have also some familiarity with genomic data such as those arising from NGS experiments, including genotyping-by-sequencing (GBS), and commercial genotyping platforms.

Please visit our website to have more information about the course content: <https://www.physalia-courses.org/courses-workshops/course36/curriculum-36/>

Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/>
If you have any questions please feel free to contact us.

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 15771084054 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org” <info@physalia-courses.org>

Berlin scRNAseq Feb25-Mar1

Course: Analysis of single cell RNA-seq data

Berlin, 25 February-1 March 2019

<https://www.physalia-courses.org/courses-workshops/course18/> Botanischer Garten und Botanisches Museum Berlin/Freie Universität Berlin Konigin-Luise-Str. 6-8

INSTRUCTORS:

Dr. Ayshwarya Subramanian (Broad Institute of MIT and Harvard)

Dr. Dana Silverbush (Broad Institute of MIT and Harvard)

Dr. Ehsan Habibi (Broad Institute of MIT and Harvard)

Course overview

In recent years single-cell RNA-seq (scRNA-seq) has

become widely used for transcriptome analysis in many areas of biology. In contrast to bulk RNA-seq, scRNA-seq provides quantitative measurements of the expression of every gene in a single cell. However, to analyze scRNA-seq data, novel methods are required and some of the underlying assumptions for the methods developed for bulk RNA-seq experiments are no longer valid. In this course we will cover all steps of the scRNA-seq processing, starting from the raw reads coming off the sequencer. The course includes common analysis strategies, using state-of-the-art methods and we also discuss the central biological questions that can be addressed using scRNA-seq.

Targeted Audience & Assumed Background

This course is aimed at researchers and technical workers who are or will be analyzing scRNA-seq data. The material is suitable both for experimentalists who want to learn more about data-analysis as well as computational biologists who want to learn about scRNASeq methods. Examples demonstrated in this course can be applied to any experimental protocol or biological system.

The requirements for this course are:

- i- Working knowledge of unix (managing files, running programs)
- ii- Programming experience in R (writing a function, basic I/O operations, variable types, using packages).
- iii- Bioconductor experience is a plus.
- iv- Familiarity with NGS data and its analyses (using alignment and quantification tools for bulk sequencing data)

Teaching Format

The course will be delivered over the course of five days. Each day will include a lecture and laboratory component. The lecture will introduce the topics of discussion and the laboratory sessions will be focused on practical hands-on analysis of scRNA-seq data. These sessions will involve a combination of both mirroring exercises with the instructor to demonstrate a skill as well as applying these skills on your own to complete individual exercises. After and during each exercise, interpretation of results will be discussed as a group. Computing will be done using a combination of tools installed on the attendees laptop computer and web resources accessed via web browser.

EXAMPLE DATA

Please find example datasets here: <https://support.10xgenomics.com/single-cell-gene-expression/datasets> Please visit our website to have more informa-

tion about the course content: <https://www.physalia-courses.org/courses-workshops/course18/> Here is the full list of our courses and Workshops: <https://www.physalia-courses.org/courses-workshops/> Should you have any questions, please do not hesitate to contact us :info@physalia-courses.org

Best regards,

Carlo

Carlo Pecoraro, Ph.D Physalia-courses DIRECTOR
info@physalia-courses.org <http://www.physalia-courses.org/> Twitter: @physacourses mobile: +49 15771084054 <https://groups.google.com/forum/#!forum/physalia-courses> “info@physalia-courses.org”
 <info@physalia-courses.org>

Crete IntroductionModelingR Nov26-30

Dear evoldir members, Transmitting Science is offering the course 'INTRODUCTION TO GENERALIZED LINEAR MODELING AND MIXED MODELS USING R'; Instructor: Dr. Dan Warren (Senckenberg Biodiversity and Climate Research Center, Germany) Dates: November 26th-30th, 2018 Location: Heraklion, Crete (Greece) COURSE OVERVIEW: This course will teach the basics of the R statistical programming language as well as providing an accessible introduction to generalized linear models and mixed models. We will cover the basic R skills necessary to conduct most of the common analyses in the sciences, and then will focus on giving students a working understanding of ANOVA, Generalized Linear Models (GLM), and Generalized Linear Mixed Models (GLMM). The course is intended to give students a conceptual understanding of these methods, not just a set of recipes to follow. By the end of this course, students will understand: How to read and write data from R. How to manipulate their data for analysis. How to design workflows for efficient and reproducible scientific computing. How to make attractive and informative color graphics from R. The importance of likelihood in statistics. How regression works and what it means. How to choose the appropriate link function and why it's important. How to model fixed vs. random effects. The course is intended primarily for users who have no experience in R, or those who have performed a few basic functions but wish to develop their skills. PROGRAM: Monday, November

26th, 2018. The R statistical programming environment: R Studio. Interacting with the console. Reading in data. Writing and reading scripts. Workflows for efficient and reproducible science. Tuesday, November 27th, 2018. What's an object? Working with data frames. What's a function? Control flow. Basic graphics. Intro to ggplot2 and qplot. Exporting publication-quality graphics. Viridis: making color plots accessible to everyone. Wednesday, November 28th, 2018. Likelihood. What is a regression? AIC in brief. ANOVA. Simple linear regressions using GLM. Thursday, November 29th, 2018. Link functions – extending regression to different types of data. How do you pick the appropriate link function? Applied regression exercises. Friday, November 30th, 2018. Mixed models and applied mixed model exercises. Applied mixed model regression exercises. Simulation. For more information and registration: <http://bit.ly/introduction-to-generalized-linear-modelling-and-mixed-models-using-R> Contact: courses.crete@transmittingscience.org All the best, Haris Saslis, PhD Course Coordinator Transmitting Science www.transmittingscience.org haris.saslis@transmittingscience.org Haris Saslis <haris.saslis@transmittingscience.org>

Czech Republic Genomics Jan20-Feb2

2019 Workshop on Phylogenomics

We are pleased to announce that we are accepting applications for the Workshop on Phylogenomics which is being held once again in beautiful \check{A} esk \check{A} $\frac{1}{2}$ Krumlov, Czech Republic from 20 January - 2 February, 2019. More information is below and can be found on our website at <http://evomics.org>. An on-line application form can be found at: <http://evomics.org/registration-form/apply-2019-workshop-on-phylogenomics-cesky-krumlov/>

2019 Workshop on Phylogenomics, \check{A} esk \check{A} $\frac{1}{2}$ Krumlov, Czech Republic

Dates: 20 January - 2 February, 2019

Application Deadline: 15 September, 2018 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: \$1800 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-2019-workshop-on-phylogenomics-cesky-krumlov/>

Useful Links: Direct Link to the Full Workshop Schedule: <http://evomics.org/workshops/2019-workshop-on-phylogenomics-cesky-krumlov/>

General Workshop information: <http://evomics.org> Frequently Asked Questions (FAQ) about the Workshop and \check{A} esk \check{A} $\frac{1}{2}$ Krumlov can be found here: <http://evomics.org/workshops/faq/> Workshop Overview: This workshop brings together an international collection of faculty members and Workshop participants to study and discuss current ideas and techniques for exploring phylogenomics. The Workshop consists of a series of lectures, demonstrations and computer laboratories that cover theoretical and conceptual aspects of large-scale phylogenetics and phylogenomics, with a strong emphasis on data analysis.

The Workshop places a strong focus on molecular phylogenetics performed at genome-wide scales (phylogenomics), and covers all aspects of phylogenomics workflows. The workshop will cover main aspects of phylogenomics: the reconstruction of species trees from large-scale genomics data.

A majority of the schedule is dedicated to hands-on learning activities designed by faculty and the workshop team. This interactive experience provides Workshop participants with the practical experience required to meet the challenges presented by modern evolutionary sciences.

Lectures and computer laboratories total ~90 hours of scheduled instruction. No programming experience is required.

Topics to be covered include: - methods and software for phylogenomic analysis - coalescent methods - species divergence - trait evolution patterns - how-to reconstruct and analyze genome-wide collections of species trees to detect orthology and paralogy - genome dynamics along species trees - detection and analysis of horizontal gene transfer - More!

For more information and online application see the Workshop web site - <http://evomics.org> shandley@wustl.edu

Edinburgh SearchForSelection Oct15-19

Hi,

Following the successful short course on “Evolutionary Quantitative Genetics” last year, Bruce is coming back to the The Roslin Institute with “The Search for Selection”. The course will take place at the auditorium of The Roslin Institute between the 15th and 19th October 2018. Further details about the course are given below. You can register by following this link:

<https://www.epay.ed.ac.uk/conferences-and-events/-college-of-medicine-and-veterinary-medicine/royal-dick-school-of-veterinary-studies/the-roslin-institute/the-search-for-selection> We encourage early registration to secure a place - last year’s course was fully booked out and very well received!

With regards,

Gregor Gorjanc

Short course: The Search for Selection Venue: Roslin Institute, University of Edinburgh Dates: Oct 15-19 2018, Instructor: J. Bruce Walsh, Ecology & Evolutionary Biology, Univ. of Arizona

Description Biologists are obsessed (indeed, seduced) by the search for signatures of selection in organismal features of interest, ranging from specific traits to genome-wide signatures. A vast number of approaches have been suggested in this search for selection, including genomic-based signatures of recent or ongoing selection, tests based on either excessive amounts or nonrandom patterns of divergence (in both fossil sequences and functional genomics data) and the more classical Lande-Arnold fitness estimates (direct association of phenotypic values with fitness estimates) and their modern extensions (such as aster models). Given the breadth of such searches, a large amount of machinery has been developed, but is rarely presented in a unified fashion. This course presents an integrated overview of all these approaches, highlighting common themes and divergent assumptions.

The goal of this course is to expose investigators from all branches of biology to this rich menagerie of tests, applicable for population geneticists, genome biologists, evolutionary ecologists, paleontologists, functional morphologists, and just about any biologist who ponders on

how to formally demonstrate that a feature (or features) of interest might have been shaped by selection.

Intended Audience. The intended audience is advanced graduate students, postdocs, and faculty with an interest in searching for targets of selection, be they particular genomic sequences or specific traits. Given the breadth of this topic, the material is of interest to students from functional genomics, population and evolutionary genetics, ecology, paleobiology, functional morphology, and statistics (as well as other fields). Background required: some basic introduction to population and/or quantitative genetics.

Optional Reading: This course is based on material from Chapters 8-10, 12, and 29-30 in Walsh and Lynch (2018) *Evolution and Selection of Quantitative Traits* (Oxford). While this text is not required, it does present much more detail discussion (with detailed references) of the material to be covered.

Lectures

Day 1: Tests of neutral trait divergence (WL Chapter 12) Lecture 1: Drift in the mean of Quantitative Traits Lecture 2: Rate-based and time-series based tests Lecture 3: Q_{st} vs F_{st} Lecture 4: Orr QTL tests (and their extensions)

Day 2: Tests based on Molecular Data I (WL Chapters 8, 9) Lecture 5: Sweep theory Lecture 6: Genome-wide Signatures from repeated past selection Lecture 7: Polymorphism-based tests 1: Allele frequency changes and Lewontin-Krakauer tests Lecture 8: Polymorphism-based tests 2: Genome pattern-based tests and SFS tests

Day 3: Tests based on Molecular Data II (WL Chapters 9, 10) Lecture 9: Polymorphism-based tests 3: Haplotype-based tests Lecture 10: Polymorphism-based tests 4: Domestication genes and other examples Lecture 11: Divergence-based tests 1: HKA and MK tests Lecture 12: Divergence-based tests 2: Rate of adaptive substitutions, Poisson random field models

Day 4: Estimating Individual fitness (WL Chapter 29) Lecture 13: Episodes of Selection and the Assignment of Fitness Lecture 14: Variance in Individual Fitness, Bateman gradients, Trait-fitness associations I Lecture 15: Descriptions of Phenotypic Selection 1: Basics Lecture 16: Descriptions of Phenotypic Selection 2: Fitness surfaces

Day 5: Trait-fitness associations II (WL Chapter 30) Lecture 17: Multivariate selection 1: Basics Lecture 18: Multivariate selection 2: Fitness surfaces Lecture 19: Final topics and wrap-up

Gregor Gorjanc <gregor.gorjanc@roslin.ed.ac.uk>

HongKong IntroPhylogenetics Oct22-27

C3BI courses: Introduction to Molecular Phylogenetics, Hong Kong 2018

General Information

This introductory course aims to give the basic theoretical and practical concepts,

best practices, and software necessary to start working on molecular phylogenetics.

The course will have theoretical morning sessions followed by small groups practice

for a few selected students with their own data.

Topics:

- Introduction to phylogeny, general principles and application to infectious diseases
- Interpreting phylogenetic trees
- Introduction to the math behind the trees and evolutionary models
- Distance methods and bootstrapping
- Parsimony methods
- Maximum likelihood methods
- Bayesian methods
- Evolutionary processes and how to detect positive selection
- How to select the best method
- Molecular epidemiology

Course dates:

Monday, October 22nd to Saturday, October 27th (morning)

Deadline for applications: August 20, registration web site:

<https://c3bi.pasteur.fr/c3bi-courses-introduction-to-molecular-phylogenetics-hong-kong-2018-2/>

Pre-requisites:

- Basic knowledge on how to use sequence databanks
- Basic knowledge using Blast and multiple alignments software

- Basic knowledge on statistics (tests, distributions, parameter estimation)

Selection:

Prospective students for the practice afternoons (20 maximum) will be selected on the

basis of their data and the analysis they wish to perform. For the theoretical mornings,

the selection will be first come first served.

Location:

The course will be held in the University of Hong-Kong. The official language for the course

will be English.

Price:

The course will be free for participants coming from the Institut Pasteur International Network,

whereas all other students will pay 500HKD if they assist to the theoretical morning and,

1000HKD if they are selected to the full course (theory and practice).

The Institut Pasteur will offer travel grants to some selected students coming from the

Institut Pasteur International Network.

Sponsors:

This course is supported by the Institut Pasteur, HKU-Pasteur Research Pole, and The University of Hong Kong

Olivier GASCUEL <olivier.gascuel@pasteur.fr>

IndianaU NovoTranscriptome Oct1-3 DeadlineAug6

Supercomputing for Everyone Series: de novo assembly of transcriptomes using HPC resources workshop

APPLICATION DEADLINE MONDAY, AUGUST 6th!

The National Center for Genome Analysis Support (NCGAS) at Indiana University seeks interested participants for this FREE National Science Foundation-sponsored two-day workshop.

Registration page: <http://go.iu.edu/21IC> NCGAS is offering a National Science Foundation-sponsored, two-day workshop on high performance computing (HPC) usage

and de novo transcriptome assembly. It will take place October 1-2 on the IU Bloomington campus. There are limited spots on October 3 to have one-on-one consultation sessions with NCGAS Staff. Registration is free, but application is required.

The workshop will include discussions, lectures, and hands-on tutorials to cover topics important to getting started constructing and analyzing transcriptomes without the use of a genome. Material covers both the availability and use of HPC resources, alongside the task of assembling a new transcriptome, in order to provide a more comprehensive preparation for this and future bioinformatic tasks.

Transcriptome assembly will consist of using four separate assemblers (Trinity, SOAP de novo, Velvet Oases, and TransABySS), with multiple kmers, to be combined and curated with Evidenceminer. This combined assembly with multiple parameters is considered much more robust than simply using one assembler, and the NCGAS pipeline streamlines the process and allows for customization if desired.

While material will make heavy use of XSEDE and IU machines, the material is transferable to any cluster.

Please direct questions to ss93@iu.edu??

Sheri Sanders Bioinformatic Analyst National Center for Genome Analysis and Support (NCGAS)

NCGAS is part of the Research Technologies division of UITS; Research Technologies is a PTI Cyberinfrastructure & Service Center.

“Sanders, Sheri” <ss93@iu.edu>

Norway

PolyloidPopulationGenetics Dec1-7

[2nd call; Application deadline approaching!]

Population genetics of polyploids, from theory to practice -> This hands-on course will take place in the Drøbak Marine Research Station (near Oslo, Norway) from the 1st to the 7th of December 2018.

Location info: <https://www.mn.uio.no/ibv/english/-research/sections/aqua/Infrastructure/biological-station/> Confirmed teachers: Filip Kolář*, Patrick Meirmans*, Marc Stift*, Olivier Hardy, Camille Roux, Patrick Monnahan *course organisers Course dates: 1-7 Dec 2018 Application deadline: September 1st 2018.

More details and preliminary program: <https://www.forbio.uio.no/events/courses/2018/-polyploids.html>

Objectives: Polyploidy is widespread and frequent in plants (including many crops), but also occurs in animals such as fish and amphibians. However, our understanding of the genetics of polyploid populations and populations of mixed ploidy is still poor. This is mainly because population genetics theory was originally developed for diploids. Moreover, there is often a gap between theory developed for polyploids and its practical implementation. This practically-oriented course will attempt to bridge this gap. Simulation-based exercises (among others using R) will elucidate theoretical foundations of both diploid and polyploid population genetics. Additionally, analyses of real or realistic example datasets (microsatellite and SNP markers) will give participants hands-on training in several available methods for the population genetic analysis of polyploids.

The exact course contents are not cast in stone, but will include clustering methods with specific attention for the problem of mixed ploidy, evolutionary history reconstruction of polyploid complexes, the effect of mating system variation, and detection of linked selection in polyploid genomes. Participants will also devote time to a group project focused on application of gathered knowledge in further modelling or on analyses of sample or own datasets and discussion of further prospects and methods limitations.

Prerequisites: Basic knowledge of R programming language and general knowledge of population genetic foundations of diploid populations (diversity, differentiation, inbreeding). Experience in scripting in R is useful, but for the beginners there will be an extra R-introductory day before the workshop start.

Costs: course participation is free (!) and includes food and accommodation, but travel arrangements are at own cost. Please apply to participate using the link to the registration form on

<https://www.forbio.uio.no/events/courses/2018/-polyploids.html> where you should upload a ca 200-500 word summary of your research and motivation and the CV, merged in a single PDF file. This should be done no later than September 1st 2018 (we may only consider later applications in case the course is not fully booked). In case the participant is willing to provide his/her own data for the project work (not obligatory), please also upload a short description of your data set (organism, type of markers, analyses done/in progress) and scientific questions addressed. There is a maximum of 16 participants. If needed, we will select participants based on topical relevance and motivation). Members

of ForBio and PhD students will be prioritized (but MSc students and postdocs will also be considered). For non-ForBio members we require registration as ForBio associates (free of charge).

We look forward to your application, Filip, Patrick and Marc.

–

Mit freundlichen Grüßen, with kind regards,

Marc Stift.

Email: marc.stift@uni-konstanz.de = marcstift@gmail.com Accounts are automatically synchronised, so it does not matter to which address you send your message.

Dr. Marc Stift Fach 658 / Ecology / AG van Kleunen
Department of Biology University of Konstanz 78457
Konstanz Germany

Office M802: +49 (0)7531 88-2116 (email contact preferred)

<http://sites.google.com/site/marcstift/> <http://cms.uni-konstanz.de/vkleunen/the-team/marc-stift/> Marc Stift
<marcstift@gmail.com>

Norwich UK 2 Metagenomics RNAseq Sep11-14 Dec3-7

Training Course - Metagenomics: Data Analysis and Interpretation

Start date: 11 September 2018

End date: 14 September 2018

Venue: Earlham Institute, Norwich, UK

Organiser: Prof Neil Hall

Enquiries: training@earlham.ac.uk

Registration deadline: 31 August 2018

Cost: 400

Register here: <https://www.eiseverywhere.com/-metagenomics2018> About: This course will provide an overview of the main aspects involved in metagenomics data analysis and discussion around the interpretation and actual examples of the impact and applications of metagenomics derived research. A substantial part of the course will be devoted to hands-on experience with bioinformatics resources and tools relevant in

metagenomics data analysis. Participants will start with an overview of NGS technologies, a look at experimental approaches and emerging technologies, including a tour of Earlham Institute's Genomic Pipelines laboratories. Then the remainder of the course will be spent in front of the computers learning how to produce metagenomic assemblies, and taking participants from data to publication-ready figures.

For more information, please visit: <http://www.earlham.ac.uk/metagenomics-data-analysis-and-interpretation> Wilfried Haerty Group Leader
Norwich Research Park Norwich Norfolk NR4 7UG
+44 (0) 1603 450 974 wilfried.haerty@earlham.ac.uk
www.earlham.ac.uk —

Training Course - Single-Cell RNAseq

Start date: 03 December 2018

End date: 07 December 2018

Venue: Earlham Institute, Norwich, UK

Organisers: Dr Wilfried Haerty, Dr Iain Macaulay, Dr Graham Etherington

Enquiries: training@earlham.ac.uk

Registration deadline: 07 October 2018 Register here: <https://www.eiseverywhere.com/scrnaseq18> About: The course will provide an introduction to Single Cell Genomics. It covers several aspects such as the experimental design, cell sorting and processing for production of quality samples for sequencing, generation of sequencing data, assessing the quality of sequence data, data visualisation, differential expression analyses and identifying Copy Number Variants at the single cell level.

Laboratory practicals will produce real sequencing data. Provided the quality is high enough, delegates will have the opportunity to interpret the data that they have produced. All theory lectures and hands-on sessions will include best practices and tips as learned first-hand by EI's own faculty.

The course will consist of a mixture of conceptual lectures, methodological lectures and hands on sessions in both the laboratory and computational analyses, as well as ample time for group discussions. Participants will gain first-hand experience in generating two different libraries for sequencing, will understand how to assess data quality working with the assistance of the faculty, and in small groups troubleshooting small problems, and reviewing the results.

For more information, please visit: <http://www.earlham.ac.uk/single-cell-rnaseq-training-course> Wilfried Haerty Group Leader
Norwich Research Park Norwich Norfolk NR4 7UG +44 (0) 1603 450 974 wil-

fried.haerty@earlham.ac.uk www.earlham.ac.uk “Wilfried Haerty (EI)” <Wilfried.Haerty@earlham.ac.uk>

QueensU Belfast Animal Contests Aug29-30

*** Only one week left to register!***

Registration closes Weds 15th August

Interdisciplinary workshop: 'Broader perspectives on animal contests' Wednesday 29th August - Thursday 30th August 2018 Queen's University Belfast

Submit your abstract and register here < <https://contestsworkshop.wordpress.com/registration-abstract-submission/> >.

This ASAB-funded two-day workshop is aimed at anyone studying contests and aggression, as well as those interested in bringing their disciplinary expertise to this area.

We encourage anybody with an interest in contests, from economists to psychologists and biologists, everyone is welcome.

The workshop will include the opportunity for delegates to give short research talks (15-20 min) within themed sessions, as well as a chance for structured discussion concerning timely topics in the contests field.

Confirmed plenary speakers:

- Professor Yuying Hsu | National Taiwan Normal University
- Professor Mike Mesterton-Gibbons | Florida State University
- Dr Dayu Lin | New York University

If you have any questions please contact us at asab.workshop@qub.ac.uk.

Dr Sarah Lane Postdoctoral Research Fellow Marine Biology and Ecology Research Centre Plymouth University Davy 620 01752 584618 <https://sarahlanebehaviour.wordpress.com/> Sarah Lane <sarah.lane@plymouth.ac.uk>

The Wilds Ohio eDNA monitoring Nov5-9

Workshop: Using environmental DNA for surveys and monitoring

Dates: November 5-9, 2018

Location: The Wilds Conservation Science Training Center, Cumberland OH

Instructor: Dr. Stephen Spear, Director of Wildlife Ecology at The Wilds

Environmental DNA is increasingly used as a monitoring tool for aquatic and even some terrestrial species. This week-long workshop will provide a detailed introduction to eDNA methodology and how to apply the method into a monitoring framework. The workshop will have lecture components, but will primarily focus on hands-on lab exercises. The workshop is geared toward focal species eDNA monitoring, although metabarcoding approaches will be discussed. The following topics will be included:

- * Overview of eDNA case studies using both water and soil sampling
- * Collection and filtering of water and soil samples in the field
- * Designing primers for species-specific amplification
- * Laboratory extraction and amplification of eDNA samples using qPCR
- * Interpreting results and analytical tools for using eDNA in monitoring programs.

At the end of the week, each participant will have collected, extracted, and analyzed their own eDNA samples. Participants will also work in groups to design and implement a small eDNA research study during the course of the week.

This workshop is targeted toward both professionals and graduate students with limited first-hand experience with eDNA that are looking to learn more about the method or develop their own eDNA projects. No previous experience is required, although some prior experience in either genetic techniques or monitoring methods would be helpful.

The course will be located at The Wilds (<https://thewilds.columbuszoo.org>), a 10,000 acre AZA conservation center located approximately 90 miles east of Columbus. Our facilities include a low-copy DNA lab, a general lab, classroom, Eastern hellbender conservation center, and many lakes and streams. Hous-

ing is available at the new Wilds cabins at Straker Lake (<https://thewilds.columbuszoo.org/home/visit/-stay-overnight/the-wilds-cabins-at-straker-lake>). The cabins at Straker lake have 3 rooms/ 2 bathrooms per cabin. Each room has two beds. A limited number of spaces at our Conservation Science Training Center cabins will be available for students on a first-come, first-serve basis. Food service will not be available at The Wilds during the workshop, although each cabin comes with a kitchen that will allow participants to prepare their own meals.

Workshop fees and costs: The fee for the workshop is \$700 for professionals and \$500 for students. Housing at the cabins at Straker lake is an additional \$50/person/night for each room if there are two people per room, or \$100/person/night if an individual room is desired. Limited student housing at the CSTC cabins is available for \$62.50 for the entire week.

To register for the workshop or to ask any questions, please contact Stephen Spear at sspear@thewilds.org.

Stephen Spear, PhD Director of Wildlife Ecology The Wilds

“Spear, Stephen” <sspear@thewilds.org>

UBristol UK CerealsDB Sep18-19

*** Only one week left to register ***

Registration closes Monday 20th August

The Cereal genomics group at the University of Bristol are hosting a two-day bioinformatics workshop focussing on the CerealsDB website.

The workshop will take place on Tuesday 18th September and Wednesday 19th September at the Bristol University Life Sciences Building.

We will provide training for life scientists and plant breeders enabling them to explore the wealth of genomic data contained in CerealsDB and related bioinformatics resources.

The content examines the data repositories, resources and web tools available to explore and analyse wheat SNP datasets and introduces the principles of web services for data integration and high-throughput programmatic access to CerealsDB. The course is expected to be of interest to early career plant breeders and researchers with an interest in wheat genomics.

Travel expenses and accommodation will be provided for successful UK candidates.

Interested applicants should contact Paul.Wilkinson@bristol.ac.uk providing information on their background in wheat genomics and their eligibility for this course. Applications are also accepted via the CerealsDB website:

<http://www.cerealsdb.uk.net/cerealgenomics/-CerealsDB/workshop-2018.php> Best regards, Paul Wilkinson

Paul Wilkinson <Paul.Wilkinson@bristol.ac.uk>

UGroningen EvolutionaryDynamics Oct21-26

Postgraduate Course on ‘Community and Ecosystem Dynamics’

This is the second announcement of the winter school for PhD students and Postdocs on Linking Community and Ecosystem Dynamics organized by Research School Ecology & Evolution of the Groningen Institute for Evolutionary Life Sciences (GELIFES; University of Groningen, Netherlands).

The school will be held in the University field station ‘Herdshut’ on the Dutch island of Schiermonnikoog from October 21 - 26 2018.

We are very happy to announce that this year we will have two special guest lecturers: Dr <<https://trishaatwood.weebly.com/people.html>> Trisha B Atwood (Utah State University) and Dr <<http://www.shaipilosofof.info/>> Shai Pilosof (University of Chicago).

Dr Atwood is assistant professor and chair of the Aquatic Ecology and Global Change Lab. She and her team members are interested in three broad research themes across all aquatic ecosystems (marine, estuarine, freshwater, and riparian zones). 1. The effects of global change on aquatic food webs and species interactions. 2. How food webs and species interactions influence ecosystem function. 3. The role of aquatic ecosystems in climate change mitigation and biodiversity conservation.

By focusing on these three broad questions, her research has taken her all over the world with studies in Hawaii, Canada, Costa Rica, and Australia (including The Great Barrier Reef).

Dr Pilosof is postdoctoral scholar at the University of Chicago, at the lab of Mercedes Pascual. He is mostly interested in the application of network theory to ecological systems, specifically in the field of disease ecology. He uses a complex systems approach to study the factors that effect spread of disease in animal communities and from animals to humans. His research is unique as it takes the individual point of view: 1. What is the role of individual heterogeneity in shaping host-parasite interactions at the community level? 2. How does genetic variation affect infection with parasites in different hosts? 3. How does individual heterogeneity translate to efficiency of disease spread in host communities?

Scope of the course

The research fields community and ecosystem ecology have diverged more or less independently over the last decennia. In community ecology progress is made in understanding shifts in community composition under the influence of environmental change and how these shifts can be explained by functional trait approaches of component species. Also, the importance of positive feedbacks in community dynamics is more and more appreciated, and merged with trophic interactions in ecological networks. Studies in ecosystem ecology traditionally have a strong focus on energy and nutrient fluxes and how deviation in these fluxes affect ecosystem functioning and stability. Recent studies reveal tight links between these sub-disciplines that enforce us to rethink how communities and ecosystems interact.

This course focuses on theoretical concepts, such as autocatalytic loops and positive and negative feedbacks between organisms in ecological networks as well as the importance of non-trophic interactions by ecosystem engineers. The course will address how these principles can be used to link communities to ecosystems enabling a better understanding of how environmental changes affect community and ecosystem dynamics. Students will construct ecological networks of their own study system or based on literature data and analyze these using structural equation modelling.

Course Set-up

The course is composed of a series of lectures, a poster session, analyzing ecological networks using structural equation modelling and finalized with a debating session.

Poster session: Prior to the course, participants submit a poster of their work (A4-size) in PDF, which will be printed and included in the course reader. The poster contains your name and affiliation, title and short description of research project (including concepts) with one highlight (something exciting) and the reason you want to participate in this course. During the course,

participants briefly pitch their research (maximum 3 slides) and indicate where they would like to receive input from the course participants and lecturers.

Lectures and discussion: Each day starts with a key speaker who will give a lecture on one of the key course topics (covering both general theory and own research). After the lecture we'll have a discussion which is convened by three participants who challenge the speaker on the lecture and two papers that the speaker submitted which are related to the topic of the lecture (participants will receive these before the course to prepare them self).

Group activities: In the afternoons, participants will be split into working groups, which will work on specific group assignments

— / —

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>

UK IntroductionToBioinformatics Oct28-Nov2v

Introduction to bioinformatics for DNA and RNA sequence analysis (IBDR01)

<https://www.prinformatics.com/course/introduction-to-bioinformatics-for-dna-and-rna-sequence-analysis-ibdr01/>

This course will be delivered by Dr Malachi and Obi Griffith from the 29th October - 2 November 2018 in Glasgow city centre.

Course Overview:

Analysis of high throughput genome and transcriptome data is major component of many research projects ranging from large-scale precision medicine efforts to focused investigations in model systems. This analysis involves the identification of specific genome or transcriptome features that predispose individuals to disease, predict response to therapies, influence diagnosis/prognosis, or provide mechanistic insights into disease models. During this course (IBDR01), students will perform an example end-to-end bioinformatics analysis of genome (WGS and Exome) and transcriptome (RNA-seq) data. Students will start with raw sequence data for a hypothetical case, learn to install and use the tools needed to analyze this data on the cloud, and visualize and interpret results.

After completing the course, students should be in a position to (1) understand raw sequence data formats, (2) perform bioinformatics analyses on the cloud, (3) run complete analysis pipelines for alignment, variant calling, annotation, and RNA-seq (transcriptome analysis approaches will be a major component of the workshop), (4) visualize and interpret whole genome, exome and RNA-seq results, (5) leverage the identification of passenger variants for immunotherapy applications, and (6) begin to place these results in a clinical context by use of variant knowledgebases. The data, tools, and analysis will be most directly relevant to human genomics and bioinformatics research. However, many of the skills and concepts covered will be applicable to other human diseases and model organisms. Furthermore, many analysis concepts covered during the workshop will be broadly applicable to other “big data” research problems. 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 primarily aimed at researchers and technical workers with a background in biology who want to learn fundamental bioinformatics skills for genomics with a particular emphasis on biomedical research applications. The course is essentially a crash course in bioinformatics for next generation sequence data analysis. It would also be useful for students with a computational background who seek an introduction to genomics technology and analysis approaches. In general, it is suitable for anyone working with genome or transcriptome (RNA-seq) data in the context of disease research. Attendees are encouraged to bring their own data or project outlines for discussion. Some time during the course will be dedicated to consultation with a team of instructors from the McDonnell Genome Institute.

Monday 29th - Classes from 09:30 to 17:30

Session 1. Introduction to genomics and bioinformatics. In this session, students will be introduced to key concepts of genomics and their application to genomics research and precision medicine in cancer. An introduction to next-generation sequencing platforms and related bioinformatics approaches will also be provided. Core concepts and tools introduced: fundamentals of genome and transcriptome analysis, next-generation sequencing, precision/personalized medicine approaches (using cancer as an exemplar disease).

Session 2. Introduction to genomics data, file formats, QC, and cloud analysis.

In this session, students will be introduced to a hypo-

thetical patient case and related samples to be analyzed throughout the course. Students will be provided with an introduction to the whole genome, exome, transcriptome and other data sets we have generated for this test case. Information on where to get the raw data and how to access it (and other test data) will be provided. Using this data as an example, the students will learn fundamentals of next generation sequence (NGS) data formats. The students will also be introduced to accessory files needed for analysis including reference genomes, reference transcriptomes, and annotation files. Tools for QC analysis of raw data will be demonstrated. Since most analysis will be performed on the cloud, each student will learn how to launch and log into their own cloud compute environment. Students will learn how to install bioinformatics tools and learn to use some of the most broadly useful tool kits for NGS data. Core concepts and tools introduced: file formats (Fasta, FastQ, SAM/BAM/CRAM, VCF, GTF), bed-tools, Picard, samtools, fastQC, cloud computing (AWS, EC2).

Tuesday 30th - Classes from 09:30 to 17:30

— / —

This message has been arbitrarily truncated at 5000 characters. To read the entire message look it up at <http://life.biology.mcmaster.ca/~brian/evodir.html>

UK PhylogeneticComparativeMethods Nov5-8

Phylogenetic comparative methods for studying diversification and phenotypic evolution (PCME01)

<https://www.prstatistics.com/course/phylogenetic-comparative-methods-for-studying-diversification-and-phenotypic-evolution-pcme01/> This course will be delivered by Dr. Antigoni Kaliontzopoulou in Glasgow City Centre from 5th - 8th November 2018.

Please feel free to share anywhere you see fit.

Course Overview: Phylogenetic comparative methods are commonly used nowadays to investigate how species diversification occurs and to test hypotheses about the mechanisms that drive phenotypic evolution, e.g. to model speciation and extinction, to understand why some groups are more diverse than others, to test

whether phenotypic traits have evolved under neutral, directional or diversifying selection, to investigate how evolutionary rates are modified across the evolutionary history of a group etc. In all these cases, a phylogenetic hypothesis for the group of interest is combined to phenotypic and ecological data at the species level to understand the tempo and mode of evolutionary change.

The objective of this course is to provide an overview of these methods and of the tools available for their implementation in the R statistical language. During theoretical sessions, we will review the main concepts and statistical tools necessary for testing hypotheses about species diversification and phenotypic evolution. These will then be implemented during practical's through worked examples to provide the participants with hands-on experience on data management and the implementation of these methods to real biological data.

Intended Audience Research postgraduates, practicing academics and primary investigators in evolutionary ecology with interest for any kind of studies involving evolutionary inferences across phylogenetically related species.

Monday 29th 9:00 - 9:30: Introductions 9:30 - 10:30: Why do we need PCMs? A short history of the field 11:00 - 12:00: Testing for phylogenetic signal 13:00 - 14:00: Ancestral character reconstruction 14:30 - 17:30: PRACTICALS

Tuesday 30th Testing hypotheses on phenotypic evolution 9:00 - 10:30: Phylogenetic independent contrasts and phylogenetic GLS 11:00 - 12:30: Phylogenetically-informed ordination 14:30 - 17:30: PRACTICALS

Wednesday 31st Tempo and mode of evolutionary change 9:00 - 10:30: Evolutionary rates: estimation and tests 11:00 - 12:30: Models of phenotypic evolution 14:30 - 17:30: PRACTICALS

Thursday 1st Miscellanea 9:00 - 10:30: Modelling lineage diversification 11:00 - 12:30: Future perspectives: multivariate extensions to PCMs 14:30 - 17:30: PRAC-

TICALS

Email oliverhooker@prstatistics.com Check out our sister sites, www.PRstatistics.com (Ecology and Life Sciences) www.PRinformatics.com (Bioinformatics and data science) www.PSstatistics.com (Behaviour and cognition)

1. October 1st - 5th TIME SERIES MODELS FOR ECOLOGISTS (TSME02) Glasgow, Dr Andrew Parnell <https://www.prstatistics.com/course/time-series-models-foe-ecologists-tsme02/>

2. October 1st - 5th 2018 INTRODUCTION TO LINUX WORKFLOWS FOR BIOLOGISTS (IBUL03) Glasgow, Scotland, Dr. Martin Jones <https://www.prinformatics.com/course/-introduction-to-linux-workflows-for-biologists-ibul03/>

3. October 8th - 12th 2018 INTRODUCTION TO FREQUENTIST AND BAYESIAN MIXED (HIERARCHICAL) MODELS (IFBM01) Glasgow, Scotland, Dr Andrew Parnell <https://www.psstatistics.com/course/-introduction-to-frequentis-and-bayesian-mixed-models-ifbm01/>

4. October 15th - 19th 2018 APPLIED BAYESIAN MODELLING FOR ECOLOGISTS AND EPIDEMIOLOGISTS (ABME04) Glasgow, Scotland, Dr. Matt Denwood, Emma Howard <http://www.prstatistics.com/course/applied-bayesian-modelling-ecologists-epidemiologists-abme04/>

5. October 23rd - 25th 2018 INTRODUCTIUN TO R (This is a private 'in-house' course) London, England, Dr William Hoppitt

6. October 29th - November 2nd 2018 INTRODUCTION TO R AND STATISTICS FOR BIOLOGISTS (IRFB02) Glasgow, Scotland, Dr. Olivier Gauthier <https://www.prstatistics.com/course/-introduction-to-statistics-and-r-for-biologists-irfb02/>

7. October 29th - November 2nd 2018

— / —

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>

Instructions

Instructions: To be added to the EvoDir 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 EvoDir 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 EvoDir direct them to the email evodir@evol.biology.McMaster.CA. Do not include encoded attachments and do not send it as Word files, as HTML files, as L^AT_EX files, Excel files, etc. . . . plain old ASCII will work great and can be read by everyone. Add a subject header that contains the correct category “Conference:, Graduate position:, Job:, Other:, Postdoc:, Workshop:” and then the message stands a better chance of being correctly parsed. Note that the colon is mandatory.

The message will be stored until the middle of the night (local time). At a predetermined time, the collected messages will be captured and then processed by programs and filters. If the message is caught by one of the filters (e.g. a subject header is not correctly formatted) the message will be sent to me at Golding@McMaster.CA and processed later. In either case, please do not expect an instant response.

Afterword

This program is an attempt to automatically process a broad variety of e-mail messages. Most preformatting is collapsed to save space. At the current time, many features may be incorrectly handled and some email messages may be positively mauled. Although this is being produced by L^AT_EX do not try to embed L^AT_EX or T_EX in your message (or other formats) since my program will strip these from the message.