



Congress of the European Society
for Evolutionary Biology

Congress Program & Information

August 10 - 14, 2015

Lausanne, Switzerland

unil.ch/eseb2015

@eseb2015

#eseb15

Unil

UNIL | Université de Lausanne

Département d'écologie
et évolution



UNIL campus overview

The congress will take place in three main buildings of UNIL, the **Amphipôle (POL)**, the **Amphimax (MAX)**, and the **Génopode (GEN)**. Access to this section of campus is easiest via the M1 metro stop **UNIL-Sorge**.

Lunch throughout the conference will be served at the **Unithèque**. The conference dinner on the last evening of the meeting will also be held at the Unithèque.

Childcare is provided by La Croq'cinelle in the **Anthropole**, a 10 minute walk from the buildings where sessions will occur. Access to childcare from Lausanne city is easiest via the M1 metro stop **UNIL-Dorigny**.

m1 UNIL-Sorge m1 UNIL-Mouline m1 UNIL-Dorigny

m1/metro

MAX / L'Amphimax

POL / L'Amphipôle

GEN / Le Génopode

i info / registration

fork lunch

child care

ATM (bancomat)

to the lake

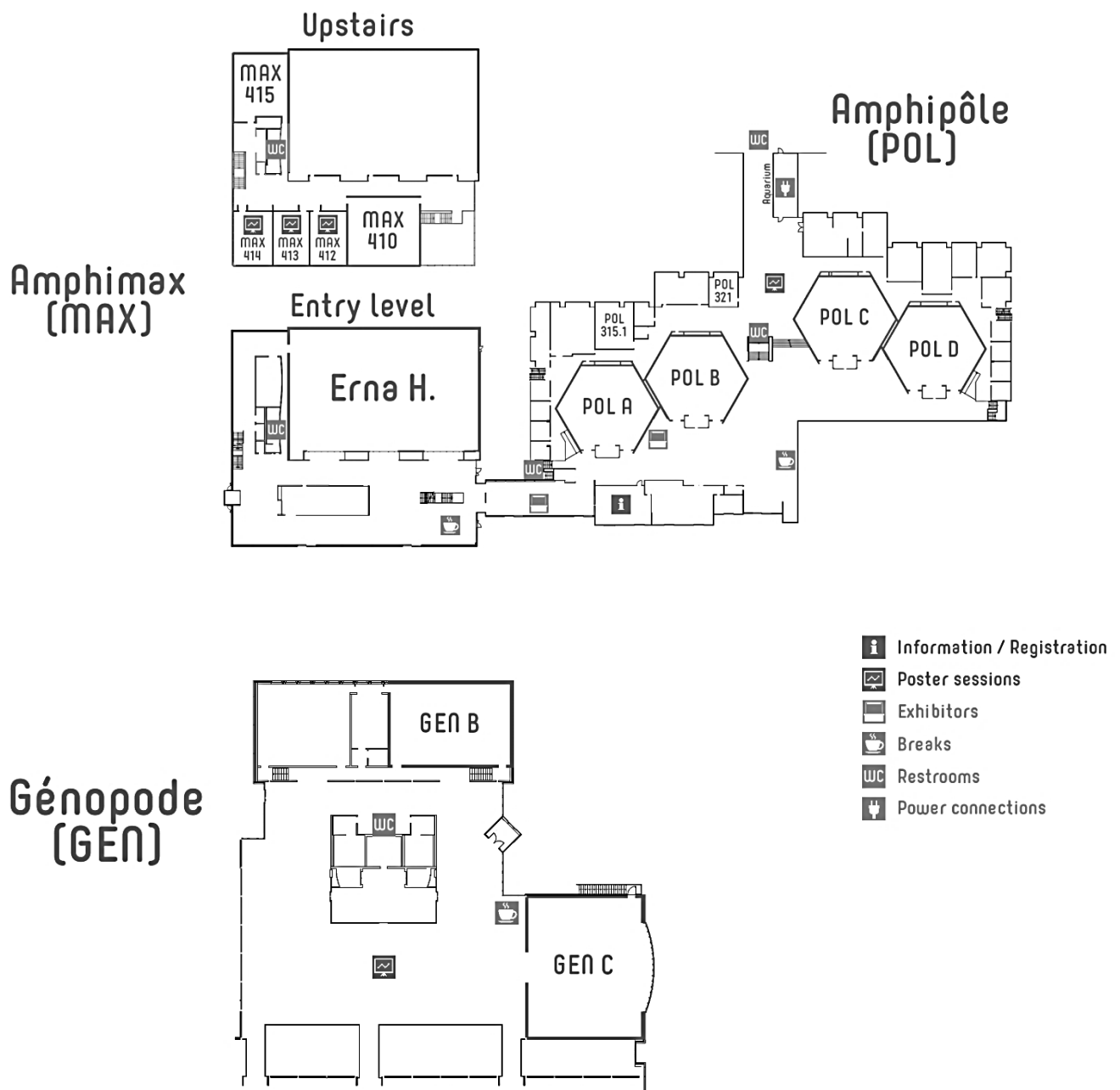
Primary buildings

Participants may pick up their conference bags and badges at the welcome reception or anytime thereafter in the Amphipôle in **POL-303 – Anthropos Café**.

Opening remarks, plenary sessions, the presidential address, and John Maynard Smith prize talks will take place in the **Auditorium Erna Hamburger** in the Amphimax. Concurrent sessions will take place in four rooms in the Amphipôle (**POL-A, POL-B, POL-C, and POL-D**), two rooms in the Amphimax (**MAX-410 and MAX-415**), and two rooms in the Génopode (**GEN-B and GEN-C**). Coffee breaks will be held in all three buildings.

Poster sessions will take place in **POL-300, GEN-2000, MAX-412, MAX-413, and MAX-414**.

Conference attendees can access the internet throughout campus via Wi-Fi (guest-unil network, password eseb2015) and can plug in their laptops (adapter required) in POL-342.6, the **Aquarium**.



Key information

Travel and transport

ESEB 2015 will take place at the Dorigny campus of the University of Lausanne (UNIL), with some events occurring in the city of Lausanne. There are regular trains between Lausanne and both the Geneva and Zurich airports. Departure and arrival times can be found on www.sbb.ch/en.

The UNIL campus is located west of Lausanne. The easiest way to reach the campus from Lausanne-Flon in the city center is to take the metro line M1, direction Renens Gare, and stop at UNIL-Sorge. The M2 line runs between Ouchy in the south, on the shore of Lake Geneva, and Les Croisettes to the north. The two metro lines meet at Lausanne-Flon. Transport on the M1 and M2, as well as all of the buses in Lausanne, is free for all Congress participants with a personal transport card provided by the hotels at check-in. Without this transportation card, a single ticket will cost CHF 3.60 and a day pass (carte journalière) costs CHF 9.00. For those Congress participants who will drive to the venue, parking on the campus is free throughout the meeting.

More information about accommodation, entertainment, and transport is available on the website of Lausanne Tourisme (<http://www.lausanne-tourisme.ch/en/>). A map of the city is provided in your conference bag and the inside back cover of this program.

Registration and information desk

The congress bag, T-shirts, and any general information can be obtained at the Amphipôle in POL-303 – Anthropos Café, beginning Sunday, August 9th during the welcome reception. The conference bag includes this booklet, a campus and building map, a city map, lunch vouchers, and other material from our sponsors.

Staff

Congress staff will be easily identified by their orange ESEB 2015 T-shirts and will be able to answer any questions about the venue.

Internet

Conference attendees can access the internet throughout campus via Wi-Fi (guest-unil network, password eseb2015) and can plug in their laptops in POL-342.6, the Aquarium. Attendees without Swiss power plugs will need an adapter.

Breakfast, breaks, and lunch

Complimentary breakfast (coffee and croissant) will be available daily at the Amphimax cafeteria (MAX-301) from 8:00-8:50. Coffee will be available during breaks between sessions in all three of the primary buildings. Lunch will be available only at the Unithèque, and will consist of a choice among 5 menus, with vegetarian options. Tap water will be available; no bottled beverage will be included.

Talk and poster abstracts

The complete schedule of talks and posters, along with abstracts, is available online at <http://wp.unil.ch/eseb2015/> and also via the Guidebook application (<https://guidebook.com/g/ESEB2015/>).

Talks

Invited talks will be 27 minutes long and normal contributed talks will be 17 minutes long, including discussion. An additional 3 minutes is provided to change rooms.

It will not be possible to connect your own laptop for the presentation. Instead, we have asked you to upload your slides on a cloud-based system prior to the conference (a personal link should have been sent to you by e-mail). It is possible to modify your presentation at any time, but we would like your final version to be uploaded the day before your talk at the latest. We can accommodate Powerpoint or Keynote presentations, but we recommend that you also upload a PDF version of your presentation in case of compatibility issues. If you have any problems uploading your presentation, send an e-mail to eseb2015@unil.ch, with subject "presentation upload". There will be an opportunity to check your presentation on site before your talk in POL-321. All session rooms will be equipped with Mac laptops.

Posters

There will be two poster sessions (A and B) and three locations: Amphimax (MAX-412, MAX-413, MAX-414), Amphipôle (POL-300) and Genopode (GEN-2000).

Session A posters will be presented on **Monday, August 10th, 17:40-19:40.**

Session B posters will be presented on **Thursday, August 13th, 17:40-19:40.**

Both sessions will be combined with an apero: authors will be asked to stand in front of their poster with drinks (provided) and fill the glasses of attendees.

Session A posters will be displayed from Monday until Wednesday morning. You may place your poster during the Welcome reception (poster rooms will be open from 18:00 to 21:00). Retrieve your poster by Wednesday 11:30 at the latest.

Session B posters will be displayed from Wednesday afternoon until Friday afternoon. You may place your poster from Wednesday 12:30. Retrieve your poster by Friday 18:00 at the latest.

Wooden panels and pins will be provided for you to pin your poster. Panels will be numbered; each can accommodate two posters on each side (i.e. four in total). The maximal size for posters is 120 cm height and 90 cm width (A0 size vertical posters fit well).

Childcare

Free childcare will be provided on the campus for children 0 – 60 months old, throughout the conference (10th-14th of August, 8:00 to 18:00). Childcare is provided by La Croq'cinelle, part of the University childcare system, in the Anthropole. Access to the Anthropole is easiest via the M1 metro stop **UNIL-Dorigny**.

Contact info

eseb2015@unil.ch

ESEB help desk	+41 (0)21 692 23 44
Emergency	+41 (0)21 692 20 00
Taxi services	+41 (0)844 814 814
	+41 (0)844 810 810

Plenary lectures (Erna Hamburger Auditorium)

Judith Mank

Monday, August 10th at 9:10

University College London

"The genomic basis of sexual dimorphism"

Jane Reid

Tuesday, August 11th at 9:00

University of Aberdeen

"Dissecting the evolutionary ecology of reproductive strategies in the wild"

Kevin Foster

Wednesday, August 12th at 9:00

University of Oxford

"Social evolution in microbes: from model systems to the microbiome"

Dan Tawfik

Thursday, August 13th at 9:00

Weizmann Institute of Science

"How do proteins evolve?"

Hopi Hoekstra

Friday, August 14th at 9:00

Harvard University

"Digging for genes that affect behavior"

Presidential address (Erna Hamburger Auditorium)

Laurent Keller

Friday, August 14th at 14:45

University of Lausanne

"Supergenes, sex, and sociality"

John Maynard Smith Prize 2014 (Erna Hamburger Auditorium)

Laurie Stevison

Friday, August 14th at 15:30

Auburn University

"The timescale of recombination rate evolution in great apes"

John Maynard Smith Prize 2015 (Erna Hamburger Auditorium)

Matthew Hartfield

Friday, August 14th at 16:40

University of Toronto

"Mathematical adventures in sex and disease evolution"

Satellite activities

Meet the DFG (Tuesday, August 11th at 13:40 in MAX-415)

Christoph Limbach, Lutz Becks, and Susanne Foitzik

The German Research Foundation (DFG) – Funding programs for early career researchers. This talk is addressed to researchers at an early stage of their scientific careers (e.g. advanced PhD students, postdocs, junior research group leaders). It aims to introduce the German Research Foundation (DFG) as the largest research funding organization in Germany and DFG's funding programs for early career researchers from Germany and abroad. Application and review procedures will be presented and recent developments discussed. Experienced scientists will share their experiences relating to their scientific careers and disclose some tips and tricks for grant writing. No registration required!

Meet the Editors (Tuesday, August 11th at 17:40 in POL-A)

This workshop will offer participants the possibility of interacting with the Editors of a few selected leading journals, including Mike Ritchie (J Evol Biol), Spencer Barrett (Proc R Soc B), Loren Riesenber (Mol Ecol), Dries Bonte (Oikos), Christopher Foote (BMC Evol Biol), Roland Roberts (PLoS Biology), Laura Zahn (Science), Vera Domingues (Nature Com) and Patrick Goymer (Nature).

Meet the NSF (Thursday, August 13th at 13:40 in MAX-415)

George Gilchrist and Leslie Rissler

The National Science Foundation (NSF) — US NSF supports basic research in all areas of science. We will discuss funding opportunities in the Biological Sciences Directorate (BIO), the process of applying for funding, and the characteristics of successful proposals. Special attention will be given to international programs and CAREER awards for early stage scientists. Come with your questions, no registration required!

ESEB members meeting (Friday, August 14th at 13:40 in Erna Hamburger)

We invite all ESEB members to our members' meeting in the plenary hall Erna Hamburger on Friday the 14th of August at 13:40! The members' meeting discusses important issues for our society, this year including foundation of a new journal (Evolution Letters), information on new exciting ESEB initiatives and awards, decision on future congress locations, the society's budget, and also news on our existing journal (Journal of Evolutionary Biology). So do not miss it and join us for the members' meeting!

ESEB Business Meetings

JEB Editorial Board Meeting (Sunday, August 9th, 9:00-12:00 in the meeting room of Hotel Alpha-Palmiers, Lausanne)

ESEB Steering Committee Meeting (Sunday, August 9th, 12:00-18:00 in the meeting room of Hotel Alpha-Palmiers, Lausanne)

ESEB Council Meeting (Monday, August 10th, 13:00-14:40, in POL 315.1)

Social events and excursions

Welcome reception

The welcome reception will take place on campus, in front of the Amphimax. Food and drinks will be served on Sunday, August 9th, from 17:00 to 22:00. You will need to check in at the registration desk beforehand (POL-303 – Anthropos Café) and get your personal badge in order to be allowed to attend. You will also be able to obtain your conference bag, and to pin your poster for Session A.

Congress bar

A conference bar will be available Monday-Thursday evenings from 20:00 until 24:00 in the Casino de Montbenon, in the center of the city of Lausanne.

Gala dinner

The conference dinner will be held on the Dorigny campus of the University of Lausanne at the Unithèque on Friday, August 14th from 19:00. Live music will begin at 21:00 and festivities will continue until 2:00.

Excursions

Wednesday afternoon will be free to allow attendees to explore the Lausanne region. We have proposed three excursions organised by Lausanne Tourisme. Check the website for additional details and up to date information on the trips. Packed lunches will be provided.

- Lausanne city walking tour and wine-tasting excursion to Lavaux

Meet 13:45 at Place de la Riponne, in front of the Tourist Office “Palais de Rumine” (metro stop Riponne, M2 line). Return by 19:40. Packed lunches will be provided.
70 CHF

- Public cruise with the “Montreux” Belle Epoque paddle steamer

Meet at 13:45 at dock number 3, Lausanne-Ouchy (metro stop Lausanne-Ouchy, M2 line). Return by 17:45. Packed lunches will be provided.
50 CHF

- Rochers-de-Naye, 2042 m. altitude

Meet 14:00 at Lausanne train station. Return by 23:14. Packed lunches will be provided.
125 CHF

Outreach

We are excited to announce a series of events at ESEB 2015 that are open to the general public.

- A **workshop on “Actively learning evolution”**: Sunday 9th August (full day). We will explore methods and resources available for the enquiry-based teaching of evolution. Speakers will present effective teaching methods, the latest research discoveries in the field of evolution and participants will take part in hands-on activities that they can take back to their classroom/lecture.

- **Tweet chats** (Tuesday, August 11th 18:00-19:00)

Two parallel discussions, one in French and the other in English, with science-loving tweeters about the evolution of sex. To participate, tweet to:

@LCE_fr (for the discussion in French)

@LCE_en (for the discussion in English)

Or, simply follow the discussion:

#evosexfr (French)

#evosexen (English)

- **Questions of the day**: questions collected from the public about evolutionary biology related topics will be answered by ESEB participants before the congress and posted to our Facebook page in daily installments throughout the conference.

- **Scientist speed dating** (full): a series of short discussions between scientists and the public in an informal and relaxed environment at the bar of Casino Montbenon on Thursday , August 13th at 20:00.

If you want to collaborate or learn more about these outreach projects, please contact us at outreach2015eseb@gmail.com. You can also follow our updates on our web page <http://outreachateseb2015.tumblr.com/> or on our Facebook page <https://www.facebook.com/LCE15>.

List of symposia

Sex and sexes

1. Ecology and the evolution of sex.

Organizers: Lutz Becks, Hanna Koch

Invited speakers: Levi Morran and Tanja Schwander

2. What is new in the study of sex allocation?

Organizers: Bram Kuijper, Sara Magalhaes

Invited speakers: Lukas Schärer and Lisa Schwanz

3. The evolution of sex chromosomes.

Organizers: Susana Coelho, Nicolas Perrin

Invited speakers: Doris Bachtrog and James Umen

4. Evolutionary consequences of sexually antagonistic selection.

Organizers: Brian Hollis, Göran Arnqvist

Invited speakers: Stephen Chenoweth and William Rice

5. Novel insights in the genetics of sex-specific variation.

Organizers: Elina Immonen, Holger Schielzeth

Invited speakers: Daphne Fairbairn and Tim Connallon

Social interactions

6. Mating system evolution: unifying theory and test.

Organizers: Greta Bocedi, Francisco Garcia-Gonzalez

Invited speakers: Suzanne Alonzo, Aneil Agrawal

7. Social evolution and sexual conflict.

Organizers: Tommaso Pizzari, Jay Biernaskie

Invited speakers: Andy Gardner and Tracey Chapman

8. Cooperation without kinship: from genomes to mutualisms.

Organizers: Arvid Ågren, Kevin Foster

Invited speakers: Justin Blumenstiel and Toby Kiers

9. Evolutionary ecology of cooperation: theory and experiment.

Organizers: Dusan Misevic, Sam Brown

Invited speakers: Ashleigh Griffin and Jeff Gore

Interspecific interactions

10. Adaptation in heterogeneous environments: insights from host-parasite systems.

Organizers: Nicolas Rode, Florence Débarre

Invited speakers: Anna-Liisa Laine and Alex Hall

11. Host defence in a parasitized world: selection, evolution and the maintenance of variation.

Organizers: Barbara Tschirren, Lars Råberg

Invited speakers: Andrea L. Graham and Brian P. Lazzaro

12. Next-generation phylodynamics.

Organizers: Tanja Stadler, Alexei Drummond

Invited speakers: Gabriel Leventhal and Katja Koelle

13. Evolutionary analysis of ecological communities.

Organizers: Brent Emerson, Andres Baselga

Invited speakers: Mike Hickerson and Catherine Graham

14. Experimental evolution and ecology of (microbial and other) ecosystems.

Organizers: Sijmen Schoustra, Susanne Kraemer

Invited speakers: Susanna Remold and Tom Bell

Genome evolution

15. Evolution of genomes.

Organizers: Alexandre Reymond, Laurent Keller

Invited speakers: Evan Eichler and Lucia Carbone

16. Evolutionary consequences of selfish genetic elements.

Organizers: Tom Price, Anna Lindholm

Invited speakers: Gerry Wilkinson and Laura Ross

17. Polyploid evolution: Integrating ecological and genomic studies.

Organizers: Mario Vallejo-Marin, Richard Buggs

Invited speakers: Christian Parisod and Andrea Harper

18. How to identify and test the loci and alleles underlying adaptation?

Organizers: Paul Schmidt, Thomas Flatt

Invited speakers: Felicity Jones and Alistair McGregor

19. Ignoramus et ignorabimus? – How much genome scans can and should tell us about evolution.

Organizers: Daniel Berner, Marius Roesti

Invited speakers: Matthew Rockman and Rasmus Nielsen

20. Genomics of local adaptation.

Organizers: Santiago Gonzalez-Martinez, Martin Lascoux

Invited speakers: Outi Savolainen and Thomas Mitchell-Olds

Plasticity, epigenetics and behaviour

21. The evolution of phenotypic plasticity within and across generations.

Organizers: Matthew Walsh, Steve Munch

Invited speakers: Cameron Ghalambor and Eva Jablonka

22. Evolutionary epigenetics: switching from models to the field.

Organizers: Conchita Alonso, Ovidiu Paun

Invited speakers: Koen Verhoeven and Annalisa Varriale

23. Emerging ‘models’ in evolutionary and ecological neurobiology.

Organizers: Stephen Montgomery, Alison Wright

Invited speakers: Katie Peichel and Niklas Kolm

24. Evolution of behavioral variation.

Organizers: Barbara Feldmeyer, Susanne Foitzik

Invited speakers: Seirian Sumner and Jürgen Gadau

Microbe evolution

25. Groups versus individuals: levels of selection in microbial systems.

Organizers: Christian Kost, Martin Ackermann

Invited speakers: Martin Polz and Thierry Emonet

26. Real-time bacterial evolution in vivo and in vitro.

Organizers: Daniel Wilson, Craig MacLean

Invited speakers: Sebastien Gagneux and Rasmus Lykke Marvig

Selection / adaptation

27. Ecology and evolution of floral signals.

Organizers: Florian Schiestl, Martin von Arx

Invited speakers: Brian Smith and Santiago Benitez-Vieyra

28. Variation in natural selection: patterns, causes, and consequences.

Organizers: Anne Charmantier, Michael Morrissey

Invited speakers: Christina Caruso and Luis-Miguel Chevin

29. The evolution and ecology of trait loss and dependency.

Organizers: Jacintha Eilers, Fabrice Vavre

Invited speakers: Sonia Pascoal and Amparo Latorre

30. Protein evolution: structural and functional perspective.

Organizers: Romain Studer, Maria Anisimova

Invited speakers: Dan S. Tawfik and Richard A. Goldstein

31. Melanism: macrophysiology to molecules.

Organizers: Subhash Rajpurohit, Paul Schmidt

Invited speakers: Alexandre Roulin and Aya Takahashi

32. Forecasting eco-evolutionary responses to global changes.

Organizers: Frédéric Guillaume, Ophélie Ronce

Invited speakers: Katja Schiffrers and Liana Burghardt

Speciation

33. The molecular basis of adaptation and ecological speciation.

Organizers: Philipp Schlüter, Shuqing Xu

Invited speakers: Mark Rausher and Beverley Glover

34. Charting the genomic landscape of speciation.

Organizers: Anja Marie Westram, Mark Ravinet

Invited speakers: Nicolas Bierne and Mohamed Noor

Open symposium

35. Open symposium.

Organizers: John Pannell, Laurent Keller

Program summary

SUNDAY 9	MONDAY 10	TUESDAY 11	WEDNESDAY 12	THURSDAY 13	FRIDAY 14
	breakfast				
	keynote lectures				
	symposia # 1 5 6 13 14 15 28 34	symposia # 3 8 11 20 21 28 30 33	symposia # 2 7 11 20 21 29 33 35	symposia # 4 9 10 18 24 26 32 35	symposia # 12 16 17 19 22 23 31 35
	Meet the DFG lunch Meet the NSF ESEB members				
	symposia # 1 5 6 13 14 15 28 34	symposia # 3 8 11 20 21 27 28 33 35		symposia # 4 9 10 18 24 25 32 35	Presidential address JMS prizes Closing ceremony
welcome reception	poster session A	meet the editors		poster session B	
					conference dinner

MONDAY, AUGUST 10TH

8:00	Complimentary breakfast			
8:50	Opening			
9:10	Judith Mank University College London The genomic basis of sexual dimorphism <i>Erna Hamburger Auditorium</i>			
10:00				
	Symposium 28 Variation in natural selection: patterns, causes, and consequences <i>POL A</i>	Symposium 15 Evolution of genomes <i>POL B</i>	Symposium 14 Experimental evolution and ecology of (microbial and other) ecosystems <i>POL C</i>	Symposium 34 Charting the genomic landscape of speciation <i>POL D</i>
10:10	Identifying the causes of natural selection: What have we learned from 25 years of experiments? Caruso C.	The gibbon genome: Swinging between evolution, speciation and disease Carbone L.	Stalking the elusive generalist: Understanding the relationship between the fundamental and realized niches of <i>Pseudomonas</i> in the home Remold S.	Inversions as barriers to recombination and facilitators of speciation: Studies in <i>Drosophila pseudoobscura</i> / <i>D. persimilis</i> Noor M. Korunes K.
10:40	The fluctuation of selection and its evolutionary consequences in an alpine rodent population Bonnet T. Postma E.	Fitness consequences of inversion polymorphisms in the zebra finch Forstmeier W. Knief U., Hemmrich-Stanisak G., Franke A., Griffith S., Kempnaers B.	Sub-inhibitory antibiotic concentrations can radically alter the eco-evolutionary consumer-resource dynamics in microbial communities Hiltunen T. Becks L., Jalasvuori M., Ojala V., Laakso J.	Genome divergence during early stage speciation with gene flow Marques D. A. Excoffier L., Seehausen O.
11:00	Break			
11:30				

Symposium 6	Symposium 13	Symposium 1	Symposium 5
Mating system evolution: unifying theory and test	Evolutionary analysis of ecological communities	Ecology and the Evolution of Sex	Novel insights in the genetics of sex-specific variation
<i>MAX 410</i>	<i>MAX 415</i>	<i>GEN C</i>	<i>GEN B</i>
The social side of sex: Male/female coevolution and social plasticity affect reproductive patterns	Linking patterns and processes across scales: A case study with Neotropical hummingbirds	On the maintenance of sex in natural populations	How important are sex- linkage and non-additive genetic variation in the variance structure of sexually dimorphic traits?
Alonzo S.	Graham C.	Schwander T.	Fairbairn D.
Promiscuity modulates the male Bateman gradient in <i>Drosophila</i> <i>melanogaster</i>	Using low coverage multispecies genomic data to reconstruct the assembly of a widespread insect community	Evolutionary advantage of sexual algal prey exposed to predation	X-linkage of sex-specific genetic variance revealed using G-matrix analyses and a novel laboratory technique
Morimoto J. McDonald G. C., Pizzari T., Wigby S.	Bunnefeld L. Hearn J., Lohse K., G.N. Stone	Koch H. Wagner S., Becks L.	Griffin R. Schielzeth H., Friberg U.

MONDAY, AUGUST 10TH

	Symposium 28	Symposium 15	Symposium 14	Symposium 34
	Variation in natural selection: patterns, causes, and consequences <i>POL A</i>	Evolution of genomes <i>POL B</i>	Experimental evolution and ecology of (microbial and other) ecosystems <i>POL C</i>	Charting the genomic landscape of speciation <i>POL D</i>
11:30	Measuring fluctuating phenotypic selection Chevin L. Visser M., Tufto J.	Human Evolution by Segmental Duplication Eichler E.	Experimental evolution of bacteria in the laboratory and in the wild Bell T.	The multifarious histories charting the multifaceted landscapes of genomic differentiation Bierne N.
12:00	The spatial scale of local adaptation Hadfield J. Phillimore A.	Parental investment predicts genetic diversity of animal species Romiguier J. Galtier N.	Bacterial biodiversity: The role of spatial structure and competition within species Leinweber A. Kümmerli R.	Evolution of genome differentiation across the speciation continuum: From patterns to mechanisms to regions related to species-specific evolution Burri R. Nater A., Kawakami T., Mugal C.F., Olason P. I., Smeds L., Suh A., Ludovic D., Ellegren H.
12:20	Detecting changing selection intensities from time-sampled data Shim H. Laurent S., Foll M., Jensen J.	A genomic study of the contribution of DNA methylation to regulatory evolution in primates Roux J. Hernando-Herraez I., Banovich N., Garcia-Perez R., Pritchard J., Marques-Bonet T., Gilad Y.	Experimental coevolution and the effects of parasite species co-infection on parasite virulence and fitness Ford S. King K.	Genome-wide tests for introgression between cactophilic <i>Drosophila</i> implicate a role of inversions during speciation Lohse K. Clarke M., Ritchie M. G., Etges W.J.
12:40		Recombination and GC-biased gene conversion shape genome evolution in the honeybee (<i>Apis mellifera</i>) Wallberg A. Glémin S., Webster M. T.	Pathogen adaptation to individual and social host defences in ants Stock M. Grasse A. V., Cremer S.	Traversing the micro-evolution to macro-evolution boundary in <i>Caenorhabditis</i> nematodes with full-genome population genomics, crosses, and hybrid phenotypes Cutter A.
13:00	Lunch			
14:45				

Symposium 6	Symposium 13	Symposium 1	Symposium 5
Mating system evolution: unifying theory and test <i>MAX 410</i>	Evolutionary analysis of ecological communities <i>MAX 415</i>	Ecology and the Evolution of Sex <i>GEN C</i>	Novel insights in the genetics of sex-specific variation <i>GEN B</i>
Coalescence and genomics with linked selection in systems with bi- and uniparental reproduction: Contrasting partial asexuality and selfing Agrawal A.	Comparative population genomics for community-scale demographic inferences Hickerson M.	Invasion of the selfers! Evolutionary ecology and the maintenance of outcrossing Morran L.	The geography of sex-specific selection, local adaptation, and sexual dimorphism Connallon T.
Genetics of attractiveness and mate choice in <i>Drosophila melanogaster</i> Arbuthnott D. Promislow D.	Ecological correlation reinforcement facilitates collective community behaviours without group selection Power D. Watson R., Száthmary E.	Fitness consequences of parasite-mediated selection on sexual reproduction in a natural population Gibson A. Delph L., Lively C.	Transcriptome-wide effects of male sexual selection on the fate of new mutations Collet J. M. Blows M. W., McGuigan K.
Does sexual selection augment or oppose natural selection? Holman L.	Ecological novelty may facilitate homoploid hybrid speciation in cichlid fish Selz O.M. Seehausen O.	<i>Brachionus calyciflorus</i> evolves higher levels of sex with more loci under selection Luijckx P. Ho E., Gasim M., Yanchus C., Chen S., Kim Y., Agrawal A.	Red males revealed: A cytochrome P450 gene cluster controls production of derived red ketocarotenoids in the zebra finch bill Mundy N. Stapley J., Bennison C., Burke T., Birkhead T., Andersson S., Slate J.
Sexually transmitted infection and the evolution of serial monogamy McLeod D. Day T.			

MONDAY, AUGUST 10TH

	Symposium 28	Symposium 15	Symposium 14	Symposium 34
	Variation in natural selection: patterns, causes, and consequences	Evolution of genomes	Experimental evolution and ecology of (microbial and other) ecosystems	Charting the genomic landscape of speciation
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
14:45	<p>Evolution by r- and K-selection in fluctuating environments</p> <p>Saether B. Engen S., Visser M. E., Grøtan V.</p>	<p>Adaptive genome remodeling by massive changes in gene content and gene transfers across gene fungi</p> <p>Branca A. Ropars J., Rodríguez de la Vega R., López-Villavicencio M., Gouzy J., Sallet E., Dumas E., Dupont J., Giraud T.</p>	<p>The effects of increasing parasite diversity on the evolution of resistance/infectivity and host/parasite growth</p> <p>Betts A. Maclean C., King K.</p>	<p>Recombination rate variation and differential gene flow shape the genomic landscape of speciation in sea bass</p> <p>Gagnaire P. Bierne N., Bonhomme F.</p>
15:05	<p>Maintenance of polymorphism through small-scale spatial variation in selection</p> <p>Lange R. Monro K., Marshall D.</p>	<p>Transcriptome comparisons within a species complex: Half a million years is enough to remove half of the genetic diversity in coding sequences, but not enough for morphological differentiation. Influence of life history</p> <p>Chenuil A. Galtier N., Abi-Rached L., Weber A.</p>	<p>Evolution of competitive ability in multispecies bacterial communities is sensitive to community composition</p> <p>Ketola T. Mikolantala L., Laakso J., Mappes J.</p>	<p>The repeatability of genomic architecture in a homoploid hybrid species</p> <p>Runemark A. Trier C. N., Eroukhanoff F., Hermansen J.S., Elgvin T. O., Saetre G.</p>
15:25	<p>Variation in selection in a wild insect population</p> <p>Tregenza T. Rodríguez-Muñoz R., Fisher D., Slate J., Skicko I., Kendall S., Liu X., Hopwood P., Rodríguez del Valle C.</p>	<p>Evolutionary dynamics of bacterial pan-genomes</p> <p>Charlesworth J. Wilson D., Crook D.</p>	<p>The role of dispersal and interspecific competition on local adaptation</p> <p>Bonte D. Bisschop K., Etienne R. S., Bonte D.</p>	<p>The genomic landscape of the speciation continuum in the killer whale</p> <p>Foote A. D. Vijay N., Ávila-Arcos M. C., Fumagalli M., Korneliussen T. Sand, Martin M. D., Morin P. A., Gilbert M. Thomas P., Wolf J. B.W.</p>
15:45	<p>Break</p>			
16:15				

Symposium 6	Symposium 13	Symposium 1	Symposium 5
Mating system evolution: unifying theory and test <i>MAX 410</i>	Evolutionary analysis of ecological communities <i>MAX 415</i>	Ecology and the Evolution of Sex <i>GEN C</i>	Novel insights in the genetics of sex-specific variation <i>GEN B</i>
Bias in the Heritability of Preference and its Potential Impact on the Evolution of Mate Choice Roff D. Fairbairn D.	The role of hybridization in the evolution of alpine Coenonympha butterflies Capblancq T. Després L., Mavarez J.	Diversity and the maintenance of sex by parasites Ashby B. King K.	Sexually antagonistic effects on development and transcriptomic maturity in Drosophila Hollis B. Keller L., Kawecki T. J.
Heritability of heterozygosity leads to transgenerational effects of heterozygosity and inbreeding Nietlisbach P. Keller L., Postma E.	Nestedness and turnover in the genetic diversity of marine species across the Indo-Pacific Ocean Liggins L. Crandall E. D., Aguirre J. David, Gaither M.R., Bird C. E., Toonen R. J., DIPnet members, Riginos C.	Geographical parthenogenesis in Hieracium alpinum (Asteraceae): Molecular evidence for multiple origin of asexuality and replacement of sexual diploids by asexual triploids Mráz P. Hartmann M., Zdvorák P., Rioux D., Choler P., Chrtek J., Taberlet P.	Sex-specific effects of serotonin on behavior and gene expression in a stalk-eyed fly Grace J. Bubak A., Watt M., Renner K., Swallow J.
Genetic compatibility underlies benefits of mate choice in an external fertilizer Aguirre J.D. Blows M. W., Marshall D. J.	Specificity of the microbiome: Insights from Daphnia hosts Pichon S. Mariadassou M., Ebert D.	Interactions between genetic and ecological effects on the evolution of life cycles Rescan M. Lenormand T., Roze D.	Convergent evolution of female-limited color dimorphism in Drosophila Yassin A. Bastide H., Lack J., David J., Pool J.

MONDAY, AUGUST 10TH

	Symposium 28	Symposium 15	Symposium 14	Symposium 34
	Variation in natural selection: patterns, causes, and consequences	Evolution of genomes	Experimental evolution and ecology of (microbial and other) ecosystems	Charting the genomic landscape of speciation
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
16:15	<p>A general condition for adaptive genetic polymorphism in temporally and spatially heterogeneous environments</p> <p>Svardal H. Rüffler C., Hermisson J.</p>	<p>Avian phylogenomic analyses revealed the macroevolution patterns of bird genomes</p> <p>Zhang G.</p>	<p>Rescued by evolution - problems ahead: Adapting to fluctuating environment increases invasiveness</p> <p>Saarinen K.</p>	<p>What causes "genomic islands" of excess F_{st} ?</p> <p>Barton N. Tavares H., Field D.</p>
16:35	<p>Spatio-temporal heterogeneity of natural selection in the wild: An experimental approach towards understanding life history adaptation of <i>Arabidopsis thaliana</i></p> <p>Exposito-Alonso M. Brennan A., Alonso-Blanco C., Pico F.X.</p>	<p>Fixation of gene duplications due to beneficial increases in gene expression</p> <p>Cardoso-Moreira M. Arguello R. J., Riccardi D., Gottipati S., Harshman L. G., Grenier J. K., Clark A.</p>	<p>Life after death: The fate of the microbiota of a dying host</p> <p>Preiswerk D. Walser J., Ebert D.</p>	<p>Recombination rate and the chromosomal distribution of gene flow between species of <i>Heliconius</i> butterflies</p> <p>Martin S. Davey J., Jiggins C.</p>
16:55	<p>Tempo does not infer mode in evolution</p> <p>Voje K.</p>	<p>Adaptive Evolution of a Clinal Inversion Polymorphism in <i>Drosophila melanogaster</i></p> <p>Kapun M. Schmidt C., Goudet J., Schmidt P., Flatt T.</p>	<p>The effect of interspecific competition on the evolutionary response of photosynthetic algae to elevated CO₂</p> <p>Lawrence D. Collins S.</p>	<p>Functional speciation genomics of the <i>Anopheles gambiae</i> complex</p> <p>Tripet F. Aboagye-Antwi F., Alhafez N., Niang A., Weedall G., Paton D., Brothwood J., Kandola S., Diabate A.</p>
17:15	<p>Consequences of multiple-scale variation in selection on microgeographic adaptation</p> <p>Cubry P. Oddou-Muratorio S., Scotti I., Lefèvre F.</p>	<p>Whole genome sequencing reveals an antibiotic resistance determinant driving rapid evolutionary change via several mechanisms in a multi-species outbreak</p> <p>Sheppard A. Stoesser N., Giess A., Sebra R., Kasarskis A., Peto T., Crook D., Sifri C., Mathers A.</p>	<p>The interaction of <i>Saccharomyces paradoxus</i> with its natural competitors on oak bark</p> <p>Kowallik V. Greig D.</p>	<p>Ant hybrids reveal genomic features underlying speciation</p> <p>Kulmuni J. Dhaygude K., Pamilo P., Butlin R.</p>
17:35				
17:40				
	<h2>Poster session A</h2>			
19:40				

Symposium 6	Symposium 13	Symposium 1	Symposium 5
Mating system evolution: unifying theory and test <i>MAX 410</i>	Evolutionary analysis of ecological communities <i>MAX 415</i>	Ecology and the Evolution of Sex <i>GEN C</i>	Novel insights in the genetics of sex-specific variation <i>GEN B</i>
<p>The structure of the mating network as a framework to understand mating systems: Theory and tests McDonald G. Spurgin L., Fairfield E., Richardson D., Pizzari T.</p>	<p>From neutral theory to competition-dispersal trade-off: Dispersal polymorphism effects on species diversity patterns Laroche F. Jarne P., Perrot T., Massol F.</p>	<p>Evidence for inter-individual genetic transfers among the genus <i>Adineta vaga</i> Debortoli N. Li X., Tang C. Q., Hespeels B., Fontaneto D., Flot J., Van Doninck K.</p>	<p>Trans-regulation of sexually discordant expression from the <i>Drosophila melanogaster</i> X chromosome Stocks M. Dean R., Rogell B., Friberg U.</p>
<p>The breakdown of self-incompatibility during a range expansion Encinas-Viso F. Pannell J., Young A.</p>	<p>Evolution of ecological communities through the lens of an island chronosequence Gillespie R. Rominger A., Lim J., Valdavinosa F., Harte J., Goodman K., Gruner D., Shaw K., Price D.</p>	<p>The Red Queen and the bdelloid rotifers: Host-parasite interactions in the long-term absence of sex Wilson C. Kriezis A., Penny T., Potter J., Barraclough T.</p>	<p>Sexual selection drives evolution and rapid turnover of male-biased genes Harrison P. W. Wright A. E., Zimmer F., Dean R., Montgomery S. H., Mank J. E.</p>
<p>The intersection of the mating system and strong selection: Herbicide resistance is related to increased inbreeding in <i>Ipomoea purpurea</i>, the common morning glory Baucom R. Kuester A., Chang S.</p>		<p>No evidence for parasites maintaining sex in natural stick insect populations Larose C. Schwander T.</p>	
<p>Inherited Inbreeding: Evidence of sex-specific, additive genetic variances in the degree of inbreeding Wolak M. Nietlisbach P., Keller L., Arcese P., Reid J.</p>			

TUESDAY, AUGUST 11TH

8:00

Complimentary breakfast

8:50

Communications

9:00

Jane Reid
University of Aberdeen
Dissecting the evolutionary ecology of reproductive strategies in the wild
Erna Hamburger Auditorium

9:50

	Symposium 28	Symposium 20	Symposium 11	Symposium 33
	Variation in natural selection: patterns, causes, and consequences <i>POL A</i>	Genomics of Local Adaptation <i>POL B</i>	Host defence in a parasitized world: selection, evolution and the maintenance of variation <i>POL C</i>	The molecular basis of adaptation and ecological speciation <i>POL D</i>
10:00	Region-specific selection on floral signals in a terrestrial orchid Gross K. Schiestl F. P.	Genomics of local adaptation in the face of high gene flow	Defence heterogeneity under the double-edged sword of mammalian immunity	Evolution and development of floral signals influencing pollinator behaviour
10:20	Selection and real-time evolution of floral traits in plants with different pollinators	Savolainen O. Knürr T., Kujala S., Tyrmi J., Kärkkäinen K., Pyhäjärvi T.	Graham A. L.	Glover B.
10:30	Gervasi D. Schiestl F. P.	Variation and selection of genes controlling ecologically important traits in nature	Balancing selection and convergent evolution in an antimicrobial peptide	Genetic Parallelism in Flower Color Evolution
10:40	Over-dominance and adaptive gene duplications Milesi P. Weill M., Labbé P.	Mitchell-Olds T. Perera N., Mojica J., Carley L., Olson-Manning C., Anderson J., Lee C.	Lazzaro B. P. Unckless R. L., Howick V. M.	Rausher M.
11:00	Break			
11:30				

Symposium 21	Symposium 30	Symposium 3	Symposium 8
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Protein evolution: structural and functional perspective <i>MAX 415</i>	The Evolution of Sex Chromosomes <i>GEN C</i>	Cooperation without kinship: from genomes to mutualisms <i>GEN B</i>
The Evolution of Epigenetic Inheritance Jablonka E.	The thin line between conformational freedom and anarchy - negative epistasis and evolvability in TEM-1 beta-lactamase Tawfik D.	Beetles, Birds, Snakes & Flies: The Diversity of Sex Chromosomes and their Evolution Bachtrog D.	Caught in the crossfire: Genome defense in light of genomic autoimmunity Blumenstiel J. <small>Erwin A., Galdos M., Wickersheim M., Harrison C., Marr K.</small>
How does plasticity influence adaptive evolution? Ghalambor C.	How do proteins evolve? Simulating evolution with in silico models of protein thermodynamics Goldstein R. A.	Interactions Between A Master Regulator Of Sex Determination And Haploid Sex Chromosomes In The Evolution Of Dimorphic Sexes Umen J. <small>Miyagi A., Hamaji T., Geng S.</small>	The punishment wars Kiers T.

TUESDAY, AUGUST 11TH

	Symposium 28	Symposium 20	Symposium 11	Symposium 33
	Variation in natural selection: patterns, causes, and consequences	Genomics of Local Adaptation	Host defence in a parasitized world: selection, evolution and the maintenance of variation	The molecular basis of adaptation and ecological speciation
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
11:30	Temporal fluctuation in the phenotypic optimum of laying date in a wild Blue tit population Marrot P. Garant D., Anne C.	Genetic variance associated with overwintering adaptation in a butterfly Pruisscher P. Wheat C., Gotthard K.	Genome wide analysis of selection in immune genes within and among butterfly populations Keenhnen N. Wheat C.	The molecular basis of genic ecological speciation in sexually deceptive orchids Schlüter P. Sedeek K., Xu S., Shanklin J., Cozzolino S., Schiestl F.
11:50	There is more to pollinator-mediated selection than pollen limitation: Interaction intensity versus functional significance Sletvold N. Ågren J.	Experimental evidence for mitochondrial genomic adaptation to climate Camus M. Florencia Sgrò C. M., Wolff J. N., Dowling D.K.	Functional variation at innate immune loci in the Seychelles warbler Gilroy D.	Gene flow and the genetic architecture of speciation revealed by 1043 stick-insect genomes Nosil P.
12:10	Local adaptation is prevented along patchy ecological gradients Bridle J. Butlin R.	Origin, history and local adaptation of the recent polyploid <i>Capsella bursa-pastoris</i> Lascoux M. Cornille A., Salcedo A., Kryvokhyzha D., Holm K., Lagercrantz U., Glémin S., Wright S.	Genetics of natural variation of <i>Daphnia magna</i> resistance to a bacterial pathogen Bento G. Routtu J., Bourgeois Y., Ebert D.	Loss of function mutations in MC4R drive adaptation of <i>Astyanax mexicanus</i> through hyperphagia Rohner N. Aspiras A., Borowsky R., Tabin C.
12:30		The genomics of avian breeding time – an ecologically relevant trait for adaptation to climate change Gienapp P. Calus M. P.L., Laine V. N., van Oers K., Groenen M. A.M., Slate J., Visser M.E.	Experimental evolution of host specificity by comparing single and multiple infections Schulte R. D. Bose J., Kloesener M. N.	Identifying the molecular basis of adaptation and genomic divergence in <i>Heliconius</i> butterflies Nadeau N. Pardo-Diaz C., Whibley A., Supple M., Joron M., McMillan O., Jiggins C.
12:50	Lunch			
13:40				
14:45				

Symposium 21	Symposium 30	Symposium 3	Symposium 8
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Protein evolution: structural and functional perspective <i>MAX 415</i>	The Evolution of Sex Chromosomes <i>GEN C</i>	Cooperation without kinship: from genomes to mutualisms <i>GEN B</i>
<p>An evolutionary model of maternal effects</p> <p>Hoyle R. Kuijper B.</p>	<p>Gene network re-wiring in the convergent evolution of a key innovation: egg dummies in cichlid fish</p> <p>Gu L. Salzburger W.</p>	<p>Baby sex chromosomes in the housefly</p> <p>Beukeboom L. W. Bopp D., Wimmer E., van de Zande L., Sharma A., Wu Y., Schenkel M., Visser S., Francuski L.</p>	<p>The origins, persistence and decay of bacterial mutualisms</p> <p>Henry L. Charles G.</p>
<p>Paternal heat exposure causes immediate and inherited epigenetic response in Wild guinea pigs</p> <p>Weyrich A. Lenz D., Jeschek M., Chung T.H., Heeger F., Rübensam K., Goeritz F., Jewgenow K., Fickel J.</p>	<p>Correlated substitutions are rare under molecular coevolution</p> <p>Talavera D. Lovell S., Whelan S.</p>	<p>Wolbachia bacterial endosymbionts and the evolution of sex determination in the isopod <i>Armadillidium vulgare</i></p> <p>Leclercq S. Thézé J., Giraud I., Chebbi M., Moumen B., Ernenwein L., Grève P., Gilbert C., Cordaux R.</p>	<p>'Currency' exchange underlying the long-term association between squid and bioluminescent bacteria</p> <p>Kremer N. Schwartzman J., Ruby E., McFall-Ngai M.</p>
<p>Genome methylation patterns across castes and generations in a parasitoid wasp</p> <p>Shaham R. Keasar T., Ben Schlomo R.</p>	<p>Disease-related mutations in proteins: A study of dynamically correlated networks and coevolved residue clusters</p> <p>Karami Y. Amselem S., Laine E., Carbone A.</p>	<p>Why are there so many species with Y-autosome fusions?</p> <p>Kitano J. Pennell M., Kirkpatrick M., Otto S., Vamosi J., Peichel C.</p>	<p>Spatial exclusion of non-cooperators from released public goods stabilizes inter-specific cooperation</p> <p>Pande S. Kaftan F., Lang S., Germerodt S., Svatos A., Kost C.</p>
	<p>Complex phylogeny of aminoacyl-tRNA synthetases</p> <p>Popinga A. Bouckaert R., Wills P.</p>		
<div> The German Research Foundation (DFG) Funding programs for early career researchers </div>			

TUESDAY, AUGUST 11TH

	Symposium 28	Symposium 20	Symposium 11	Symposium 33
	Variation in natural selection: patterns, causes, and consequences	Genomics of Local Adaptation	Host defence in a parasitized world: selection, evolution and the maintenance of variation	The molecular basis of adaptation and ecological speciation
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
14:45	Antagonistic coevolution with competing consumers alters the dynamics of selection over time Frickel J. Becks L.	Genomics of local adaptation in the Mediterranean blue tit <i>Cyanistes caeruleus</i> Szulkin M. Gagnaire P., Bierne N., Charmantier A.	Toll-like receptors in birds: Diversifying selection, pseudogenization and gene duplication Bainova H. Gutowska M. Weronika, Burt D. W., Vinkler M.	Multiple morphological and behavioural modifications converge into a function that promotes invasion and diversification within a new adaptive zone Crumière A. Khila A.
15:05	Stress response of mutation accumulation lines of the green algae <i>Chlamydomonas reinhardtii</i> across two environmental gradients Kraemer S. Morgen A., Keightley P., Colegrave N.	Utilizing large sampling frames to investigate the genomic determinants of short-term adaptation in <i>Mycobacterium tuberculosis</i> Hedge J. Walker T., Walker S., Crook D., Peto T., Wilson D.	Diversity through alternative splicing: Do <i>Dscam1</i> splice variants respond to bacteria exposure? Armitage S. Sun W., You X., Kurtz J., Schmucker D., Chen W.	Natural <i>Arabidopsis</i> BRX Loss-of-Function Alleles Confer Root Adaptation to Acidic Soil Hardtke C.
15:15				
15:25	Geographical variation in predation pressure toward warning signals of an Arctiid moth <i>Parasemia plantaginis</i> Rönkä K. Rojas B., Burdfield-Steel E., Gordon S., Nokelainen O., Tasane T., Valkonen J., Mappes J.	Signatures of selection in an admixed feral chicken population Johnsson M. Gering E., Willis P., Getty T., Wright D.	Major-effect mutations provide resistance to viruses in natural <i>Drosophila</i> populations Cao C. Cogni R., Magwire M., Jiggins F.	The genomic architecture of adaptation and speciation in ecologically divergent forest trees (<i>Populus</i> spp.) Paris M. Stölting K. N., Meier C., Heinze B., Castiglione S., Bartha D., Macaya-Sanz D., Gonzalez-Martinez S., Lexer C.
15:45	Break			
16:15				

Symposium 21	Symposium 27	Symposium 3	Symposium 8
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Ecology and evolution of floral signals <i>MAX 415</i>	The Evolution of Sex Chromosomes <i>GEN C</i>	Cooperation without kinship: from genomes to mutualisms <i>GEN B</i>
<p>Non-genetic transmission and sex-linked inheritance of prenatal maternal effects in a precocial bird</p> <p>Tschirren B. Ziegler A., Okuliarova M., Zeman M., Pick J., Giraudeau M.</p>	<p>The adaptive value of within-individual covariation between floral signals and rewards</p> <p>Benitez-Vieyra S.</p>	<p>Coevolution of the sex chromosomes in <i>Drosophila melanogaster</i></p> <p>Lund-Hansen K. Morrow E. H., Abbott J. K.</p>	<p>How do beneficial microbiomes form and adapt within mutualisms?</p> <p>Innocent T. Al-Bassam M., Schiøtt M., Yu D.W., Hutchings M. I., Boomsma J. J.</p>
<p>Does molecular pleiotropy constrain evolution, plasticity or both? A proteomic perspective in a salmonid fish metapopulation</p> <p>Papakostas S. Vøllestad A., Bruneaux M., Aykanat T., Vanoverbeke J., Ning M., Primmer C., Leder E.</p>		<p>Evolution of an unusual sex determination system in a Mammal, the African pygmy mouse <i>Mus minutoides</i></p> <p>Saunders P. Ronce O., Crochet P., Veyrunes F.</p>	<p>Mutualism in a community context: Lessons from ants, aphids and their gut microbiomes</p> <p>Ivens A. B.F. Kiers E. Toby, Kronauer D. J.C.</p>
<p>Evolutionary and ecological plasticity in short order: Genome-wide evidence for in-situ evolution and adaptation in invasive Florida Burmese pythons</p> <p>Castoe T. Card D., Schield D., Hunter M., Hart K.</p>	<p>Learning about natural variation of floral odors sets boundaries for generalization among flowers with the same reward value</p> <p>Smith B. H. Locatelli F. F., Fernandez P. C.</p>	<p>The PhyloSex project: Towards a better understanding of sex determination diversity and sex chromosome evolution in fish</p> <p>Anderson J. Klopp C., Parrinello H., Journot L., Postlethwait J. H., Guiguen Y., Schartl M.</p>	<p>Colony fusion as a route to cooperation without kinship in ant supercolonies</p> <p>Hørsving E. B.M. Pedersen L. S., Huszár D. B., Pontieri L., Boomsma J. J., Pedersen J. Søre</p>

TUESDAY, AUGUST 11TH

	Symposium 28	Symposium 20	Symposium 11	Symposium 33
	Variation in natural selection: patterns, causes, and consequences	Genomics of Local Adaptation	Host defence in a parasitized world: selection, evolution and the maintenance of variation	The molecular basis of adaptation and ecological speciation
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
16:15	Environmental suitability influences the evolvability of morphological traits: Linking biogeography and evolutionary dynamics Martinez-Padilla J. Estrada A., Early R., Garcia Gonzalez F.	Experimental genomic tests for pollution driven rapid evolution in the Mediterranean mussel Štambuk A. Dennis S., Polović D., Šrut M., Soria-Carrasco V., Gompert Z., Baković V., Klobučar G., Nosil P.	Bumblebee immune response upon faecal transplant and microbiota community structure in host parasite interactions Näpflin K. Schmid-Hempel P.	The origin and spread of premating isolation driving incipient speciation in <i>Mimulus</i> Streisfeld M. Stankowski S., Sobel J.
16:35	Climate-change driven evolution of an ornament in a wild bird Evans S. Gustafsson L.	Parallel and non-parallel genomic signatures of selection in three-spine sticklebacks from different regions Liu S. Ferchaud A., Hansen M. M.	Evolution of anti-parasitic behaviors in monarch butterflies de Roode J.	Sexual isolation and the genetics of chemical cues involved in speciation in <i>Heliconius</i> butterflies Mérot C. Davey J., Merrill R., Barker S., Leppik E., Frérot B., Jiggins C., Jonon M.
16:55		Studying mutation load and purifying selection in natural populations of lodgepole pine and interior spruce Conte G. Yeaman S., Hodgins K., Aitken S., Rieseberg L., Whitlock M.	The effectiveness and costs of pathogen resistance strategies in a long-lived host Susi H. Laine A.	Key Physiological Innovations during Colonizations of Fresh Water and Land Lee C.E. Eyun S., Posavi M., Gelembiuk G., Remfert J., Charmantier G., Charmantier-Daures M.
17:15		Extreme local adaptation in <i>Drosophila</i> chemosensory perception Arguello J. Roman Cardoso-Moreira M., Mohammed J., Grenier J.K., Gottipati S., Clark A. G., Benton R.	Trade-off between dual roles of the gut in nutrient acquisition and immune defense: Experimental evolution and physiological basis Kawecki T. Vijendravarma R.	Distinct genetic mechanisms of parallel speciation in phytophagous ladybird beetles Matsubayashi K. Soria-Carrasco V., Gompert Z., Villoutreix R., Muschick M., Togashi A., Kataura H., Ueno H., Nosil P.
17:35				
17:40	Meet the Editors			
19:00				

Symposium 21	Symposium 27	Symposium 3	Symposium 35
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Ecology and evolution of floral signals <i>MAX 415</i>	The Evolution of Sex Chromosomes <i>GEN C</i>	Open symposium <i>GEN B</i>
Bridging Ecology and Evolution by Symbiotic and Epigenetic Mechanisms Soen Y.	Paternity analysis reveals mating patterns in an <i>Antirrhinum</i> hybrid zone incorporating sibships and phenotypes Ellis T. Field D., Barton N.	Evolution of sex-determining modes in amniotes: Transitions, stability and ancestral state Kratochvil L. Rovatsos M., Altmanova M., Vukic J., Pokorna M.	Specialist and generalist oviposition strategies in butterflies: Maternal care or precocious young? Schäpers A. Nylén S., Carlsson M., Janz N.
Plastic vs genetic responses to temperature acclimation: quantitative traits to transcripts Clemson A. Telonis-Scott M. , Sgro C.	The double role of <i>Salvia viridis</i> ' extrafloral display Gerchman Y. Kearse T.	The evolution of sexual specialization in an artificial dioecious fungus Nieuwenhuis B. Johannesson H., Immler S.	Factors affecting the evolution of host-switching in infectious diseases Wang A. Meier M., Balloux F.
Adult transcriptome variation is determined by egg to adult development time in a desert drosophilid Etges, W.J. de Oliveira C., Rajpurohit S., Gibbs A.	Heritability of floral volatiles and pleiotropic responses to artificial selection in <i>Brassica rapa</i> Zu P. Schiestl F., Blankenhorn W.		The long reach of a tapeworm parasite in its social host Beros S. Jongepier E., Hagemeyer F., Foitzik S.
Within and across generation life-history responses to nutritional stress during development Saastamoinen M.	Are florivores agents of selection on floral colour? Review and Synthesis Ghara M. Sapir Y.		Wing pigmentation and immune response in the <i>Glanville</i> fritillary butterfly Rosa E. Saastamoinen M.

WEDNESDAY, AUGUST 12TH

8:00	Complimentary breakfast		
8:50	Communications		
9:00	Kevin Foster University of Oxford Social evolution in microbes: from model systems to the microbiome <i>Erna Hamburger Auditorium</i>		
9:50			

	Symposium 29	Symposium 20	Symposium 11	Symposium 33
	The evolution and ecology of trait loss and dependency <i>POL A</i>	Genomics of Local Adaptation <i>POL B</i>	Host defence in a parasitized world: selection, evolution and the maintenance of variation <i>POL C</i>	The molecular basis of adaptation and ecological speciation <i>POL D</i>
10:00	Can't do it alone: Buchnera and its very different partners	Identifying locally adaptive loci by scanning for barriers to introgression Fulgione A. Hermisson J., Hancock A.	Individual variation in host health and its consequences for pathogen spread Vale P.	Artiodactyl limb diversification: Attenuated sensing of SHH by Ptch1 underlies adaptive evolution of bovine limbs Zeller R. Lopez-Rios J., Duchesne A., Speciale D., Andrey G., Peterson K. A., Wicking C., McMahon A., Duboule D.
10:20	Latorre A.	A worldwide perspective on isolation-by-distance patterns in humans	Local adaptation to parasites suggests costs of migration and explains immunogenetic polymorphism in sticklebacks	Selection on flower colour in snapdragon hybrid zones
10:30	How are negative fitness consequences of evolutionary trait loss compensated?	Peter B. Petkova D., Stephens M., Novembre J.	Kaufmann J. Lenz T. L., Kalbe M., Milinski M., Eizaguirre C.	Field D. Tavares H., Coen E., Barton N.
10:40	Pascoal S. Bailey N.	Genetic variation linked to climate adaptation in Arabidopsis lyrata Fracassetti M. Willi Y.	Increased diversity at a locus involved in resistance to parasitism in Daphnia magna Bourgeois Y. Fields P., Bento G., Roulin A., McTaggart S., Little T., Obbard D., Ebert D.	Adaptation to a special environment: A novel endosymbiotic bacterium living inside an ant Klein A. Schrader L., Gil R., Manzano-Marín A., Flórez L., Kaltenpoth M., Latorre A., Moya A., Oettler J.
11:00	Break			
11:30				

Symposium 21	Symposium 7	Symposium 2	Symposium 35
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Social Evolution & Sexual Conflict <i>MAX 415</i>	What is new in the study of sex allocation? <i>GEN C</i>	Open symposium <i>GEN B</i>
The evolution of transgenerational integration of information in heterogeneous environments Leimar O. McNamara J.	Sexual conflict and social behaviour Chapman T.	The crucial link between 'how' and 'why' in the evolution of environmental sex determination Schwanz L.	Drosophila wing shape Integration: A multi-level approach Benitez H. Klingenberg C.
Maternal effect on worker size in the seed harvester ant <i>Pogonomyrmex rugosus</i> Paolucci S. Czech B., Hannon G., Schwander T., Keller L.			The evolution of cuticular hydrocarbon profiles in ants Schmitt T. Blaimer B., Menzel F.
Pollution-induced non-genetic inheritance and its effect on eco-evolutionary dynamics Plaistow S. Chan B., Collin H., Paterson S.	Inclusive fitness and sexual conflict Gardner A.	Sex allocation in simultaneous hermaphrodites: Lessons from an emerging model organism Schärer L.	Queen signalling in the honeybee Richardson T.

WEDNESDAY, AUGUST 12TH

	Symposium 29	Symposium 20	Symposium 11	Symposium 33
	The evolution and ecology of trait loss and dependency <i>POL A</i>	Genomics of Local Adaptation <i>POL B</i>	Host defence in a parasitized world: selection, evolution and the maintenance of variation <i>POL C</i>	The molecular basis of adaptation and ecological speciation <i>POL D</i>
11:30	Genomic signatures of sexual trait decay in an asexual wasp Kraaijeveld K. Anvar Y., Frank J., den Dunnen J., Ellers J.	The role of host plant adaptation in genomic divergence and diversification of <i>Timema</i> stick insects Muschick M. Soria-Carrasco V., Dennis S. R., Gompert Z., Comeault A. A., Feder J. L., Nosil P.	Variation in phenotypic selection on quantitative immune defence traits in a freshwater snail Langeloh L. Jokela J., Seppälä O.	The hemoglobin repertoire in the order of Gadiformes linked to depth adaptation Baalsrud H.T. Tørresen O. Kristian, Malmstrøm M., Salzburger W., Jakobsen K. Sigurd, Jentoft S.
11:50	Explaining siderophore loss, cross-use and exploitation in natural <i>Pseudomonas</i> communities Butaite E. Kuemmerli R.	The flexible genome: Uncovering the regulatory basis of phenotypic plasticity Oostra V. Saastamoinen M., Zwaan B. J., Wheat C.W.	Diversity and divergence of immune genes in four wild rodent species Turner A. Begon M., Pedersen A., Paterson S.	Molecular structure and functional diversity of a naturally polymorphic enzyme: PGI of <i>Colias</i> Hill J. Watt W.
12:10	Strong selection for a loss of metabolic autonomy in bacteria D'Souza G. Waschina S., Kost C.	Ecological genetics of local adaptation in <i>Arabidopsis thaliana</i> Ågren J. Oakley C. G., Lundemo S., Schemske D.W.	Constitutive protection, mismatch, and secondary exposure in transgenerational immune memory in the bumblebee <i>Bombus terrestris</i> Barribeau S. Schmid-Hempel P., Sadd B.	The genetic basis of parallel speciation in a marine snail Westram A.M. Panova M., Galindo J., Butlin R.
12:30	Loss and (re)gain of color vision in deep-sea fishes: Uncovering the secrets of 100 teleost genomes Musilova Z. Cortesi F., Malmstrøm M., Tørresen O., Jentoft S., Salzburger W.		Intracellular endosymbiont selection contributes to <i>Drosophila</i> adaptation to viral infection Faria V. G. Martins N. E., Magalhães S., Nolte V., Schlötterer C., Teixeira L., Sucena É.	
12:50	Lunch and Excursions			

Symposium 21	Symposium 7	Symposium 2	Symposium 35
The evolution of phenotypic plasticity within and across generations <i>MAX 410</i>	Social Evolution & Sexual Conflict <i>MAX 415</i>	What is new in the study of sex allocation? <i>GEN C</i>	Open symposium <i>GEN B</i>
Genetic basis of variation in thermal plasticity for body pigmentation Lafuente E. Beldade P.	The influence of relatedness on male entomopathogenic nematode aggression Kapranas A. Abigail M., Christine G.	Sex allocation, juvenile mortality & the costs imposed by offspring on parents and siblings Kahn A. Jennions M. , Kokko H.	Transcriptomic underpinning of lifespan differentiation between castes in ants Lucas E. Riba-Gognuz O., Corona M., Wurm Y., Keller L.
Transgenerational effects of diet through the maternal and paternal lineage Zizzari Z.V. van Straalen N. M., Ellers J.	Local mate competition mediates sexual conflict over sex ratio in a haplodiploid mite Magalhaes S. Macke E., Olivieri I.	The evolution of unisexual flowers within inflorescences Torices R. Afonso A., Méndez M.	Adaptive landscapes of transcription factor binding sites Aguilar-Rodríguez J. Payne J. L., Wagner A.
Age-dependent plasticity in reproductive effort is driven by metabolic reserves and mating opportunities, not adaptive allocation strategies Houslay T. Houslay K., Rapkin J., Hunt J., Bussière L.	Male <i>Drosophila melanogaster</i> fight more, and sire shorter-lived daughters, when rival male are unrelated and unfamiliar Carazo P. Perry J., Johnson F., Pizzari T., Wigby S.	Genomic conflict over sex allocation in the parasitoid wasp <i>Nasonia vitripennis</i> Cook N. Ritchie M. G., Pannebakker B. A., Tauber E., Shuker D. M.	Why shuffle genes? The dynamics of integron evolution in changing environments Engelstädter J. Harms K., Johnsen P. Jarle
	How sex-biased dispersal affects the resolution of intralocus sexual conflict Kuijper B. Johnstone R. A.	Sperm storage and the size advantage model of sex allocation in the protandrous sex-changer <i>Crepidula fornicata</i> Broquet T. Barranger A., Billard E., Bestin A., Berger R., Honnaert G., Viard F.	

THURSDAY, AUGUST 13TH

8:00

Complimentary breakfast

8:50

Communications

9:00

Dan Tawfik
Weizmann Institute of Science
How do proteins evolve?
Erna Hamburger Auditorium

9:50

	Symposium 32	Symposium 18	Symposium 10	Symposium 9
	Forecasting eco-evolutionary responses to global changes <i>POL A</i>	How to Identify and Test the Loci and Alleles Underlying Adaptation? <i>POL B</i>	Adaptation in heterogeneous environments: insights from host-parasite systems <i>POL C</i>	Evolutionary ecology of cooperation: theory and experiment <i>POL D</i>
10:00	How likely is rapid adaptation? Lessons from eco-evolutionary population modelling	Functional genomics of marine and freshwater sticklebacks	Ecological and evolutionary determinants of disease dynamics	A behavioural ecologists' view of bacterial life in the lung
10:20	Schiffers K.	Jones F.	Laine A.	Griffin A.
10:30	Mapping life-cycle phenology of plant genotypes in space and time	The genetic basis for the rapid diversification of male genital morphology among <i>Drosophila</i> species	Side effects of parasitism in microbes	Cooperation, cheating, and collapse in microbial populations
10:40	Burghardt L. E. Metcalf C. Jessica, Wilczek A. M., Runcie D.E., Schmitt J., Donohue K.	Tanaka K. M. Hopfen C., Herbert M. R., Schlötterer C., Stern D. L., Masly J. P., Nunes M., McGregor A. P.	Hall A.	Gore J.
11:00	Break			
11:30				

Symposium 24	Symposium 26	Symposium 4	Symposium 35
Evolution of behavioural variation <i>MAX 410</i>	Real-time bacterial evolution in vivo and in vitro <i>MAX 415</i>	Evolutionary consequences of sexually antagonistic selection <i>GEN C</i>	Open symposium <i>GEN B</i>
Genetic architecture of aggression and cooperation in the California harvester ant <i>Pogonomyrmex californicus</i> Gadau J. Fewell J., Mikheyev A.	The role of epistasis in the evolution and epidemiology of multidrug-resistant tuberculosis Gagneux S.	Comparing within and between-sex pleiotropy as constraints on the evolution of male and female gene expression Chenoweth S.	A theoretical study of sympatric divergence of whitefish in Scandinavia Thibert-Plante X. Amundsen P., Kahilainen K., Praebel K., Østbye K., Gavrillets S. <hr/> Genomic imprinting and its systematic perturbation in abortive interspecific tomato seeds Florez Rueda A.M. Margot P., Schmidt A., Widmer A., Grossniklaus U., Städler T. <hr/> Why are ring species so rare? Martins A. B. de Aguiar M.A.M.
Convergent molecular signatures of plastic phenotypes in eusocial evolution Sumner S.	Convergent evolution and adaptation of <i>Pseudomonas aeruginosa</i> within patients with cystic fibrosis Marvig R.L. Sommer L. M., Molin S., Johansen H.K.	Sexually antagonistic epigenetic marks Rice W.	

THURSDAY, AUGUST 13TH

	Symposium 32	Symposium 18	Symposium 10	Symposium 9
	Forecasting eco-evolutionary responses to global changes <i>POL A</i>	How to Identify and Test the Loci and Alleles Underlying Adaptation? <i>POL B</i>	Adaptation in heterogeneous environments: insights from host-parasite systems <i>POL C</i>	Evolutionary ecology of cooperation: theory and experiment <i>POL D</i>
11:30	<p>The accumulation of mutation load and range dynamics</p> <p>Henry R. Coulon A., Bartoń K., Travis J.</p>	<p>Functional characterization of an adaptive cis-regulatory polymorphism in <i>Drosophila melanogaster</i></p> <p>Parsch J. Glaser-Schmitt A.</p>	<p>Parasite evolution in heterogeneous and spatially structured host populations</p> <p>Lion S.</p>	<p>Rock-paper-scissors dynamics maintain cooperation and diversity in well-mixed bacterial communities</p> <p>Kümmerli R. Inglis F., Biernaskie J., Gardner A.</p>
11:50	<p>Local adaptation versus inbreeding depression in marginal populations of a Mediterranean alpine plant: Are they worthy of conservation in a context of climate change?</p> <p>Morente-López J. García-Fernández A., Lara-Romero C., Rubio-Teso M.L., Ruiz R., Sánchez A., Iriondo J.M.</p>	<p>From genome to function: Timing adaptations in the intertidal insect <i>Clunio marinus</i></p> <p>Kaiser T. S.</p>	<p>Relative fitness of a generalist parasite on alternative hosts: A cross-infestation experiment of the hen flea among sympatric passerine hosts</p> <p>Appelgren A. McCoy K., Richner H.</p>	<p>Sibling cooperation mitigates effects of low parental care in earwigs: A new perspective on the early evolution of family life</p> <p>Kramer J. Thesing J., Meunier J.</p>
12:10	<p>Forecasting the demographic and evolutionary response of perennial Alpine plants</p> <p>Cotto O. Thuiller W., Guillaume F.</p>	<p>Characterization of the wing colour patterning supergene in a mimetic butterfly</p> <p>Saenko S. Prunier F., Llaurens V.</p>	<p>Parasite evolution in a host sexually dimorphic world</p> <p>Duneau D. Buchon N., Lazzaro B.</p>	<p>Kin Selection and Maternal Effects: The confusion, consequences and case study</p> <p>Thomson C. Hadfield J.</p>
12:30	<p>Combining demography with quantitative and population genetics to infer the adaptive potential of small populations</p> <p>Vincenzi S. Crivelli A., Garza C.</p>			<p>The role of antimicrobials in the evolution of cooperation</p> <p>Vasse M. Torres-Barceló C., Hochberg M. E.</p>
12:50	<p>Lunch</p>			
13:40				
14:45				

Symposium 24	Symposium 26	Symposium 4	Symposium 35
<p>Evolution of behavioural variation</p> <p><i>MAX 410</i></p>	<p>Real-time bacterial evolution in vivo and in vitro</p> <p><i>MAX 415</i></p>	<p>Evolutionary consequences of sexually antagonistic selection</p> <p><i>GEN C</i></p>	<p>Open symposium</p> <p><i>GEN B</i></p>
<p>Bold individuals live in risky environments: Nature, nurture or both?</p> <p>Holtmann B. Nakagawa S.</p>	<p>Omics of endosymbiosis adaptation during experimental evolution of legume symbionts</p> <p>Clerissi C. Capela D., Marchetti M., Li F., Torchet R., Cruveiller S., Gris C., Rocha E. P.C., Masson-Boivin C.</p>	<p>Resource competition and the evolution of sexual dimorphism</p> <p>De Lisle S. Rowe L.</p>	<p>Male barn swallows mimic nestlings to attract females</p> <p>Hasegawa M. Arai E., Watanabe M., Nakamura M.</p>
<p>Direct and indirect genetic effects shape the social phenotype of great tits</p> <p>Radersma R. Firth J. A., Garroway C. J., Voelkl B., Sheldon B. C.</p>	<p>Rapid evolution of bacterial pathogens co-infecting an animal host</p> <p>King K. Brockhurst M., Paterson S., Hurst G.</p>	<p>Sexual selection drives short- and long-term evolution of the avian Z chromosome</p> <p>Wright A. Harrison P., Zimmer F., Montgomery S., Pointer M., Mank J.</p>	<p>How sick are sexy males? Testing Hamilton & Zuk hypothesis with a meta-analytical approach</p> <p>Prokop Z. Buczek M., Plesnar-Bielak A., Nakagawa S., Michalczyk L.</p>
<p>Baffling: An alternative signalling strategy using self-made tools</p> <p>Deb R. Balakrishnan R.</p>	<p>Phylogenetic analysis of a mycobacterium tuberculosis outbreak</p> <p>Kühnert D. Stucki D., Coscolla M., Fenner L., Stadler T., Gagneux S.</p>	<p>Insights on Sexually Antagonistic Selection in the Human Genome</p> <p>Lucotte E. Laurent R., Heyer E., Ségurel L., Toupance B.</p>	<p>Worldwide patterns of bird colouration on islands and associated mechanisms</p> <p>Doutrelant C. Paquet M., Renoult J., Crochet P., Grégoire A., Covas R.</p>
<p>The influence of age and gene expression on division of labor in a social insect</p> <p>Kohlmeier P. Susanne F., Barbara F.</p>	<p>Parallel evolution of a global regulator ameliorates the cost of plasmid carriage</p> <p>Harrison E. Paterson S., Spiers A., Brockhurst M.</p>		
<div> <p>Meet the U.S. National Science Foundation (NSF)</p> </div>			

THURSDAY, AUGUST 13TH

	Symposium 32	Symposium 18	Symposium 10	Symposium 9
	Forecasting eco-evolutionary responses to global changes <i>POL A</i>	How to Identify and Test the Loci and Alleles Underlying Adaptation? <i>POL B</i>	Adaptation in heterogeneous environments: insights from host-parasite systems <i>POL C</i>	Evolutionary ecology of cooperation: theory and experiment <i>POL D</i>
14:45	Coevolution of genetic variance and species' range in a changing environment Polechova J. Barton N.	An island model for unraveling adaptive history: Cape Verde Arabidopsis Fulgione A. Arnoux S., Hermisson J., Hancock A.	Parasitoid adaptation to hosts with symbiont-conferred resistance Dennis A. Vorburger C.	Testing inclusive fitness theory in a lower termite Korb J. Hoffmann K.
15:05				
15:15	The role of sex and recombination in evolutionary rescue Uecker H. Hermisson J.	The Genetic Architecture of Recombination Rate Variation in <i>Drosophila melanogaster</i> Singh N. Hunter C.	Endosymbiotic bacteria protect aphids against natural enemies in a natural wet meadow habitat Hrcek J. Godfray H. Charles J.	An evolutionarily significant unicellular strategy in response to starvation in <i>Dictyostelium</i> social amoebae Nizak C. van Baalen M., Dubravcic D.
15:25				
15:45	Environmental marginality and the evolutionary potential of peripheral populations in <i>Arabidopsis lyrata</i> Lee-Yaw J. Willi Y.	Tracking genomic changes during rapid life history evolution Therkildsen N. O. Munch S. B, Conover D. O., Palumbi S.R.	All aboard! Tracking host-parasite historical associations in the Canary Islands Jorge F. Perera A., Poulin R., Roca V., Carretero M. A.	Cheating on the edge: Spatial self-organization promotes cooperation in expanding bacterial colonies Jousset A. Hille A., Scheu S., Meyer K.
16:15	Break			

THURSDAY, AUGUST 13TH

	Symposium 32	Symposium 18	Symposium 10	Symposium 9
	Forecasting eco-evolutionary responses to global changes <i>POL A</i>	How to Identify and Test the Loci and Alleles Underlying Adaptation? <i>POL B</i>	Adaptation in heterogeneous environments: insights from host-parasite systems <i>POL C</i>	Evolutionary ecology of cooperation: theory and experiment <i>POL D</i>
16:15	Evolution of seasonal timing in a changing world: How empirical evidence and phenological models can help us to forecast the rate of adaptation Salis L. Visser M.	The genetic basis of parallel evolution in an introduced species Gould B. Stinchcombe J.	Population size shape reciprocal adaptations in the experimental host-parasite coevolution Papkou A. Schalkowski R., Barg M., Braker I., Schulenburg H.	Long Life, Promiscuity and the Origin of Cooperation in Birds Downing P.
16:35	From genes to ecosystems: The molecular mechanisms of eco-evolutionary feedbacks from rapid adaptation of herbivore consumers to nutrient limitation Papakostas S. Declerck S.	A Clinal Polymorphism in Insulin Signaling Has Major Effects on Drosophila Life History Durmaz E. Rajpurohit S., Betancourt N., Schmidt P.S., Flatt T.	Testing for genetic differentiation along altitudinal gradients in ticks (<i>Ixodes ricinus</i>) Lemoine M. Tschirren B.	Diversity in parent-offspring communication in birds: Shifting between signals and cues Caro S. Griffin A., Hinde C., West S.
16:55	Estimating evolutionary potential in the wild: Role and stability of the G matrix Teplitsky C. Chantepie S., Moller A. P., Nakagawa S., de Lope F., Gustafsson L., Mills J. A., Wheelwright N., Charmantier A.		Eco-evolutionary dynamics in coevolving host-virus systems Frickel J. Becks L.	Developing social evolution theory into a set of tools for analyzing microbial data Smith J.
17:15	Adaptation lags in bet-hedging traits during periods of climate change Van Dooren T. J. M.		Host age structure as a source of heterogeneity in host-parasite interactions Ben-Ami F.	Fitness costs in spatially structured environments Débarre F.
17:35				
17:40				
19:40				
	Poster session B			

Symposium 24	Symposium 25	Symposium 4	Symposium 35
Evolution of behavioural variation <i>MAX 410</i>	Groups versus individuals: levels of selection in microbial systems <i>MAX 415</i>	Evolutionary consequences of sexually antagonistic selection <i>GEN C</i>	Open symposium <i>GEN B</i>
Genomic changes associated with behavioural plasticity: Selection for improved learning behaviour Liefting M. Kraaijeveld K., Le Lann C., Wertheim B., Ellers J.	Is HIV short-sighted? Insights from a multistrain nested model Lythgoe K. Pellis L., Fraser C.	Sex biased expression as a sexually antagonistic trait Veltsos P. Fang Y., Cossins A. R., Snook R.R., Ritchie M.G.	The molecular mechanisms and reversibility of fisheries-induced evolution Uusi-Heikkilä S. Sävilampi T., Papakostas S., Arlinghaus R., Primmer C.
Maladaptive reproductive investment and behavioral variation in urban habitat Demeyrier V. Grégoire A., Lambrechts M., Charmantier A.	Spatial constraints on public good production during biofilm development Hölscher T., Bartels B., Gallegos-Monterrosa R., Kovacs A.T.	Sexual conflict and sex-biased gene expression throughout development Ingleby F.	Density dependence determines the role of extrinsic mortality in shaping life history traits Daňko M. J. Burger O., Kozłowski J.
The role of state-behavior feedbacks in explaining adaptive personality differences Moiron M. Mathot K. J., Dingemanse N. J.	Migrating together: How <i>Bacillus subtilis</i> uses division of labor to colonize surfaces van Gestel J. Vlamakis H., Kolter R.	Evolution of haploid selection in predominantly diploid organisms Otto S. P., Scott M. F. , Immler S.	Sex-specific evolution of learning performance, locomotion, reproduction and lifespan in an outcrossing nematode Zwoinska M. Lind M., Cortazar M., Ramsden M., Maklakov A.
Behavioural interactions of a planktonic crustacean with pond sediments Arbore R. Mushegian A., Andras J., Ebert D.	Experimental evolution of increased efficiency through serial propagation in emulsion Rabbers I. Bruggeman F., Bachmann H., Teusink B.	Sexually antagonistic selection in canaries not generated by testosterone-related intralocussexual conflict Iserbyt A. Eens M., Müller W.	A comprehensive phylogenetic study of mammalian embryology and skeletogenesis reveals the altricial life history of the placental ancestor, modularity and a brain-bone development link Sánchez-Villagra M. Werneburg I., Laurin M., Koyabu D.

FRIDAY, AUGUST 14TH

8:00

Complimentary breakfast

8:50

Communications

9:00

Hopi Hoekstra
Harvard University
Digging for genes that affect behavior
Erna Hamburger Auditorium

9:50

	Symposium 31	Symposium 17	Symposium 12	Symposium 22
	Melanism: macrophysiology to molecules <i>POL A</i>	Polyploid evolution: Integrating ecological and genomic studies <i>POL B</i>	Next-generation phylogenomics <i>POL C</i>	Evolutionary Epigenetics: switching from models to the field <i>POL D</i>
10:00	Nucleotide polymorphism and physiological diversity underlying pigmentation variation in <i>Drosophila melanogaster</i>	Whole genome duplications and recruitment of ecologically relevant genes in alpine mustards	The effects of deleterious mutations on patterns of influenza A/H3N2's evolutionary dynamics	Epigenetic origin of adaptive phenotypic variants in the blood-fluke <i>Schistosoma mansoni</i> Fneich S., Theron A., Cosseau C., Buard J., Duval D., Arancibia N., Boissier J., Mitta G., Grunau C.
10:20	Takahashi A.	Geiser C., Bardil A., Mandáková T., North B., Leempoel K., Lysak M., Joost S., Parisod C.	Koelle K.	Facing environmental predictability with different sources of epigenetic variation Leung C. , Breton S., Angers B.
10:30	Do good genes induce a higher metabolic rate? A study in the colour polymorphic barn owl	Application of associative transcriptomics to polyploid crops	Estimating heritability: Old-school parent-offspring versus next-gen phylogenetics	Epigenetic contribution to natural heritable variation within apomictic dandelion lineages
10:40	Roulin A. Séchaud R., Béziers P.	Harper A.	Leventhal G. Bonhoeffer S.	Verhoeven K.
11:00	Break			
11:30				

Symposium 23	Symposium 16	Symposium 19	Symposium 35
Emerging 'models' in evolutionary and ecological neurobiology <i>MAX 410</i>	Evolutionary consequences of selfish genetic elements <i>MAX 415</i>	Ignoramus et Ignorabimus? How much genome scans can and should tell us about evolution <i>GEN C</i>	Open symposium <i>GEN B</i>
Genetic and neural basis for the evolution of schooling behavior in sticklebacks Peichel C. L. Greenwood A. K., Wark A. R., Mills M.G.	Whole genome meiotic drive in Arthropods Ross L.	The promise of reverse ecology Rockman M.	The genetic sex determination system predicts adult sex ratio in tetrapods Kirkpatrick M. Pipoly I., Bókony V., Székely T., Liker A.
Using live bearing fish as short generation time models in the study of vertebrate brain evolution Kolm N.	Origin, evolution and consequences of sex chromosome drive in stalk-eyed flies Wilkinson G. A. Reinhardt J., Paczolt K. A.	Human adaptation to life in the high arctic Nielsen R.	A quantitative genetic signature of senescence in a short-lived perennial plant Pujol B. Marrot P., Pannell J.
			Bauplan constraints on the evolution of lifespan in Vertebrates Scheuerlein A.

FRIDAY, AUGUST 14TH

	Symposium 31	Symposium 17	Symposium 12	Symposium 22
	Melanism: macrophysiology to molecules	Polyploid evolution: Integrating ecological and genomic studies	Next-generation phylogenomics	Evolutionary Epigenetics: switching from models to the field
	<i>POL A</i>	<i>POL B</i>	<i>POL C</i>	<i>POL D</i>
11:30	<p>Tests of the thermal melanism and melanisation desiccation-resistance hypotheses in New Zealand Hemideina maori (Orthoptera: Stenopelmatidae)</p> <p>King K. Sinclair B., Waters J., Wallis G.</p>	<p>Zinc accumulation, transcriptomics and asymmetric adaptation in the allopolyploid Arabidopsis kamchatica</p> <p>Paape T. Hatakeyama M., Sese J., Shimizu-Inatsugi R., Shimizu K.</p>	<p>New routes to phylogeography</p> <p>De Maio N. Wilson D.</p>	<p>Importance of pollution induced epigenetic inheritance for phenotypic diversification in Daphnia pulex</p> <p>Collin H. Paterson S., Plaistow S.</p>
11:50	<p>Effects of MC1R gene on sexual dimorphism in barn owls and the potential conflict between natural and sexual selection on melanin-based colorations</p> <p>San-José García L.M. Ducrest A., Ducret V., Béziers P., Simon C., Wakamatsu K., Roulin A.</p>	<p>Evolutionary analysis and demographic inference for polyploid genomes using ABC</p> <p>Roux C. Pannell J.</p>	<p>Heterogeneity in antibody range and the antigenic drift of influenza A viruses</p> <p>Gomes G.</p>	<p>Associations of climate with DNA methylation polymorphisms provide evidence of local response to environment in a California oak, Quercus lobata</p> <p>Sork V. Gugger P.</p>
12:10	<p>Could melanin-based plumage colouration be adaptive in environments polluted with trace metals?</p> <p>Chatelain M. Gasparini J., Frantz A.</p>	<p>Molecular basis of ecological diffusion after recurrent allopolyploidization in Dactylorhiza</p> <p>Paun O. Balao F., Lorenzo M., Diehl D., Hao B., Trucchi E., Hedrén M.</p>	<p>Phylogenetic analysis of poliovirus outbreak</p> <p>Li L. Grassly N. C., Fraser C.</p>	<p>A role for methylation in responding to environmental stress in a wild rodent</p> <p>Sims A. van Cann J., Koskela E., Mappes T., Watts P.</p>
12:30	<p>Larval UV exposure impairs adult immune function through a trade-off with larval investment in cuticular melanin</p> <p>Debecker S. Sommaruga R., Maes T., Stoks R.</p>	<p>Whole genome duplication events and evolution of the self-incompatibility system are strongly associated within the Brassicaceae</p> <p>Vekemans X. Henocq L., Castric V., Poux C.</p>	<p>Phylogenetic inference for bacterial and viral populations using BEAST 2</p> <p>Vaughan T. Leventhal G., Drummond A., Welch D., Stadler T., French N.</p>	<p>Epigenetic divergence and parallel evolution in Heliosperma pusillum (Caryophyllaceae)</p> <p>Trucchi E. Flascher R., Romero M. Lorenzo, Frajman B., Schönschetter P., Paun O.</p>
12:50	Lunch			
13:40	ESEB Members meeting			
14:45	Erna Hamburger Auditorium			

Symposium 23	Symposium 16	Symposium 19	Symposium 35
Emerging 'models' in evolutionary and ecological neurobiology <i>MAX 410</i>	Evolutionary consequences of selfish genetic elements <i>MAX 415</i>	Ignoramus et Ignorabimus? How much genome scans can and should tell us about evolution <i>GEN C</i>	Open symposium <i>GEN B</i>
Innate differences in auditory perception and reproductive isolation in an avian species pair Wheatcroft D.	Mating system shifts and transposable element evolution Ågren J.A. Wright S. I.	Genomic basis of the evolution and variation in <i>Drosophila</i> immunity against parasitoids Wertheim B. Salazar-Jaramillo L., Gerritsma S., Jalvingh K.M.	Early-life reproduction is associated with increased mortality risk but enhanced lifetime fitness in humans Lummaa V. Hayward A., Nenko I.
From the jungle to the barn: Independent genetic control for increased brain and body size and Mosaic brain evolution in chickens during domestication Henriksen R. Andersson L., Jensen P., Wright D.	Spore killer genomics: Elucidating causes and consequences meiotic drive in <i>Neurospora</i> Svedberg J. Molnar R. I., Hammond T. M., Johannesson H.	A complementary method to genome scans for selection against maladaptive gene flow Aeschbacher S. Coop G.	Repair or reproduce? Trying to solve an open question - an experimental study on zebra finches Sudyka J. Casasole G., Rutkowska J., Cichoń M.
Evolution of acid-sensing olfactory circuits in <i>Drosophila</i> Prieto-Godino L. Rytz R., Cruchet S., Abuin L., Bargeton B., Silbering A., Ruta V., Dal Peraro M., Benton R.	The molecular basis of paris sex ratio meiotic drive in <i>Drosophila simulans</i> Helleu Q. Gérard P. R., Dubraille R., Ogereau D., Bastien S., Prud'homme B., Loppin B., Montchamp-Moreau C.	The genomic consequences of local adaptation in deer mice Pfeifer S. P. Laurent S., Foll M., Peterson B., Jensen J. D., Hoekstra H. E., Barrett R. D. H.	Reproductive costs in males: Does it really matter? Gamelon M. Bleu J., Sæther B.
Communication scenes of weakly-electric fish recorded in natural habitats challenge sensory processing Benda J. Henninger J., Krahe R.	Genome size variation and song attractiveness in grasshoppers: Sexual selection against large genomes? Schielzeth H. Streitner C., Lampe U., Franzke A., Reinhold K.	The genetic architecture of recombination rate variation in a wild population Johnston S. Slate J., Pemberton J.	Slow development as an evolutionary cost of long life Lind M. Chen H., Meurling S., Guevara Gil A.C., Carlsson H., Zwońska M., Maklakov A.

FRIDAY, AUGUST 14TH

14:45	<i>ESEB Presidential Address</i> Laurent Keller University of Lausanne Supergenes, sex, and sociality <i>Erna Hamburger Auditorium</i>
15:30	<i>John Maynard Smith Prize 2014</i> Laurie Stevison Auburn University The timescale of recombination rate evolution in great apes <i>Erna Hamburger Auditorium</i>
16:10	Break
16:40	<i>John Maynard Smith Prize 2015</i> Matthew Hartfield University of Toronto Mathematical adventures in sex and disease evolution <i>Erna Hamburger Auditorium</i>
17:20	Closing ceremony <i>Erna Hamburger Auditorium</i>
17:50	
19:00	Conference dinner <i>Unithèque</i>
21:00	Concert Orchestre jaune <i>Unithèque</i>
2:00	

Poster session A

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Génopode 2000

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