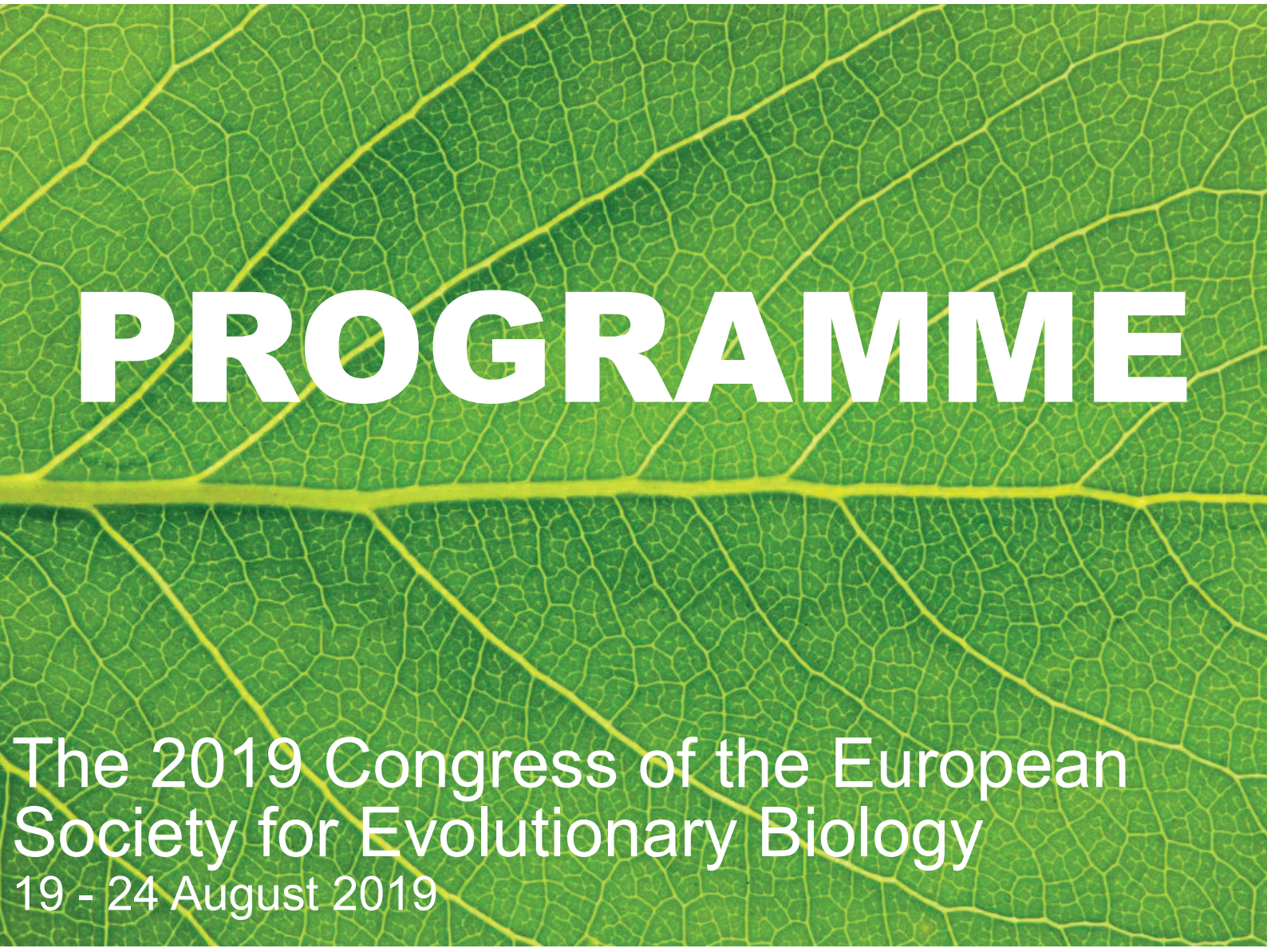
ESEB 2019

Turku • Finland



PROGRAMME

The 2019 Congress of the European Society for Evolutionary Biology

19 - 24 August 2019

eseb

ESEB 2019 Turku • Finland

#ESEB2019

LOGOMO


LO
GO
MO
Logi1
Logi2
3rd FloorChildcare/nursing, 2nd floor quiet/speaker rooms
Logomo-Hall
Goto33
Teatro
Goto32
Galleria
Goto31
Outreach-stage
Goto30
Cloakroom
Poster session and
the exhibition
Entrance
Move1
Move2
Railwaytracks

LOGOMO MAP

TABLE OF CONTENTS

WELCOME

Dear colleagues,

It is a pleasure to welcome you to the Logomo entertainment centre in Turku, Finland, for the 17th Congress of the European Society for Evolutionary Biology! More than 1300 people have registered for the conference, of which 543 researchers are presenting their research in one of the oral sessions, and an additional 570 will present posters.

The five-day programme follows the traditional ESEB format with 35 themed symposia proposed by members of the ESEB community. As a new innovation, we have classified abstracts submitted to the Open Symposium into five broad sub-themes (36a. Sexual selection and reproductive strategies; 36b. Phylogeography, biogeography, Speciation, systematics; 36c. Species interactions; 36d. Genome Evolution; 36e. Phenotypic Evolution) that we hope will make it easier for delegates to identify sessions and talks matching their interests.

In line with ESEB values, we have also placed emphasis on achieving gender balance amongst speakers and ensuring the environmental impact of the meeting is minimized. 53.7% of all speakers, and 57.7% of invited speakers who reported their gender at registration are female (compared to 52.9% of all abstract submitters). To reduce environmental impact, we have minimized the use of plastic throughout the conference (meals and coffee are served with reusable crockery and cutlery, no plastic cups are on offer for water, no plastic cover for badges etc.) and have focused on sourcing food with a low carbon footprint (e.g. 2 days with vegetarian only, 2 days with locally sourced fish). The conference t-shirt and bag are also made from recycled cotton.

We have also arranged active outreach and social programs. Outreach includes a school children mini-conference that will bring over 40 high school students to Logomo on Thursday morning, while on the social side, the conference pub (Koulu a.k.a “The Old School”) will be open until 2am each day (kitchen open until 23:30). There is a large area upstairs reserved for congress participants where you can taste two of their craft beers that have been re-branded for the congress (Beer Reviewed and Drinkage Disequilibrium).

Finally, we would like to thank the 39 volunteers and the exhibitors and sponsors for helping to make this event possible, and we wish you all a productive, supportive and enjoyable meeting!

On behalf of the organizing and scientific committees

Craig Primmer
(main organizer)

CONFERENCE INFORMATION

CONGRESS VENUE

The congress venue, Logomo, is a centre for culture, arts and creative economy operating from the defunct locomotive workshop near the main railway station, the bus station and close to Turku city centre. A pedestrian bridge provides access from the main railway station to Logomo. Walking from the Market Square (which unfortunately is currently under construction) to Logomo takes about 20 minutes (1.5 km). All session rooms are located on the ground floor, except for GOTO rooms, which are located on the third floor, accessible by elevator and Logomo Hall stairs.

REGISTRATION AND INFORMATION

The registration & information desk will be open on Monday, August 19, from 15:00 until 20:00 on the entrance hall, and during the scientific programme on the following congress days, from 7:30 (Tue) and from 8:00 (Wed-Sat). Participant registration fees include attendance at the scientific sessions, coffee and lunch on the congress days as marked on the programme, congress bag, congress app, access to live stream of all sessions, as well as the Welcome reception on 19 August. Last minute registration is possible at the information desk.

LUNCHES AND COFFEE

A cooked lunch on each day is included as a part of the congress registration fee. Coffee and tea are available all day (starting 30 mins before the first session commences), while additional snacks are served during the morning and afternoon breaks (except Saturday afternoon). To reduce the environmental impact of the meals we will serve vegetarian only options on two days, and two days will have locally sourced abundant fish as the meat source. All meals and drinks are served with reusable crockery and cutlery. For the refill water stations, we recommend bringing your own bottle. There is also a restaurant and a bar located in Logomo. Restaurant Kitchen is open daily 9:00-16:00 and Teatro bar is open on Monday 16:00-21:00, and on following days from 12:30 onwards.

CONGRESS STAFF & VOLUNTEERS

Besides registration and info desk staff, there are congress volunteers who can be identified by their white congress T-shirts at the congress venue. Feel free to ask them for any assistance you may need.

QUIET/REFLECTION ROOM

There is a quiet/reflection room available on the second floor (indicated with signs).

SPEAKERS' PRACTICE ROOM

There is a speakers' room on the second floor (indicated with signs) where speakers can practice their talks. If you need to borrow a computer to practice in the room, please ask the info desk. There is a time reservation sheet on the room's door.

CHILDCARE & NURSING ROOM

Childcare will be organized at the 3rd floor "backstage" rooms (take an elevator at the far end of the long hallway on the right side of the Logomo hall). Opening hours are Tue 8:30-17:45, Wed 8:45-17:45, Thu 8:45-13:00, Fri 8:45-17:45 and Sat. 8:45-16:15.

There is also a room for nursing or bottle feeding your child available on the second floor (indicated with signs). The room includes a shower and washbasin, a kitchen sink, refrigerator and microwave. A sign for indicating that the room is in use will be available if you wish to feed in private.

PRESENTATIONS

Regular oral presentations will be 10 min long 3 additional minutes for discussions and then 2 minutes for changing rooms. Invited symposiums presentations will be 23 min long 5 minutes for discussion and 2 minutes for changing rooms. Presenters must follow the assigned times to ensure the eight concurrent sessions remain synchronised. Loud music will play during the 2 min transition to ensure speakers cannot speak overtime. The next speaker's timeslot starts as soon as the music stops. To enable the staff to handle the technical aspects in an efficient way, all presentations must be prepared according to the guidelines listed on the congress website.

POSTER SESSIONS

There will be two poster sessions during ESEB2019 on two evenings (17:20-19:20), after the parallel symposia: Poster Session 1 on Tuesday, 20 August and Poster Session 2 on Friday, 23 August. Presenters can check their poster session in the programme on the congress website. Poster boards will be marked with poster codes. Poster presenters are required to be by their poster for at least one hour during the poster session designated to their poster. Poster presenters also have the opportunity to invite up to 3 attendees of their choice to visit their poster through the Postvites system. Poster presenters will serve wine to their poster visitors.

POSTER PRIZES

There will be prizes awarded for the best student poster in both poster session one and poster session two (by public vote), as well as a "jury's choice" poster prize chosen by members of the scientific committee that recognizes a student poster (across both poster sessions) that honestly and clearly presents complicated/non-significant/counter-intuitive results. The prizes will be announced at the closing ceremony.

EvoKE OUTREACH STAGE

The EvoKE team is arranging a series of events to get evolutionary biology researchers more involved in outreach. These events will mostly be held during lunch breaks on the EvoKE outreach stage in the Teatro café and bar.

The events are listed under "Satellite events".

The EvoKE (Evolutionary Knowledge for Everyone) network is funded by ESEB. EvoKE seeks to contribute to a world where people understand evolution and can use scientific knowledge and skills to make informed decisions that address societal problems thereby contributing to an inclusive, sustainable and resilient future. See https://evokeproject.org/ for more details

STREAMING

In order to encourage open science, and to allow people not able to attend ESEB2019 to have access to presentations, we are providing presenters the opportunity for their presentations to be live streamed and also available for viewing following the conference. All presenters are asked if they do not wish to give permission to allow the streaming and recording of their talk on the presentation upload form. Only those who have given the permission will be streamed/recorded.

WIFI

In Logomo, the wifi network is LogomoPublic and password loGOmo2012.

CONGRESS APP

Aboa Events Congress app is available for the ESEB2019 congress participants and it is free to download from Google Play and App Store. The Aboa Events app contains features such as abstracts, programme, information about the transportation service Föli, notifications about the possible updates in the programme, maps, venue information and other useful features.

BUS (FÖLI) PASS

Delegates will receive complimentary weekly bus passes (QR-codes in the name badges) with FÖLI public transportation from Saturday 17th until Sunday 25th of August. FÖLI Turku region traffic allows you to use local bus services in the city of Turku, without limitation (www.foli.fi).

NAME BADGE

Entrance to the congress venue and upstairs at the conference pub requires wearing your name badge. The conference dinner ticket, if you have purchased one, is also on your name badge, as well as FÖLI pass (QR code).

DELEGATE BAGS

Delegate bags are made in the Turku Work Centre as a part of rehabilitative services for the special needs unemployed. Bags are made of waste fabric and other recycled materials, they all come in different colours and patterns. This new project is inspired by ESEB 2019, which it is the first congress to receive these bags. Take one if you like from the City of Turku stand in the lobby. Also city maps are available.

The Turku Work Centre will also have a pop-up shop in the lobby on Friday, 23 August at 12:00-16:30. They sell lovely handmade, local, Scandinavian style products, toys, wool socks, small purses and bags.

PRINTING

There is no printing possibility at the venue of the congress. Your hotel may have a business centre where you can print. Closest printing place Niini, address Laivurinkatu 1, 20810 Turku, open 8:00-17:00 on weekdays.

FIRST AID

If you need first aid, please contact any staff member or volunteer and you will be directed to first aid room.

ELECTRICITY

There are sockets in the "street area" (furnished with tables and chairs) by the entrance hall. The Voltage: 220-240 Volts. Electrical sockets (outlets) in Finland are one of the two European standard electrical socket types: "Type C" Europlug and "Type E/F" Schuko.

CITY OF TURKU

You can find useful information and get inspired about the city of Turku by visiting the congress website, www.visitturku.fi/en or the congress app Aboa Events.

ENVIRONMENTAL IMPACT

In line with ESEB values, we have placed emphasis on ensuring the environmental impact of the meeting is as low as possible. For example, we provided details of strategies for reaching Turku without flying, as well as options for compensating flight carbon footprints. The City of Turku has also provided all delegates with a weekly bus pass free of charge for moving around the city.

Further, we have minimized the use of plastic throughout the conference (e.g. meals and coffee are served with reusable crockery and cutlery, no plastic cups are on offer for water, no plastic cover for badges etc.) and have focused on sourcing food with a low carbon footprint. There will be two vegetarian lunches and two lunches with locally sourced fish. Berries and herbs in salads come direct from the Finnish nature. The conference t-shirt and optional conference bag are also made from recycled cotton, and are sourced from local companies.

Finland offers the best quality water straight from a tap, so there is no need for bottled water. You can fill your own mug or bottle making use of the water filling stations in Logomo. Finland uses a deposit-based efficient return system for beverage bottles and cans, so do not throw them into trash, but return them to a store and get money back. Logomo also provides recycling centers for other waste.

DIVERSITY OF PRESENTATIONS

In line with ESEB values, we have also placed emphasis on promoting diversity in gender, career stage and nationalities amongst speakers. 54% of all speakers, and 58% of invited speakers who reported their gender at registration are female (compared to 53% of all abstract submitters). ECR and mid-career scientists make up 84% of symposium organisers and 60% of invited speakers. 28 nationalities are represented amongst the symposium organisers and 19 amongst the 75 invited speakers.

SOCIAL MEDIA POLICY

ESEB supports open communication of science. Therefore, in addition to offering a live streaming opportunity for all oral presentations, the default assumption is that information presented at the congress (in oral or poster format) may be reported and discussed, and images of slides posted, by attendees in social media and blogs unless presenters specifically state otherwise. If a presenter does not want information from their presentation to be broadcast and/or photographed they should make this clear in their talk/poster, for example by including one or both of the following images.

We expect delegates to respect the rights of presenters. Any clear breaches of this policy should be reported to the congress desk.

CODE OF CONDUCT

The ESEB Congress is intended to foster the exchange of scientific ideas, providing participants with an opportunity to network with an international community of evolutionary biologists. ESEB is committed to creating an environment where everyone can participate without harassment, discrimination, or violence of any kind. All meeting participants must be treated with respect and consideration. Registration for the meeting is considered an agreement to abide by this Code of Conduct.

Harassment of any participant will not be tolerated. Unacceptable behaviour includes (but is not limited to) unwanted verbal attention, unwanted touching, intimidation, stalking, shaming, or bullying. Blatant discrimination on the basis of gender or gender identity, sexual orientation, age, disability, physical appearance, race, religion, national origin, or ethnicity will not be tolerated. Harassment presented in a joking manner constitutes unacceptable behaviour. Retaliation for reporting harassment is also unacceptable, as is reporting an incident in bad faith.

Please note that the use of certain language or images in oral or poster presentations may contravene the Code of Conduct if they represent disrespectful criticism of individuals or teams rather than valid criticism of their science, if they are seen to objectify or demean individuals or groups. It is important to recognise that sensitivity to such aspects of communication varies, and what might be acceptable or humorous to some people might not be to others.

The meeting organizers and society executive officers reserve the right to enforce this Code of Conduct in any manner deemed appropriate. Anyone violating the Code of Conduct may be: (a) asked to stop, (b) expelled from the meeting, and/or (c) prohibited from attending future meetings. Establishing this Code of Conduct is intended to maintain the high quality of scientific discourse that members have come to expect from our meetings.

If you experience any form of inappropriate behaviour, you may wish to contact and speak with an experienced external Human Relations counsellor that ESEB has contracted to help in such situations. You may also speak with the ESEB Office Manager, Dr Ute Moniatte, who can liaise with the external counsellor on your behalf. Either way, all communication will be held in strict confidence.

If you contact our counsellor, you will be asked the following:
• to give your name
• to describe the events or behaviour that took place, and any other relevant circumstances surrounding the incident
• if relevant or appropriate, to identify the perpetrator
• if relevant or appropriate, to identify any witnesses.

Important
Nothing will be undertaken without your consent, nor will your name be communicated to anyone without your consent.

Our external HR Adviser is Joanne Harding, at Workforce Window Ltd, a Human Resources company based in the UK with many years' experience in dealing with individual complaints and breaches of codes of conduct. Joanne will handle your issues both sensitively and confidentially.

The Workforce Window website is: www.workforcewindowltd.co.uk

To contact Joanne Harding, either send her an email (joanne@workforcewindow.co.uk) or phone/text her (+44 792 009 46 63).
To contact Ute Moniatte, either send her an email (office@eseb.org) or phone/text her (+49 160 524 3050).

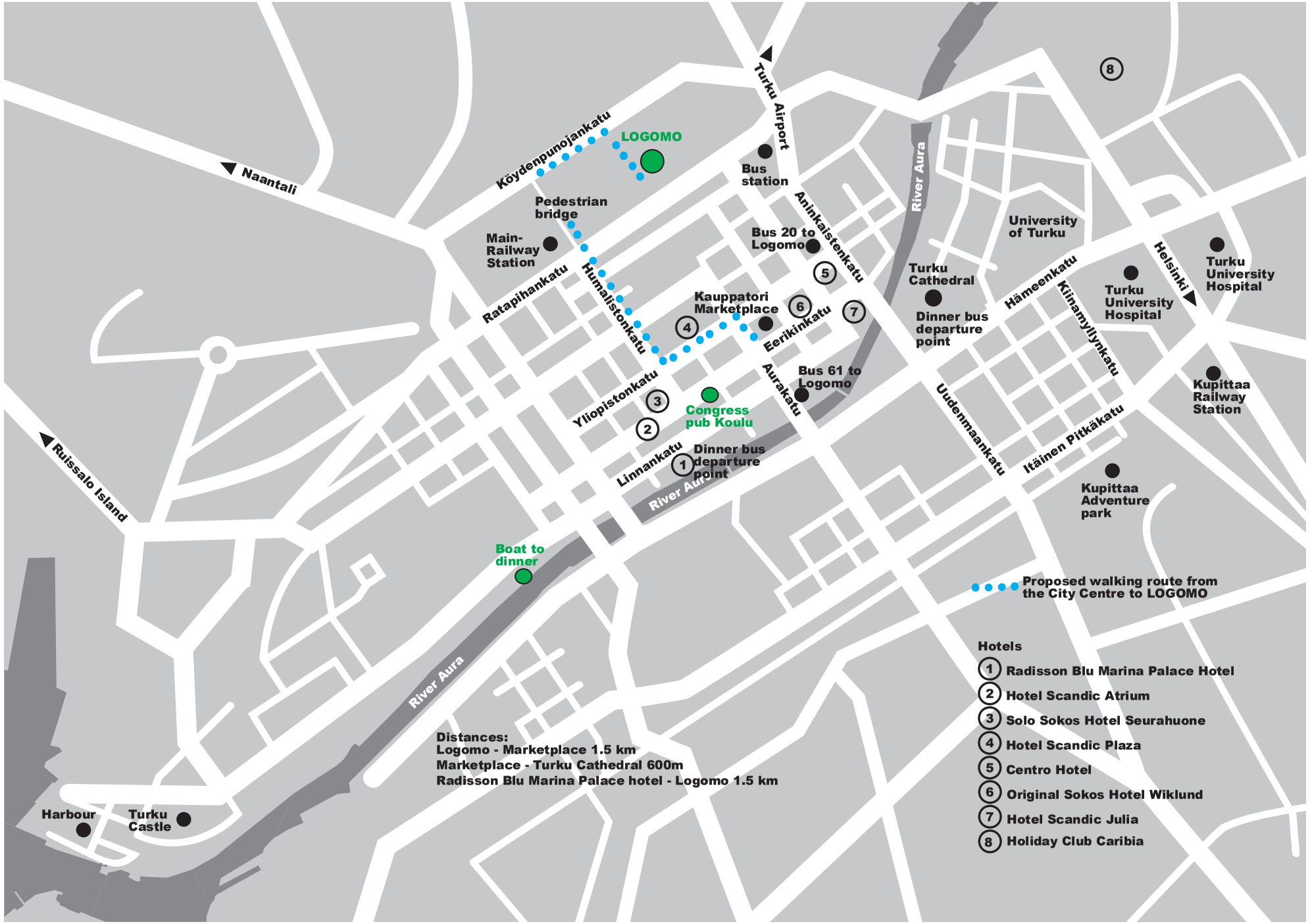
Workforce Window Ltd follow the General Data Protection Regulations and are registered with the Information Commissioners Office. The company has no other links with ESEB.

EXHIBITION

Exhbition is open throughout the congress in the entrance hall. List of exhibitors:

1. Peer Community In
2. Guarant International
3. Frontiers
4. Wiley
5. Oxford University Press
6. Royal Society Publishing
7. Cambridge University Press
8. Current Zoology
9. The New Phytologist Trust
10. Nordic Society Oikos
11. University of Helsinki / HiLIFE
12. EvoKE - Outreach activities
13. ESEB organisation

CITY MAP


Naantali
Köydenpunojankatu
LOGOMO
Pedestrian bridge
Main-Railway Station
Ratapihankatu
Humalistonkatu
Turku Airport
Bus station
Aninkaistenkatu
Bus 20 to Logomo
Kauppatori Marketplace
Eerikinkatu
Bus 61 to Logomo
Yliopistonkatu
Congress pub Koulu
Linnankatu
Dinner bus departure point
Aurakatu
River Aura
Ruissalo Island
Boat to dinner
River Aura
Harbour
Turku Castle
Distances:
Logomo - Marketplace 1.5 km
Marketplace - Turku Cathedral 600m
Radisson Blu Marina Palace hotel - Logomo 1.5 km
Turku Cathedral
Dinner bus departure point
University of Turku
Hämeenkatu
Kiinamyllynkatu
Turku University Hospital
Helsinki
Turku University Hospital
Kupittaa Railway Station
Uudenmaankatu
Itäinen Pitkäkatu
Kupittaa Adventure park
Proposed walking route from the City Centre to LOGOMO
Hotels
1 Radisson Blu Marina Palace Hotel
2 Hotel Scandic Atrium
3 Solo Sokos Hotel Seurahuone
4 Hotel Scandic Plaza
5 Centro Hotel
6 Original Sokos Hotel Wiklund
7 Hotel Scandic Julia
8 Holiday Club Caribia

PLENARY SPEAKERS

PAT MONAGHAN

(Glasgow)

Title: Bad beginnings and untimely ends: environments, telomeres and life history variation
Tuesday, August 20
09.00-09.45 Room: LOGOMO HALL

Pat Monaghan is an evolutionary ecologist, based at the University of Glasgow, where she holds the Regius Chair in Zoology. She did her PhD at Durham University on seabird ecology, followed by work on the interactions between seabirds and fisheries management. She then began research on the effect of early life conditions in shaping individual life histories, involving studies at many different biological levels from physiology and molecular biology to ecology and behavioural biology. Her work is mainly on birds, with related work in other taxa. A current major focus is on telomere dynamics, and the extent to which this system of genome protection influences life history evolution and ageing patterns.

SINEAD COLLINS

(Edinburgh)

Title: Understanding evolution in life-giving slime
Wednesday, August 21
09.05-09.50 Room: LOGOMO HALL

Sinead Collins is a Reader at the Institute of Evolutionary Biology at the University of Edinburgh. Her research focuses on building the theory needed to predict trait evolution in large populations of photosynthetic microbes, particularly those in the ocean. To do this, she and her group use microbial experimental evolution, make models, and collaborate closely with marine microbiologists and oceanographers. Experimental evolution is a field that rarely considers marine systems, and Sinead has spent much of the past decade working with others to create a field of “marine microbial experimental evolution” that pulls together the strengths of marine and evolutionary biologists.

DAVID QUELLER

(Washington)

Title: Evolutionary conflict and molecular arms races in cooperative systems
Thursday, August 22
09.05-09.50 Room: LOGOMO HALL

David Queller is a professor at Washington University in St. Louis. His dissertation investigated sexual selection and kin selection in plants. He subsequently worked for many years, together with Joan Strassmann, on social insects, showing the importance of relatedness in both cooperation and conflict. They later switched to studying social amoebas, especially the evolution of cheating in and its control by high relatedness, kin discrimination, pleiotropy, and resistance. His theoretical work includes methods for estimating relatedness, models of kin selection and other social forces, the evolution of eusociality via demographic advantages, evolutionary conflict, and fundamental theorems of natural selection.

ANNA-LIISA LAINE

(University of Zurich, Helsinki University)

Title: What keeps pathogens in check in the wild?
Friday, August 23
09.05-09.50 Room: LOGOMO HALL

Anna-Liisa Laine is an evolutionary ecologist who is broadly interested in the eco-evolutionary feedback loops that drive species interactions. She is a professor of ecology at the University of Zurich, and a visiting professor at the University of Helsinki. She received her PhD at the University of Helsinki in 2005 and continued to do post doctoral research at the University of California, Santa Cruz, and CSIRO Canberra. Much of her work is focused on uncovering the mechanism that enable coexistence of host and their parasites in natural populations, and the mechanism which maintain diversity in host-parasite interaction traits. Currently, her work is addressing these questions within a community ecology framework.

RASMUS NIELSEN

(UC Berkley/Copenhagen)

Title: Human adaptation in time and space
Saturday, August 24
09.05-09.50 Room: LOGOMO HALL

Dr. Nielsen's work is on statistical and population genetic analyses of genomic data, in particular methods for detecting natural selection, describing population genetic variation, inferring demography, and methods for association mapping. Much of his current research concerns statistical analysis of next-generation sequencing data, both in the context of medical genetics and population genetics. Many of the methods he has developed are heavily used by other researchers, including the phylogeny based methods for detecting positive selection implemented in PAML, the methods for inferring demographic histories implemented in the IM and IMa programs, the method for detecting selective sweeps implemented in the SweepFinder programs, and the methods for analysing Next Generation Sequencing (NGS) data implemented in ANGSD.

SOCIAL EVENTS

WELCOME RECEPTION

Monday, 19 August, 18:00-21:00

Join your colleagues for a welcome reception at the congress venue Logomo on Monday evening, at 18:00.

Finger is food served until 19:30. The event includes 2 complimentary drinks, one offered by the City of Turku. Additional drinks available for purchase until 21 after which we will move to the conference pub (Koulu).

CONGRESS DINNER AT MOOMIN WORLD

Saturday, 24 August, 18:30-02:00

The congress will be concluded with the conference dinner held in Moomin World. This children's culture classic operates in Naantali, where the Archipelago Sea and Naantali's Old Town with its wooden houses meet.

Tove Jansson was a Finnish writer and a visual artist, whose Moomin characters are known all over the world. Moomin World is an ode to fairy tales and a tribute to Tove Jansson's imagination, located in south-west coast of Finland, in the island of Kailo, in Naantali. Moomin World can be reached within 20 minutes from the downtown of Turku.

Who knows, maybe we will get to meet the Moomins during the dinner, come along to spend a memorable evening!

Bus transportation to dinner

Buses to dinner leave from two locations (see below) in short intervals between 17:15 and 17:40. Families with children are recommended to take the first bus in order to give them time to explore the island before larger crowds arrive:

1. Turku Cathedral, address Tuomiokirkonkatu 1
2. Hotel Radisson Blu Marina Palace, address Linnankatu 32

In Naantali, there is about 10 minute walk from the bus to Moominworld island. Congress volunteers will show the way.

Return buses will leave starting from 20.00 in about 30 minute intervals. All return buses will stop at Hotel Radisson Blu Marina Palace and near Turku Cathedral.

Boat transportation (one way, return by bus)

If you have booked a ticket for the boat:

The boat leaves at 17:15 sharp from the River Aura, address: Läntinen Rantakatu 37

RUNNING SOCIAL

Thursday, 22 August, at 07:00

A running social will be organized early Thursday morning, meeting in the front of the Cathedral (Tuomiokirkonkatu 1, 20500 Turku). The routes will follow the river Aura. We aim to have two groups (different paces and distances).

FAMILY SOCIAL

Thursday, 22 August, at 15:00

A family social will be organized on Thursday afternoon at the Seikkailupuisto adventure park (Kupittaankatu 2, 20520 Turku; meeting point at the big moose statue), and in case of rain, in a child-friendly museum of history Aboa vetus (Itäinen Rantakatu 4–6, 20700, Turku) at 15:00.

LGBTQ SOCIAL

Friday, 23 August, at 19:30

The ESEB 2019 LGBTQ social will feature a collaboration with Turku Pride! Following the poster session on Friday August 23, we will meet near the main door in Logomo at 19:30 and head over to Saaristobaari (Aurakatu 14, Turku) together to grab a bite to eat and get to know each other. At 10pm, there will be a drag show (5€ cover) featuring Finland's fiercest underground drag and burlesque artists and DJ Slaya Bit. The show is the official Turku Pride pre-party, so let's get there early! For more information, please check @ESEB2019LGBTQ on Twitter or email evolcongen1@gmail.com - the first 100 ESEB members attending the congress who RSVP by 22 August will get in free to the show.

CONGRESS PUB

Panimo ravintola Koulu

Address: Eerikinkatu 18 (the second floor of the restaurant is reserved for ESEB participants) Open every day 11:00-02:00, kitchen open until 21:30 (Mon-Thu), until 23:30 (Fri-Sat).

Look out for two evolutionary themed congress beers on tap in the upstairs bar of Panimoravintola Koulu; ‘Beer Reviewed’ and ‘Drinkage Disequilibrium’. Our beer names were chosen following a twitter poll on a shortlist of names, whittled down from an extensive list of submissions of varying creativity (it turns out evolutionary biologists love both procrastinating and puns). Credit goes to Martin Seltmann who came up with ‘Beer Reviewed’ and Will Buswell for ‘Drinkage Disequilibrium’, as well as to Océane Liehrmann for the great logo adaptation and designs!

Panimoravintola Koulu (Brewery restaurant School in English) is a former elementary school, now Finland’s largest brewery restaurant serving large selection of beers, wine and delicious food too!

SATELLITE EVENTS

PEER COMMUNITY IN (PCI) - PEER COMMUNITY IN...THE BEGINNING OF A REVOLUTION IN OPEN ACCESS?

Where: MOVE 1
When: Tuesday 20 August, 13:00-13:50 (lunch time)
Who: Researchers

Interested by discovering/joining/using the next generation publishing experiment with the "Peer Community In" (PCI, https://peercommunityin.org) project? In a few words: PCI is a non-profit scientific organization that aims to create specific communities of researchers reviewing and recommending, for free, unpublished preprints in their field (i.e. unpublished articles deposited on open online archives like arXiv.org and bioRxiv.org). Evaluations and recommendations by a PCI are free of charge for authors and readers.The first PCI, Peer Community in Evolutionary Biology (PCI Evol Biol), has been launched in 2017 and now counts >400 Editors. Other PCIs (eg PCI Ecology, PCI Paleontology, PCI Entomology...) have been created and several PCIs will probably open soon. Come along and meet Thomas Guillemaud & Denis Bourguet – co-funders of PCI – and many reasearchers already involved as editors @PCI Evol Biol. See also https://youtu.be/4PZhpnc8wwo, @PCIEvolBiol & @PeerCommunityIn.

THE EUROPEAN RESEARCH COUNCIL - FUNDING OPPORTUNITIES FOR BRIGHT MINDS

Where: MOVE 1
When: Wednesday 21 August, 13:15-14:05 (lunch time)
Who: Researchers

Is an ERC grant for you? You will be explained what the European Research Council is, who can benefit from its funding opportunities and what to expect in the application and selection process. The ERC supports researchers performing interesting and ambitious fundamental research. This could be you!

The mission of the European Research Council is to encourage the highest quality research in Europe. The concept is simple: competitive individual funding for researchers with a great idea, across all fields. ERC grants are awarded through open competition to projects headed by starting and established researchers of any nationality and age, who are working or moving to work in Europe or an associated country. The sole criterion of choice is scientific excellence.

NETHERLANDS EVOLUTIONARY BIOLOGY GET-TOGETHER

Where: Congress pub Panimoravintola Koulu, address: Eerikinkatu 18
When: Wednesday 21 August, 18:00-19:30
Who: All scientists working in the Netherlands or of Dutch origin

The Netherlands society for evolutionary biology (NLSEB) aims to build a community of all evolutionary biologists in the Netherlands. NLSEB therefore welcomes all scientists working in the Netherlands or from Dutch origin for drinks. Come and (re-)connect to Dutch evolutionary biology!

MEET THE EDITORS - A ROYAL SOCIETY PUBLISHING WORKSHOP

Where: MOVE 1
When: Friday 23 August, 13:00-13:50 (lunch time)
Who: Everybody interested

Presenters: Editors from the Royal Society journals Proceedings B, Philosophical Transactions B and Biology Letters, including ESEB President Professor Nina Wedell.

Have you ever wondered what happens to a paper submitted to a Royal Society journal? This is your chance to find out. This one-off event offers an excellent opportunity to gain valuable insight into the peer review and processes behind the scenes at Royal Society Publishing. Come along and meet some of the highly experienced and reputable editors working for the Royal Society journals, and hear more about their expectations and top tips for compiling high quality articles. There will also be plenty of time to discuss topical publishing issues, and questions and feedback from the audience will be encouraged.

OUTREACH EVENTS

- OPEN TO EVERYBODY INTERESTED IN OUTREACH

HOW TO FOSTER PUBLIC ENGAGEMENT AT CONFERENCES

Where: Outreach Stage
When: Tuesday 20 August, 12:45-13:55 (lunch time)

In this session, you will be presented with a few examples of how outreach and public engagement were fostered at scientific conferences and participate to a brainstorming session on how to do in the future, to be able to go back home with plenty of concrete ideas! (Héloïse Dufour)

A CITIZEN-SCIENCE WORKSHOP

Where: GOTO 31 (3rd floor)
When: Tuesday 20 August, 12:45-13:55 (lunch time)

A citizen-science workshop showcasing an amazing and successful Droseu citizen-science initiative (Roberto Torres)

HOW TO PITCH YOUR SCIENCE TO NON-SPECIALIST AUDIENCES

Where: GOTO 31 (3rd floor)
When: Wednesday 21 August, 12:55-13:55 (lunch time)

In this workshop, you will get tips on how to discuss your science with non-specialist audiences and actually build and practice on YOUR pitch(es). (Héloïse Dufour)

SCISPARKS, HOW TO ORGANISE SPEED MEETINGS IN HIGH-SCHOOLS

Where: Outreach Stage
When: Friday 23 August, 12:45-13:55 (lunch time)

In this session, you will learn how to easily organise effective encounters between researchers and highschool students using speed-meetings, and how to get support to start your own. They are fun ways to create engaging links between students, teachers, and researchers! This session is also for you if you want to become part of a European coordinated activity dedicated to evolution! (Héloïse Dufour)

ART-UP YOUR EVOLUTION

Where: Outreach Stage
When: lunchtime + coffee-breaks + continued moderation throughout the conference on a flexible basis, lasts until the end of the last coffee break

Unleash your artistic side! Take the paint, crayons, paper, brushes and whatever else you need - and show us your artistic vision of your research, results - or yourself as a scientist! All materials will be provided - just come and express yourself. (Szymek Drobniak)

COME AND MEET EvOKE!

Where: Exhibition area
When: Throughout whole conference

Come share with us what outreach activities you are involved in and why! You will also learn about examples of activities you can get involved in or use. Last but not least, you will hear about EvoKE, the network aiming at Evolutionary Knowledge for Everyone, to get in touch with a diversity of people with the same goal!

LIST OF SYMPOSIA

S1. Trans generational plasticity in animals (Trans gen plast)
Organisers: Dalial Freitak, Olivia Roth
Invited: Marjo Saastamoinen, Seth Barribeau

S2. Evolution in real time: experimental evolution approaches (Exp evol)
Organisers: Biljana Stojković, Uroš Savković, Mirko Đorđević
Invited: Göran Arnqvist, Tadeusz Kawecki

S3. Exploring the role of nongenetic inheritance in evolution (Non-gen inherit)
Organisers: Pim Edelaar, Russell Bonduriansky, Troy Day
Invited: Itamar Lev, Sonia Sultan

S4. Cognitive evolution and environment (Cognition)
Organisers: Antonin Crumiere, Manuel Nagel
Invited: Reuven Dukas, Gabrielle Davidson

S5. Aging & Cancer through the lens of evolution (Aging & cancer)
Organisers: E. Yagmur Erten, Matthias Galipaud, Robert Noble
Invited: Vera Gorbunova, Joao Pedro de Magalhaes

S6. Eco-evolutionary approach to the antimicrobial resistance problem (Anti-micro resist)
Organisers: Teppo Hiltunen, Lutz Becks
Invited: Danna R Gifford, Dan Andersson

S7. Human-induced evolution (Human-induced)
Organisers: Miguel Baltazar-Soares, Kristien Brans, Christophe Eizaguirre
Invited: Fanie Pelletier, Mikko Heino

S8. Genetics of small populations (Small pop gen)
Organisers: Alina Niskanen, Lumi Viljakainen, Henrik Jensen
Invited: Richard Frankham, Nancy Chen & Jane Reid (Externally sponsored)

S9. Microbial genome and community evolution in food environments (Microbes & food)
Organisers: Jeanne Ropars, Ricardo Rodriguez de la Vega
Invited: Delphine Sicard, John Gibbons

S10. Rapid evolutionary adaption: potential and constraints (Rapid adapt)
Organisers: Carolin Wendling, Jürgen Gadau
Invited: Alison Feder, Lutz Becks
The symposium is sponsored by the DFG priority program SPP1819

S11. Quantitative trait effect size distributions and their impact on evolutionary processes (Quant traits)
Organisers: Arild Husby, Anna Santure
Invited: John Kelly, Mirte Bosse

S12. Quantifying selection and evolvability in wild plant populations: methods and measurements (Wild plant sel)
Organisers: Øystein H. Opedal, Rocío Pérez-Barrales
Invited: Benoit Pujol, Maria Clara Castellanos

S13. Genetics and genomics of adaption (Adapt gen)
Organisers: Carmelo Fruciano, Paolo Franchini, Julia C. Jones
Invited: Kathryn Elmer, Henrique Teotónio

S14. The mechanisms of evolutionary change: moving from genomic signatures to functional validation (Genome funct)
Organisers: Darren J. Parker, Nicola Cook
Invited: Alistair P. McGregor, Megan Neville

S15. Tracing evolution through time using ancient DNA (Ancient DNA)
Organisers: Päivi Onkamo, Verena Schünemann, Elina Salmela
Invited: David Wegmann, Johannes Krause

S16. Mito-nuclear interactions across levels of biological organisation (Mito-nuclear)
Organisers: Florencia Camus, Hernan Morales
Invited: Ronald S. Burton, Kristi Montooth

S17. Selfish genetic elements (Selfish GEs)
Organisers: Robert Kofler, Kirsten A. Senti
Invited: Catherine Montchamp-Moreau, Arturo Mari-Ordonez

S18. The genetic architecture of polygenic adaption: sweeps, small shifts and everything in between (Polygen arch)
Organisers: Christian Schlötterer, Neda Barghi
Invited: Catherine Peichel, Joachim Hermisson
The symposium is supported by Molecular Ecology

MOLECULAR ECOLOGY

S19. Gene-phenotype associations across evolutionary scales (Geno-pheno)
Organisers: Jo Baker, Stephen Montgomery, Francesco Cicconardi
Invited: Nicola Nadeau, Itay Mayrose

S20. The evolutionary consequences of social transmission and animal culture (Social trans)
Organisers: Rose Thorogood, Neeltje Boogert
Invited: Lucy Aplin, Sasha Dall

S21. Colour across the evolutionary spectrum: from production to perception (Colour)
Organisers: Hugo Gruson, Amélie Fargevieille, Nicola Nadeau
Invited: Edwige Moyroud, Martine Maan

S22. Evolution of host-plant use in arthropods (Host-plant)
Organisers: Ernesto Villacis-Perez, Nicky Wybouw
Invited: Silke Allmann, Noah Whiteman

S23. Parasite community dynamics and their role in the evolution of host immunity (Parasite comm dyn)
Organisers: Tobias Lenz, Sébastien Calvignac-Spencer
Invited: Anssi Karvonen, Elin Videvall

S24. Microbial evolution under biotic stress (Microbial stress)
Organisers: Marie Vasse, Antoine Frenoy
Invited: Olaya Rendueles, Ville-Petri Friman

S25. Assortative mating for quantitative traits: mechanisms, estimation and evolutionary consequences (Assort mating)
Organisers: Niels Dingemanse, Barbara Class
Invited: Wolfgang Forstmeier, Roger Butlin

S26. Sexual conflict: linking behavior, genetics and ecology (Sex conflicts)
Organisers: Kenyon Mobley, Jessica Abbott, Stephen De Lisle
Invited: Jen Perry, Howard Rundle

S27. Design of social traits: genes, individuals and social groups (Social traits)
Organisers: Gonçalo S. Faria, Thomas Hitchcock, Jasmeen Kanwal
Invited: Susanne Shultz, Alan Grafen

S28. Evolutionary game theory: modern development and interdisciplinary applications (Game theory)
Organisers: Xiang-Yi Li, Vlastimil Křivan, Christian Hilbe
Invited: Katerina Stankova, Redouan Bshary

S29. Moving beyond a quantification of eco-evolutionary dynamics (Eco-evo)
Organisers: Lynn Govaert, Marjolein Bruijning
Invited: Jelena Pantel, Tim Coulson

S30. Eco-evolutionary feedback between pollinator behaviour and floral evolution (Pollinator)
Organisers: Mario Vallejo-Marin, Avery Russell
Invited: Aimee Dunlap, Allan Ellis

S31. Life history evolution: bridging theory and data (Life history)
Organisers: Piret Avila, Mauricio González-Forero
Invited: Alexei Maklakov, Irja Ida Ratikainen

S32. Niche width evolution and its (mal)adaptive significance (Niche width)
Organisers: Maud Charlery de la Masselière, Virginie Ravigné, Vincent Calcagno
Invited: Claus Rueffler, Michael Singer

S33. Evolutionary ecology of ageing: from mechanisms to life-history consequences (Aging)
Organisers: Sophie Reichert, Hannah Froy, Antoine Stier
Invited: Sandra Bouwhuis, Tonia Schwartz

S34. Mathematical models in evolutionary biology (Math models)
Organisers: Guy Cooper, Matishalin Patel, Tom Scott, Asher Leeks
Invited: Hanna Kokko, Florence Débarre

S35. Evolution outreach projects: keep SCREAMing (Science Communication Research Empowers AMazing outreach) (Evol outreach)
Organisers: Dragana Cvetković, Szymon M. Drobniak
Invited: Pedro Russo, Héloïse Dufour

36a. Sexual selection and reproductive strategies (Sex select & mating)
Organizers: Natalie Pilakouta, Murielle Ålund, Colin Olito

36b. Phylogeography, biogeography, speciation, systematics (Phylogeo & syst)
Organizers: Bjarki Eldon, Niklas Wahlberg

S36c. Species interactions (Spp interact)
Organizers: Alexandre Figueiredo, Jos Kramer, Elisa Granato

36d. Genome evolution (Genome evol)
Organizers: Alexander Nater, Wen-Juan Ma

36e. Phenotypic evolution (Phenotypic evol)
Organizer: Dany Garant

PROGRAMME AT A GLANCE

MONDAY AUGUST 19

15.00 18.00	Registration
18.00 21.00	Welcome reception

TUESDAY AUGUST 20

7.30	Registration
8.30	Opening of conference and practical information
9.00 9.45	**Keynote I Pat Monaghan,** Bad beginnings and untimely ends: environments, telomeres and life history variation
10.00	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S34: Math Models, S8: Small pop gen, S7: Human-induced, S23: Parasite com dyn, S18: Polygen arch, S32: Niche width
11.00	Coffee & Exhibition & Outreach
11.30	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S34: Math Models, S8: Small pop gen, S7: Human-induced, S23: Parasite com dyn, S18: Polygen arch, S32: Niche width
12.30	Lunch & Exhibition & Satellite events/outreach
14.00	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S34: Math Models, S8: Small pop gen, S7: Human-induced, S23: Parasite com dyn, S18: Polygen arch, S20: Social trans
15.30	Coffee & Exhibition & Outreach
16.00 17.15	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S36d: Genome evol, S8: Small pop gen, S7: Human-induced, S36e: Phenotypic evol, S36b: Phylogeo & syst, S20: Social trans
17.20 19.20	**POSTER SESSION I**

WEDNESDAY AUGUST 21

08.55	ESEB initiatives and practical information
9.05 9.50	**Keynote II Sinead Collins,** Understanding evolution in life-giving slime
10.00	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S34: Math Models, S14: Genome funct, S33: Aging, S4: Cognition, S35: Evol outreach, S11: Quant traits
11.00	Coffee & Exhibition & Outreach
11.30	**SYMPOSIA** S10: Rapid Adapt, S31: Life History, S34: Math Models, S14: Genome funct, S33: Aging, S4: Cognition, S35: Evol outreach, S11: Quant traits
12.45	Lunch & Exhibition & Satellite events/outreach
14.15	**SYMPOSIA** S13: Adapt gen, S21: Colour, S6: Anti-micro resist, S14: Genome funct, S17: Selfish GEs, S4: Cognition, S25: Assort mating, S22: Host-plant
15.45	Coffee & Exhibition & Outreach
16.15 17.30	**SYMPOSIA** S13: Adapt gen, S21: Colour, S6: Anti-micro resist, S14: Genome funct, S17: Selfish GEs, S33: Aging, S25: Assort mating, S22: Host-plant

THURSDAY AUGUST 22

08.55	ESEB initiatives and practical information
9.05 9.50	**Keynote III David Queller**, Evolutionary conflict and molecular arms races in cooperative systems
10.00	**SYMPOSIA** S13: Adapt gen, S21: Colour, S26: Sex conflict, S3: Non-gen inherit, S29: Eco-evo, S6: Anti-micro resist, S12: Wild plant sel, S16: Mito-nuclear
11.00	Coffee & Exhibition & Outreach
11.30	**SYMPOSIA** S13: Adapt gen, S21: Colour, S26: Sex conflict, S3: Non-gen inherit, S29: Eco-evo, S7: Human induced, S12: Wild plant sel, S16: Mito-nuclear
12.45	Lunch & Exhibition & Satellite events/outreach
13.45 18.00	Excursions

FRIDAY AUGUST 23

8.55	ESEB initiatives and practical information
9.05 9.50	**Keynote IV Anna-Liisa Laine**, What keeps pathogens in check in the wild?
10.00	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S26: Sex conflict, S15: Ancient DNA, S27: Social traits, S1: Trans gen plast, S19: Geno-pheno, S24: Microbial stress
11.00	Coffee & Exhibition & Outreach
11.30	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S26: Sex conflict, S15: Ancient DNA, S27: Social traits, S1: Trans gen plast, S19: Geno-pheno, S24: Microbial stress
12.30	Lunch & Exhibition & Satellite events/outreach
14.00	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S26: Sex conflict, S15: Ancient DNA, S27: Social traits, S1: Trans gen plast, S19: Geno-pheno, S24: Microbial stress
15.30	Coffee & Exhibition & Outreach
16.00 17.15	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S26: Sex conflict, S3: Non-gen inherit, S27: Social traits, S36b: Phylogeo & syst, S36d: Genome evol, S36c: Spp interact
17.20 19.20	**POSTER SESSION II**

SATURDAY AUGUST 24

8.55	ESEB initiatives and practical information
9.05 9.50	**Keynote V Rasmus Nielsen**, Human adaptation in time and space
10.00	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S36a: Sex select & mating, S28: Game theory, S27: Social traits, S30: Pollinator, S9: Microbes & food, S5: Aging & cancer
11.00	Coffee & Exhibition & Outreach
11.30	**SYMPOSIA** S13: Adapt gen, S2: Exp evol, S36a: Sex select & mating, S28: Game theory, S27: Social traits, S30: Pollinator, S9: Microbes & food, S5: Aging & cancer
12.45	Lunch & Exhibition
13.30	ESEB members meeting
14.30	**Incoming president's address, Ophelie Ronce**, Integrating niche evolution with life history theory can help us better understand the consequences of climate change
15.10	Leg stretching break
15.20	**JMS award winner 2019, Karl Grieshop**, Sexual conflict and the maintenance of genetic variance in fitness
15.50 16.20	**Closing ceremony**
18.30 02.00	**Congress dinner at Muuminworld**

TUESDAY, AUGUST 20

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
7.45	**REGISTRATION**			
8.30	**OPENING OF CONFERENCE AND PRACTICAL INFORMATION**			
9.00	**KEYNOTE I** **Pat Monaghan,** Bad beginnings and untimely ends: environments, telomeres and life history variation			
	S10: RAPID ADAPT	**S31: LIFE HISTORY**	**S34: MATH MODELS**	**S8: SMALL POP GEN**
10.00	**S10.O1** Slowing the rapid evolution of HIV drug resistance **A. Feder**	**S31.O1** Why do organisms age: Beyond energy trade-offs **A. Maklakov**	**S34.O1** Why you might want to care about population regulation, no matter what your question is **H. Kokko**	**S8.O1** What sizes are required for populations to be genetically viable? Re-evaluation of the 50/500 rules **R. Frankham**
10.30	**S10.O2** Host virus coevolution – demography versus selection in the face of multiple stressors **L. Becks**	**S31.O2** Co-evolution of life history traits in variable environments **I. I. Ratikainen**	**S34.O2** Reconciling different modelling approaches in evolutionary theory **F. Débarre**	**S8.O2** Genetic and fitness consequences of dispersal in a small pedigreed population **N. Chen**
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			
11.30	**S10.O3** Tracking viral life history during experimental coevolution with their hosts **E. J. P. Lievens**	**S31.O3** Ageing and the fecundity/longevity trade-off in social insects: a comparative approach **J. Korb**	**S34.O3** Does ecology matter in evolutionary models? **B. Ashby**	**S8.O3** Complexities of inbreeding, outbreeding and inbreeding depression in a song sparrow meta-population **J. Reid**
11.45	**S10.O4** Rapid resource use specialisation leads to increased virulence in plant pathogenic Ralstonia solanacearum-bacterium **L. Mikonranta**	**S31.O4** The effect of environmental stress on ageing in social insects **V. Rau**	**S34.O4** Individual-based models improve understanding of evolutionary dynamics: examples from female multiple mating and dispersal **G. Bocedi**	**S8.O4** Genetic load accumulation from the perspective of post-bottleneck populations of Galapagos Mockingbirds. **J. Vlček**
12.00	**S10.O5** Changes in allelic frequencies of Brassica rapa under experimental evolution with selection by bumblebees **L. Frachon**	**S31.O5** The cost of longevity: Transgenerational effects of parental lifespan extension under dietary restriction **E. Ivimey-Cook**	**S34.O5** Dynamic invariance of evolutionary models **J. Otsuka**	**S8.O5** Patterns of genetic variation across the genome in bottlenecked populations of Eurasian and Iberian lynx **J. A. Godoy**
12.15	**S10.O6** The genomics of rapid adaptation to climate change: host preference evolution increases short-term ecological resilience **J. Bridle**	**S31.O6** Social context does not modulate age fitness effects in Drosophila melanogaster **Z. Sultanova**	**S34.O6** Predicting evolution: combining developmental biology and quantitative genetics **L. Milocco**	**S8.O6** Founder-specific inbreeding depression in an island bird population **P. Nietlisbach**
12.30	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			

Satellite events

Peer Community in (PCI) – Peer Community In … the beginning of a revolution in Open Access?, MOVE 1 at 13:00-13:50

How to foster public engagement at conferences, Outreach Stage in Teatro lobby at 12:45-13:55

A citizen-science workshop, GOTO 31 at12:45-13:55

Art-up your evolution, Outreach Stage, Teatro lobby

	MOVE1	MOVE2	LOGI2	GOTO33
7.45	**REGISTRATION**			
8.30	**OPENING OF CONFERENCE AND PRACTICAL INFORMATION**			
9.00	**KEYNOTE I** **Pat Monaghan,** Bad beginnings and untimely ends: environments, telomeres and life history variation			
	S7: HUMAN-INDUCED	**S23: PARASITE COM DYN**	**S18: POLYGE ARCH**	**S32: NICHE WIDTH**
10.00	**S7.O1** Hunting regulation and the dynamic of selection in large mammals **F. Pelletier**	**S23.O1** Dynamics of parasite co-infections – why do they matter? **A. Karvonen**	**S18.O1** Genetic and genomic architecture of polygenic adaptation in lake-stream sticklebacks **C. Peichel**	**S32.O1** Evolutionary diversification driven by competition for resources - does organismal complexity matter? **C. Rueffler**
10.30	**S7.O2** Fisheries-induced evolution in the wild and in the lab **M. Heino**	**S23.O2** Dual transcriptomics of avian malaria **E. Videvall**	**S18.O2** Polygenic adaptation: The adaptive architecture of a quantitative trait **J. Hermisson**	**S32.O2** Colonizations and host shifts cause diversification of preference and expansion of diet breadth **M. Singer**
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			
11.30	**S7.O3** Anthropogenic hybridization between red deer and sika in Kintyre results in many backcrossed individuals **S. E. McFarlane**	**S23.O3** Virulence-transmission relationships under competition in the spider mite Tetranychus urticae **A. Duncan**	**S18.O3** Proper Treatment of Haplotype Structure and LD Reduces Error in Sequence Data Analysis **S. Belohlavy**	**S32.O3** Habitat choice meets thermal niche specialization: competition with specialists may drive suboptimal preferences in generalists **S. Jacob**
11.45	**S7.O4** Evolutionary rescue through hybridization triggered by predator introduction in a Daphnia population **K. Enberg**	**S23.O4** Wolbachia incidence and host shift in scale insects **E. Sanaei**	**S18.O4** Genetic redundancy fuels polygenic adaptation in Drosophila **R. Kofler**	**S32.O4** Expression of phenotypic plasticity in multi-dimensional environments **N. Schtickzelle**
12.00	**S7.O5** The Global Urban Evolution Project: Parallel Adaptation To The World's Urban Jungles **M. Johnson**	**S23.O5** Characterization of the human pathogen peptidome and specialization in peptide binding among MHC class-I alleles **O. Özer**	**S18.O5** Response from standing variation at linked loci in the highly polygenic/ infinitesimal limit. **H. Sachdeva**	**S32.O5** Not a generalist after all? Life history genomic regions explain differences in Atlantic salmon diet. **T. Aykanat**
12.15	**S7.O6** Contrasting body-size shifts in urban communities **T. Merckx**	**S23.O6** How decreased parasite diversity affects host immunity: Approaching "Old Friends" with the cavefish, Astyanax mexicanus **R. Peuß**	**S18.O6** Detecting the signature of epistatic selection in subdivided populations **K. Csilléry**	**S32.O6** Are differences in incubation behavior and niche use linked in two sympatric flycatcher species? **P.M. Sirkiä**
12.30	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			

Satellite events

Peer Community in (PCI) – Peer Community In … the beginning of a revolution in Open Access?, MOVE 1 at 13:00-13:50

How to foster public engagement at conferences, Outreach Stage in Teatro lobby at 12:45-13:55

A citizen-science workshop, GOTO 31 at12:45-13:55

Art-up your evolution, Outreach Stage, Teatro lobby

TUESDAY, AUGUST 20

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S10: RAPID ADAPT	**S31: LIFE HISTORY**	**S34: MATH MODELS**	**S8: SMALL POP GEN**
14.00	**S10.O7** Regulatory networks link phenotypic plasticity to evolvability **F. Weissing**	**S31.O7** Limits to post-reproductive fitness benefits in humans **S. Chapman**	**S34.O7** Free-riding, exclusion, and congestion in a sequential teamwork dilemma **J. Peña**	**S8.O7** Genetic diversity and connectivity in wetland plant meta-populations depend on the degree of clonality **S. Donna Lozada-Gobilard**
14.15	**S10.O8** Assessing genetic constraints on the evolution of plasticity in multiple stressor environments **A. Hudak**	**S31.O8** Child volunteers in World War II have accelerated reproduction and higher lifetime reproductive success **R. Lynch**	**S34.O8** Selection and Polymorphism at Two Loci **H. Spencer**	**S8.O8** Effects of non-random mating and Haldane's Sieve on floral polymorphisms in plant metapopulations **J. Pannell**
14.30	**S10.O9** Evolution of physiological plasticity and selection from balanced polymorphisms during rapid habitat invasions **C.E. Lee**	**S31.O9** The antagonistic pleiotropy riddle for populations along the slow-fast continuum **C. Coste**	**S34.O9** Modeling antimicrobial cycling, mixing, and combination therapy: Why is it so difficult to draw conclusions? **H. Uecker**	**S8.O9** Fitness, life-histories, and ageing in small populations of Daphnia **C. Haag**
14.45	**S10.O10** Plasticity in evolutionary potential under environmental variation in a population of pied flycatchers, Ficedula hypoleuca **J. Le Vaillant**	**S31.O10** Live fast, die old: Oxidative stress as a potential mediator of an unexpected life-history evolution **N. Tüzün**	**S34.O10** The evolution of self-incompatible mating types **J. Christie**	**S8.O10** Understanding contemporary levels of genetic diversity in populations of silver fir(Abies Alba Mill.) **B. Trubenová**
15.00	**S10.O11** Impact of maternal genetic effects on the evolutionary potential of a red deer population **J. Gauzere**	**S31.O11** Does the life history response to dietary restriction persist with infection or injury? **E. Savola**	**S34.O11** Kin selection of function-valued traits **P. Avila**	**S8.O11** On the generality of the diploid male vortex in parasitoids with single-locus complementary sex determination **E. Nonaka**
15.15	**S10.O12** Somatic mutation and cell lineage selection during vegetative growth promotes rapid adaptation in plants **J. Schwoch**	**S31.O12** Diet-based developmental plasticity and fitness in a detritivorous isopod (Asellus aquaticus) **M. Lürig**	**S34.O12** Emergence of diverse life cycles and life histories at the origin of multicellularity **M. Staps**	**S8.O12** Genomic signatures of critically-endangered bird Chinese Crested Tern (Thalasseus bernsteini) **G. Chen**
15.30	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
	S7: HUMAN-INDUCED	S23: PARASITE COM DYN	S18: POLYGE ARCH	S20: SOCIAL TRANS
14.00	**S7.O7** Anthropogenic Pb driving selection in urban adapted population of Drosophila subobscura **A. Patenković**	**S23.O7** The determinants of pathogen communities in wild plant populations **H. Susi**	**S18.07** Selective sweep at at QTL in a randomly fluctuating environment **L.-M. Chevin**	**S20.O1** Animal Culture in Changing Environments **L. Aplin**
14.15	**S7.O8** Going to the dogs? – Human-induced evolution in the grey wolf **M. Pilot**	**S23.O8** Population genomics of Gyrodactylus bullatarudis reveals molecular basis of adaptation to the host **M. Konczal**	**S18.08** Wild wild test: Release-re-capture genomic experiment reveals within-generation polygenic adaptation in stickleback fish **T. Laurentino**	
14.30	**S7.O9** Genomics of adaptation of Penicilliumfungi used for blue cheese and dry-cured meat production **A. Branca**	**S23.O9** Within-host pathogen diversity: how it forms and what are the fitness consequences for the host **S. Sallinen**	**S18.09** The genomic basis of parallel adaptation **A. M. Westram**	**S20.O2** Does cultural transmission evolve because it is Lamarckian? **S. Dall**
14.45	**S7.O10** House sparrows evolved human commensalism with the development of agriculture **M. Ravinet**	**S23.O10** Disease-induced diversity of a crustacean iridescent virus **V. G. Faria**	**S18.010** Contemporary Atlantic salmon domestications reveal the architecture of polygenic adaptation **N. J. Barson**	
15.00	**S7.O11** Can angling-induced evolution be counteracted by releasing hatch-ery-reared fish? **A. Vainikka**	**S23.O11** Manipulated geographic mosaics: disentangling prevalence of infection and strength of selection **F. Feijen**	**S18.011** Efficiency of outlier methods for detecting loci involved in a polygenic trait under divergent selection **L. Bouteille**	**S20.O3** How do predators use social information about defended prey in the wild? **L. Hämäläinen**
15.15	**S10.012** Rapid niche expansion in European whitefish following a eutrophica-tion-induced species collapse **A. Jacobs**	**S23.O12** Fitness effects of wild Drosophila viruses **M. Wallace**	**S18.012** Genomic prediction from pool-seq to understand ash dieback susceptibility in fraxinus excelsior **C. Metheringham**	**S20.O4** Payoff- and sex-biased social learning interact in a wild primate population **E. van de Waal**
15.30	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

TUESDAY, AUGUST 20

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S10: RAPID ADAPT	S31: LIFE HISTORY	S36d: GENOME EVOL	S8: SMALL POP GEN
16.00	**S10.O13** Environmental integrons, drivers of microbial adaptation in an acidic extreme environment **E. Sandoval-Quintana**	**S31.O13** The evolution of variance control **M. Bruijning**	**S36d.O1** Extreme differences in recombination rate between the genomes of a solitary and a social bee **J. Jones**	**S8.O13** Eco-Evolutionary feedbacks between genetic diversity and varying population sizes can lead to an extinction vortex **P. Nabutanyi**
16.15	**S10.O14** Predicting adaptive evolution in heterogeneous environments from standing genetic variation **J. Engelstädter**	**S31.O14** Life history evolution under cancer risk: linking cell-level strategies to organismal traits **E. Y. Erten**	**S36d.O2** Shared ancient sex chromosomes in varanids, beaded lizards, and alligator lizards **M. Rovatsos**	**S8.O14** Demography affects the likelihood of genetic convergence and our ability to detect it in nature **J. Whiting**
16.30	**S10.O15** Beneficial mutations have greater fitness effects at higher temperatures, supporting the temperature-selection speed hypothesis **X.-L. Chu**	**S31.O15** Insulin-like growth factor 1 and the evolution of vertebrate life histories **J. Lodjak**	**S36d.O3** Germline-restricted chromosomes are widespread in songbirds and contain dozens of developmental genes **A. Suh**	**S8.O15** High population divergence at small spatial scales – the joint role of population size and migration **A. Nair**
16.45	**S10.O16** Mechanisms of rapid adaptive responses to arid environments in long-lived organisms **O. Razgour**	**S31.O16** Maturation probability and condition correlate genetically for a major-effect locus (vgll3) in Atlantic salmon **P. V. Debes**	**S36d.O4** Rearranged and relocated: chromosome-level assemblies and comparative genomics of two pelagic freshwater herring species **L. Milec**	**S8.O16** Mechanisms and consequences of balancing selection in a model cyclic parthenogen living in ephemeral habitats **A. Bergland**
17.00	**S10.O17** Predicting adaptive dynamics in different habitats using ancestral trait values and demographic events **V. Ravi Kumar**	**S31.O17** Adult male size in a sexually dimorphic spider depends on genetic factors and food availability **S. Quiñones-Lebrón**	**S36d.O5** Epigenetic modification associated with ZEB2 provides a key evidence for the human evolution **J.-E. Lee**	**S8.O17** Bypassing summary statistics: a deep learning approach to infer population size history **T. Sanchez**
17.20 19.20	**POSTER SESSION I**			

	MOVE1	MOVE2	LOGI2	GOTO33
	S7: HUMAN-INDUCED	S36e: PHENOTYPIC EVOL	S36b: PHYLOGEO & SYST	S20: SOCIAL TRANS
16.00	S7.O13 Evolution in salmon life-history induced by direct and indirect effects of fishing **Y. Czorlich**	S36e.O1 Exploring patterns of additive genetic, mutational and environmental (co)variance across traits **J. G. King**	S36b.O1 Global diversification patterns of crangonid shrimps (Decapoda, Caridea, Crangonidae) **K. H. Chu**	S20.O5 Cultural Transmission of Mating Preferences in Fruit Flies **S. Nöbel**
16.15	S7.O14 Harvest-associated selection and population density effects in fisheries-induced evolution **A. Crespel**	S36e.O2 Dissecting phenotypic integration and connecting micro- and macro-evolutionary time scales **C. Fruciano**	S36b.O2 Evo-devo approach to study asexual development and whole body regeneration: insights from tunicates **S. Tiozzo**	S20.O6 A new perspective of social population networks in a reproductive context **M. Plaza**
16.30	S7.O15 Understanding the effect of multiple anthropogenic stressors on freshwater organisms from an evolutionary perspective **M. Cuenca Cambronero**	S36e.O3 An integrated approach to understanding the evolution of flight and wing shape in heliconius butterflies **L. Queste**	S36b.O3 Phylogeography of a widespread spider: admixture across geographical barriers shapes the diversification of Gasteracantha cancriformis **F. C. Salgado-Roa**	S20.O7 On social transmission, individual agency, and a generalised theory of adaptive evolution **P. Edelaar**
16.45	S7.O16 Selection for small size affects the pace-of-life syndrome in medaka impacting the invertebrate community **B. Diaz Pauli**	S36e.O4 Intraspecific variation in floral scent in the perennial herb Arabis alpina **H. Petrén**	S36b.O4 Incipient hybrid speciation in young and rapidly speciating neotropical cichlid fish? **M. Olave**	S20.O8 Social network structure and infectious disease transmission in group-living animals **M. Silk**
17.00	S7.O17 Applying the Anna Karenina principle to the bank vole gut microbiota in a disturbed environment **A. Lavrinienko**	S36e.O5 Evolution of fork tails in aerial insectivorous birds **M. Hasegawa**	S36b.O5 Patterns consistent with Darwin's corollary in a Ficedulaflycatcher hybrid zone **C. Segami Marzal**	S20.O9 Social transmission in avian brood parasitism systems **D. Campobello**
17.20 19.20	**POSTER SESSION I**			

WEDNESDAY, AUGUST 21

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE II** **Sinead Collins,** Understanding evolution in life-giving slime			
	S10: RAPID ADAPT	**S31: LIFE HISTORY**	**S34: MATH MODELS**	**S14: GENOME FUNCT**
10.00	**S10.O18** Disparate signatures of rapid adaptation and genomic divergence in Nicaraguan Midas cichlid fishes **A. Nater**	**S31.O18** Evolutionary constraints persist through a major life history event: metamorphosis **J. Collet**	**S34.O13** Extended haplodiploidy hypothesis **P. Rautiala**	**S14.O1** Differences in tartan underlie the evolution of male genital morphology between Drosophila species **A. P. McGregor**
10.15	**S10.O19** Using whole genome sequences of newly introduced populations reveals rapid genetic adaptation in Trinidadian guppies **M. van der Zee**	**S31.O19** Disparity in diapause and its effects on insect movement **V. Bhaumik**	**S34.O14** Evolution of the irreversible somatic differentiation **Y. Gao**	
10.30	**S10.O20** Genetics and genomics of parallel evolution without gene flow **Y. Yamasaki**	**S31.O20** Locally adapted plasticity maintains geographic variation in life history strategies in a butterfly **O. Lindestad**	**S34.O15** Flows of information in evolution **A. Pocheville**	**S14.O2** Understanding the neural circuits that encode sex-specific behaviours in Drosophila melanogaster **M. Neville**
10.45	**S10.O21** A tale of many flounders: the genomics of rapid adaptation in Platichthys spp. **P. Momigliano**	**S31.O21** Constrained evolution of instar-level characteristics of larval growth in Lepidoptera **S. Kivelä**	**S34.O16** Abstraction for dealing with the multiple realizability of evolution: the ultimate constraint of computation **A. Kaznatcheev**	
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE II** **Sinead Collins,** Understanding evolution in life-giving slime			
	S33: AGING	**S4: COGNITION**	**S35: EVOL OUTREACH**	**S11: QUANT TRAITS**
10.00	**S33.O1** Understanding senescence and trans-generational parental age effects in a long-lived seabird **S. Bouwhuis**	**S4.O1** Evolutionary biology of expertise **R. Dukas**	**S35.O1** The public and research-ers: It's complicated **P. Russo**	**S11.O1** Inversions as large effect loci in quantitative genetics **J. Kelly**
10.30	**S33.O2** Senescence in reptiles: from mechanisms to life-history consequences **T. Schwartz**	**S4.O2** The interplay between environment, gut microbi-ome and host cognition **G. Davidson**	**S35.O2** Willing to promote evolutionary knowledge for everyone? Join communities! **H. Dufour**	**S11.O2** The clawprint of selection in wildlife and livestock genomes **M. Bosse**
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

WEDNESDAY, AUGUST 21

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S10: RAPID ADAPT	S31: LIFE HISTORY	S34: MATH MODELS	S14: GENOME FUNCT
11.30	**S10.O22** Genomic divergence of rapidly evolving populations of Italian wall lizards **A. Štambuk**	**S31.O22** Sex-specific effects of maturation timing on reproductive fitness in wild Atlantic salmon **K. Mobley**	**S34.O17** Transcriptional cross-talk varies between regulatory networks designs **T. Friedlander**	**S14.O3** Functional significance and evolutionary mechanisms of VMAT1genetic variants underlie psychological diversity in humans **D. Sato**
11.45	**S10.O23** Characterising genetic diversity and differentiation in multiple phenotypes of a marine invasive species **M. Prentice**	**S31.O23** Predation risk drives the evolution of placentas in live-bearing fish populations (family Poeciliidae) **A. Hagmayer**	**S34.O18** Evolutionary dynamics of plasticity in a mechanistic gene-network model **A. Odorico**	**S14.O4** The genomic and transcriptomic basis of carotenoid-based sexual dichromatism in Finches **M. Gazda**
12.00	**S10.O24** Why does male-biased gene expression evolve so rapidly? **R. Griffin**	**S31.O24** Individual differences in carry-over effects on fitness: the role of personality **S. M. Harris**	**S34.O19** Flexible, realistic, fast evolutionary simulations with SLiM **B. Haller**	**S14.O5** The evolution of lifespan: from whole genomes to SNPs **K. Hoedjes**
12.15	**S10.O25** Testing the factors promoting recurrent, convergent, and rapid adaptation in a wild insect **J. Rayner**	**S31.O25** Environmental drivers of phenotypic selection in a small passerine species **M. Gamelon**	**S34.O20** What can machine learning teach us about evolutionary ecology data? **J. Morimoto**	**S14.O6** Molecular diversity and developmental expression of the master regulator doublesex in the sexually dimorphic Papilio polytes **R. Deshmukh**
12.30	**S10.O26** Identifying the evolutionary dynamics and genetics of rapid evolutionary rescue in Callosobruchus maculatus **A. Rêgo**	**S31.O26** Evolutionary consequences of cryptobiosis on male reproduction **M. Vecchi**	**S34.O21** Speciation, extinction and environmental change: from fossil data to mathematical modelling **J. Toivonen**	**S14.O7** Key physiological genes important for freshwater adaptation and life history evolution in sticklebacks **A. Ishikawa**
12.45	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events The European Research Council – funding opportunities for bright minds, MOVE 1 at 13:15-14:05 How to pitch your science to non-specialist audiences, GOTO31 at 12:55-13:55 Art-up your evolution, Outreach Stage in Teatro lobby			

	MOVE1	MOVE2	LOGI2	GOTO33
	S33: AGING	S4: COGNITION	S35: EVOL OUTREACH	S11: QUANT TRAITS
11.30	S33.O3 Sex-biased ageing in the invertebrate Tigriopus californicus and the role of mito-nuclear interactions **S. Edmands**	S4.O3 A social perspective on the microbiota-gut-brain axis: ants as a model organism **S. Teseo**	S35.O3 Melanogaster Catch The Fly: a citizen science project on adaptation genomics **J. Gonzalez**	S11.O3 The response of a population to a change in optimum **N. Barton**
11.45	S33.O4 Sex differences in functional and reproductive senescence in African annual killifish **M. Reichard**	S4.O4 Benefits of working memory depend upon forage availability for bumblebees (Bombus terrestris) **E. Leadbeater**	S35.O4 evALLution: can we make fundamental evolution concepts accessible to the blind community? **T. G. Laurentino**	S11.O4 Disentangling the roles of mutation, selection, and genetic drift, on cis- and trans- regulatory evolution **M. Hill**
12.00	S33.O5 How the queen manages to stay young: orchid bee queens maintain young transcriptomes throughout life **A. Séguret**	S4.O5 Selective social information use in the nest choice of solitary bees **O. Loukola**	S35.O5 Science and Community: evolutionary facts for an inclusive society **J. R. Torres Miranda**	S11.O5 Dissecting evolution of adaptive traits in Arabidopsis after island colonization **C. Neto**
12.15	S33.O6 Long live the queen: eusociality and the evolutionary theory of ageing **B. H. Kramer**	S4.O6 Environmental complexity and the correlated evolution of (social) behaviour and (social) cognition **S. A. M. Varela**	S35.O6 Evolution in action – project: How to impact society through science and art education? **C. Lindstedt**	S11.O6 Genomic Prediction in a wild mammal population **J. Slate**
12.30	S33.O7 Extreme lifespan extension in tapeworm-infected ants facilitated by increased care and upregulation of longevity genes **S. Foitzik**	S4.O7 Heritability and co-variation among cognitive abilities in pheasants; an animal model approach **E. Langley**	S35.O7 The "WOW effect" of Evolution **T. Adnađević**	S11.O7 Beyond large-effect loci: large-scale GWAS reveals mixed large-effect and polygenic architecture of Atlantic salmon age-at-maturity **M. Sinclair-Waters**
12.45	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events The European Research Council – funding opportunities for bright minds, MOVE 1 at 13:15-14:05 How to pitch your science to non-specialist audiences, GOTO31 at 12:55-13:55 Art-up your evolution, Outreach Stage in Teatro lobby			

WEDNESDAY, AUGUST 21

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S21: COLOUR	S6: ANTI-MICRO RESIST	S14: GENOME FUNCT
14.15	**S13.O1** Adaptation and evolution of alternative reproductive modes **K. Elmer**	**S21.O1** Painting by numbers: understanding the eco-evo-devo mechanisms of petal patterning **E. Moyroud**	**S6.O1** Mutators drive evolution of resistance to multiple antibiotics during single-drug and combination treatment **D. R. Gifford**	**S14.O8** Effects of random coding sequences on Escherichia coli **D. Bhave**
14.30				**S14.O9** Colour encoded in innate immune gene? Accumulating evidence for Hamilton-Zuk 'Good genes' in great tits **M. Vinkler**
14.45	**S13.O2** Natural selection explains parallel evolution of locomotion bias, genetic drift variable interdependence of component traits **H. Teotónio**	**S21.O2** Colour vision and the origin of species: what you see is who you are? **M. Maan**	**S6.O2** Unstable antibiotic resistance **D. Andersson**	**S14.O10** Applying gene manipulation approaches for characterizing the evolution, dynamics and complexity of venom production **Y. Moran**
15.00				**S14.O11** Molecular mechanisms and evolution of a novel floral volatile biosynthesis in wild tobacco **S. Xu**
15.15	**S13.O3** Parallel clines in iridescence in butterfly co-mimics despite different levels of genomic divergence and selection **E. Curran**	**S21.O3** Inter-chromosomal coupling between vision and pigmentation genes during genomic divergence **O. Puebla**	**S6.O3** To establish, or not to establish – testing the probability of antibiotic resistance emergence **M. Saebelfeld**	**S14.O12** Molecular and phenotypic characterization of roo elements inserted in a unique insertional cluster **M. Merenciano**
15.30	**S13.O4** Population genomics in a case of rapid, parallel adaptation: Cape Verde Islands Arabidopsis thaliana **A. Fulgione**	**S21.O4** Fine-mapping of color variation in a butterfly shed light on the evolution of supergenes **P. Jay**	**S6.O4** Repeatable ecological dynamics govern antibiotic response of experimental microbial community **J. Cairns**	**S14.O13** The contribution of novel genes to the development of novel traits **R. Arbore**
15.45	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
	S17: SELFISH GEs	S4: COGNITION	S25: ASSORT MATING	S22: HOST PLANT
14.15	**S17.O1** X chromosome drive and intragenomic conflict: a textbook case in Drosophila simulans **C. Montchamp-Moreau**	**S4.O8** Community diversity affects categorization by foragers: implications for signal evolution **D. Kikuchi**	**S25.O1** Assortative mating from humans to birds – the role of mate choice **W. Forstmeier**	**S22.O1** Getting tuned: Understanding specificity in plant volatile signaling **S. Allmann**
14.30		**S4.O9** Widespread learned predator recognition and amphibian resilience to alien predators **N. Polo-Cavia**		
14.45	**S17.O2** Recognition and silencing of active retrotransposons in arabidopsis **A. Mari-Ordonez**	**S4.O10** Anti-predatory behaviour, sensory systems and brain transcriptomics in Icelandic threespine stickleback adapting to turbid environments **M. Ålund**	**S25.O2** Assortative mating, sexual selection and their consequences for gene flow in Littorina **R. Butlin**	**S22.O2** Genome engineering as a tool for studying host plant specialisation **N. Whiteman**
15.00		**S4.O11** Cognitive ontogeny: environmental effects on brain size divergence in developing sunfish ecotypes **C. Axelrod**		
15.15	**S17.O3** Evolutionary dynamics of transposable elements in asexual bdelloid rotifers **R. Nowell**	**S4.O12** Experimental support for the mosaic brain evolution hypothesis **S. Fong**	**S25.O3** Decomposing social genetic effects on phenology and assortative mating in a long-lived seabird **M. Moiron**	**S22.O3** Effect of plant inhibitory proteins on pectinases in herbivorous beetles **W. Häger**
15.30	**S17.O4** Molecular dissection of a natural transposable element invasion **C. Schlötterer**	**S4.O13** Annual predation risk relates to the direction of selection for brain size in the wild **M. Öst**	**S25.O4** Reproductive isolation driven by ecological adaptation in Gambusia hubbsi **V. Pärssinen**	**S22.O4** Beyond target-site insensitivity - the role of ABCB transporters in adaptations to cardiac glycosides **S. Dobler**
15.45	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

WEDNESDAY, AUGUST 21

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S21: COLOUR	S6: ANTI-MICRO RESIST	S14: GENOME FUNCT
16.15	S13.O5 Parallel evolution of reproductive timing in Atlantic and Pacific herring **E. Petrou**	S21.O5 To change or not to change: evolution of seasonal colour polymorphism in the least weasel **I. Miranda**	S6.O5 On the evolutionary ecology of multidrug resistance in bacteria **S. Lehtinen**	S14.O14 Evolution of male pregnancy reveals remodelling of vertebrate adaptive immunity **O. Roth**
16.30	S13.O6 Geographic heterogeneity in parallel evolution – three spined sticklebacks revisited **B. Fang**	S21.O6 Paint it red: co-option of MYB transcription factors shift color hue in a hummingbird-pollinated species **A. Berardi**	S6.O6 Associations between sensitivity to antibiotics and non-antibiotic antibacterials in natural and clinical escherichia coli isolates **A. Bischofberger**	S14.O15 Wide pleiotropic effects of melanin pathway genes on mating behaviour and life-history traits **V. Tyukmaeva**
16.45	S13.O7 Searching for signatures of genetic adaptation to climate in bank voles **R.Folkertsma**	S21.O7 More than meets the eye? Protective functions of red pigments in endemic Hawaiian damselflies **I. Cooper**	S6.O7 Microbiome suppresses growth and resistance evolution of Escherichia coli in a human gut microcosm **M. Baumgartner**	S14.O16 Evolution and function of the key digestive enzymes sucrase and maltase in vertebrates **D. Mendez-Aranda**
17.00	S13.O8 Assessing genomic vulnerability to climate change in Canada's northernmost freshwater fish, Arctic charr **K. K.S. Layton**	S21.O8 Mitochondria-targeted molecules determine the redness of thezebra finch bill **A. Cantarero**	S6.O8 Quantifying the impact of treatment history on plasmid-mediated resistance evolution in human gut microbiota **B. Tepekule**	S14.O17 Developmental mechanisms of Arctic charr (Salvelinus Alpinus) adaptive divergence **K. H. Kapralova**
17.15	S13.O9 Adapting to a warming world; the molecular basis of seasonal timing in a song bird **M. Visser**	S21.O9 Breaking the back of the parasite: reducing early-life burden affects nestling and adult feather colouration **E. Perez-Badas**	S6.O9 Variation in collateral sensitivity phenotypes of Escherichia coli across genotypes and growth environments **R. Allen**	S14.O18 ENHANCing the limb: from micro to macroevolution **J. P. L. Castro**

	MOVE1	MOVE2	LOGI2	GOTO33
	S17: SELFISH GEs	**S33: AGING**	**S25: ASSORT MATING**	**S22: HOST PLANT**
16.15	**S17.O5** Kirc, a new superfamily of massive DNA transposons **A. A. Vogan**	**S33.O8** Ageing in free-living great tits: multimarker evidence for age-related increase in oxidative and physiological stress **M. Těšický**	**S25.O5** A theoretical study of the effects of assortative mating on adaptive potential under climate change **C. Godineau**	**S22.O5** Interactions between metal-based and organic defences: Alternative weapons against spider mites attacking tomato plants **D. Prino Godinho**
16.30	**S17.O6** T-lex3: an accurate tool to genotype and estimate population frequencies of transposable elements **M. Bogaerts Márquez**	**S33.O9** Linking early-life environment to ageing rate: the role of prenatal thyroid hormones? **S. Ruuskanen**	**S25.O6** The timing of attraction as a driver of species diversification in the fall armyworm **S. Hänniger**	**S22.O6** Urban environments select for higher growth potential but lower herbivore resistance in Arabidopsis thaliana **J. Qu**
16.45	**S17.O7** The selfish endosymbiont Wolbachia exploits the sex determination of its host to achieve maximal transmission **F. Chen**	**S33.O10** Early-life environmental quality and variability reflected in telomere lengths and lifespan in a wild mammal **S.H.J. van Lieshout**	**S25.O7** The genetics of visual preferences in a hybrid species **A. E. Hausmann**	**S22.O7** Opposite Responses to Drought Induced Changes in Host Plant Quality within a Butterfly Metapopulation **A. Kahilainen**
17.00	**S17.O8** Dynamics of prokaryotic cell differentiation during horizontal gene transfer **R. Miyazaki**	**S33.O11** Fitness consequences of germline mutation accumulation: the hidden cost of lifespan extension? **E. Duxbury**	**S25.O8** Factors mediating reproductive isolation between related species at contact zones **A. Kirschel**	**S22.O8** Chemical defences in a Heliconius butterfly and its Passiflora host **A. Mattila**
17.15	**S17.O9** Molecular evolution of the Greenbeard Social b supergene in the fire ant Solenopsis invicta **Q. Helleu**	**S33.O12** Using Wild Crickets to test key predictions of life-history theories of senescence **T. Tregenza**	**S25.O9** Reinforcement and assortative mating between incipient outcrossing and selfing Clarkia species **D. Moeller**	**S22.O9** From monophagy to oligophagy, ecological and genetic variation affect host-associated diversification of butterfly species **R. Mattos**

THURSDAY, AUGUST 22

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE III** **David Queller,** Evolutionary conflict and molecular arms races in cooperative systems			
	S13: ADAPT GEN	**S21: COLOUR**	**S26: SEX CONFLICTS**	**S3: NON-GEN INHERIT**
10.00	**S13.O10** Altitude shapes local adaptation in Heliconius butterflies **G. Montejo-Kovacevich**	**S21.O10** Evolutionary decoupling of larval and adult colour in shield bugs: comparative and experimental evidence **I. Medina**	**S26.O1** Sexual conflict in ecological context in a semiaquatic bug **J. Perry**	**S3.O1** Transgenerational inheritance of small RNAs in C.elegans **I. Lev**
10.15	**S13.O11** An integrative perspective of adaptation to different altitudes in an alpine plant **A. Szukala**	**S21.O11** Red or dead: imperfect Müllerian mimicry between burnet and red, not yellow, wood tiger moths **B. Rojas**		
10.30	**S13.O12** Bacterial adaptations – NOT what you thought **O. Avram**	**S21.O12** Beyond the 'red edge': does visual sensitivity to long wavelengths facilitate resource location in beetles? **L.-Y. Wang**	**S26.O2** The ecology of sexual conflict and the population genetic consequences of mate choice **H. Rundle**	**S3.O2** Inherited effects of parental environment: Multi-generation GxE and the unscripted phenotype **S. Sultan**
10.45	**S13.O13** Back to the future of bacterial population genomics **J. Cury**	**S21.O13** Iridescence as camouflage **K. Kjernsmo**		
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE III** **David Queller,** Evolutionary conflict and molecular arms races in cooperative systems			
	S29: ECO-EVO	**S6: ANTI-MICRO RESIST**	**S12: WILD PLANT SEL**	**S16: MITO-NUCLEAR**
10.00	**S29.O1** Quantitative eco-evolutionary dynamics: Numerical signatures of varying sources of phenotypic novelty **J. Pantel**	**S6.O10** Microbiota inoculum composition affects holobiont assembly and host growth in Daphnia **E. Decaestecker**	**S12.O1** Evolvability, selection, and disrupting mechanisms in the wild: A roadmap for evaluating adaptive evolution **B. Pujol**	**S16.O1** Effects of mitonuclear genomic interactions on ATP synthesis and developmental time **R. S. Burton**
10.15		**S6.O11** Prophages increase bacterial fitness in the presence of high antibiotic concentrations **C. Wendling**		
10.30	**S29.O2** When do eco-evolutionary feedbacks aid adaptation, and when do they hinder them? **T. Coulson**	**S6.O12** Evolutionary rescue in the face of an arbitrarily moving optimum in asexuals **G. Martin**	**S12.O2** Flower evolution in the wild under stable and changing pollination environments **M. C. Castellanos**	**S16.O2** The impact of mito-nuclear interactions from OXPHOS to genome evolution **K. Montooth**
10.45		**S6.O13** Do antibiotic treatments accelerate evolution? Population dynamics matter! **A. Frenoy**		
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

THURSDAY, AUGUST 22

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S21: COLOUR	S26: SEX CONFLICTS	S3: NON-GEN INHERIT
11.30	**S13.O14** Linking allele-specific expression and natural selection in wild populations **R. Laso-Jadart**	**S21.O14** Variation in thin film structure produces diverse visual appearances in Christmas beetles (Scarabeidae - Rutelinae) **L. Ospina**	**S26.O3** Ecology and sexual conflict drive the macroevolutionary dynamics of female-limited colour polymorphisms **B. Willink**	**S3.O3** The ecological consequences and evolutionary potential of transgenerational temperature plasticity in Mimulus **J. Colicchio**
11.45	**S13.O15** Linking a mutation to survival in wild mice **S. Laurent**	**S21.O15** The hidden side of wing transparency in Lepidoptera **C. Pinna**	**S26.O4** The role of alternative splicing in the evolution of sexual dimorphism **T. Rogers**	**S3.O4** The role of epigenetic mechanisms in within and between generation phenotypic plasticity in Neurospora crassa **I. Kronholm**
12.00	**S13.O16** The speciation supergene in wild Petunia: structure and evolution **T. Tenreira**	**S21.O16** Different ways to make red flowers: Colour evolution in the New World Gesneriaceae **E. Ogutcen**	**S26.O5** Inter-population variation in morphology reflects different trajectories of sexually antagonistic coevolution in a beetle **C. Koshio**	**S3.O5** Genotype-specific integration of genetic, nongenetic and environmental cues shapes water flea development and life history **E. Harney**
12.15	**S13.O17** Adaptation in the wild - a systems genetics approach using Daphnia **D. Becker**	**S21.O17** Evolving rainbows: deriving a spectrum of phylogenetic signals in avian colour evolution **S. M. Drobniak**	**S26.O6** Dynamics of sex biased gene expression during development in a hemimetabolous insect **J. Djordjevic**	**S3.O6** DNA methylation facilitates adaptation to ocean salinity change **M. J. Heckwolf**
12.30	**S13.O18** Contemporary natural selection on transcript abundance in wild brown trout **F. Ahmad**	**S21.O18** Climate shapes near-infrared reflectance properties in birds and butterflies **D. Stuart-Fox**	**S26.O7** Toxic males to gentle courters: evolutionary reduction in sexual antagonism due to shift in life-history **B. Nandy**	**S3.O7** The role of DNA methylation in adaptation – social spiders as a case study **T. Bilde**
12.45	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events Art-up your evolution, Outreach Stage in Teatro lobby			
13.45 18.00	**EXCURSIONS**			

	MOVE1	MOVE2	LOGI2	GOTO33
	S29: ECO-EVO	S7: HUMAN-INDUCED	S12: WILD PLANT SEL	S16: MITO-NUCLEAR
11.30	S29.O3 Rapid Change in Mammalian Eye Shape Is Explained by Activity Pattern **J. Baker**	S7.O18 Fluctuating selection and enhancing diversity to overcome insecticide resistance evolution **R. Mangan**	S12.O3 Benefits of using non-linear path analysis for estimating natural selection **G. H. Bolstad**	S16.O3 Do mitolineages and sex-linked mitonuclear genotypes impact respiration, metabolic performance and hybrid fitness? **A. Pavlova**
11.45	S29.O4 Extinction and the temporal distribution of macroevolutionary bursts **S. De Lisle**	S7.O19 The consequences of domestication to the wheat microbiome biodiversity **E. Özkurt**	S12.O4 Does selection on plants defense strategies vary along a successional gradient? **A. Kalske**	S16.O4 Divergent mitochondrial and nuclear OXPHOS genes are candidates for genetic incompatibilities in Ficedula Flycatchers **A. Qvarnström**
12.00	S29.O5 Intraspecific variation alters ecological properties and fosters transgenerational carry-over effects as much as temperature variation **A. Raffard**	S7.O20 Climate change and Green Sea Turtle sex ratio: preventing possible extinction **J. Blechschmidt**	S12.O5 Measuring viability selection from prospective cohort mortality studies in wild plant populations **J. J. Robledo-Arnuncio**	S16.O5 The genetics of sex-biased hybrid incompatibility in Tigriopus californicus **E. Watson**
12.15	S29.O6 Density-dependent selection on exploration behaviour across multiple great tit populations **A. Mouchet**	S7.O21 Expanding thermal breadth facilitates adaptation of Daphnia to raising temperature **M. Dziuba**	S12.O6 Fitness consequences of hybridization between fully inbred lines from natural predominantly selfing populations **J. Clo**	S16.O6 SmithRNAs, a new arena for mito-nuclear interaction and coevolution **M. Passamonti**
12.30	S29.O7 Dynamic of introgression during density-dependent range expansion: European wildcats as a case study **C. S. Quilodrán**	S7.O22 Invasion success of the Asian tiger mosquito in Europe: pre-adaptation, post-introduction evolution, or both? **S. Sherpa**	S12.O7 Herbivory drives evolution of genetic architecture for plant defense and competition traits **A. Uesugi**	S16.O7 Mito-nuclear interactions in an emerging hybrid species - Insights form a time series transcriptomic study **E. Iwaszkiewicz**
12.45	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events Art-up your evolution, Outreach Stage in Teatro lobby			
13.45 18.00	**EXCURSIONS**			

FRIDAY, AUGUST 23

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE IV** **Anna-Liisa Laine,** What keeps pathogens in check in the wild?			
	S13: ADAPT GEN	**S2: EXP EVOL**	**S26: SEX CONFLICT**	**S15: ANCIENT DNA**
10.00	**S13.O19** The genetic and physiological basis of local adaptation across latitudinal range in 360 Arabidopsis accessions **Y. Yarkhunova**	**S2.O1** Replaying the tape of life: the experimental study of adaptive evolution in seed beetles **G. Arnqvist**	**S26.O8** The genetic architecture of sexually dimorphic traits: gene knock-outs and sex-specific genetic variance **W. van der Bijl**	**S15.O1** Modern tools for ancient Data: Quantifying evolution from paleogenomes **D. Wegmann**
10.15	**S13.O20** Repeated Genomic Signatures of Local Selection in Atlantic Salmon **V. Pritchard**		**S26.O9** Sex-specific transcriptomic responses to changes in the nutritional environment **F. Camus**	
10.30	**S13.O21** Dissecting the transcriptomic basis of phenotypic evolution in an aquatic keystone grazer **D. Frisch**	**S2.O2** Experimental adaptation to juvenile malnutrition: insights from and challenges of omics **T. Kawecki**	**S26.O10** Male sexual trait interacts with environment in determining female fitness **A. Plesnar-Bielak**	**S15.O2** The genetic history of the Plague: From the Stone Age to the 18th century **J. Krause**
10.45	**S13.O22** Genetic and morphological bases of a complex innovation – pelvic brooding in Sulawesi ricefishes **J. Schwarzer**		**S26.O11** Substantial sex differences in recombination in a threatened passerine with high levels of sexual conflict **A. Santure**	
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE IV** **Anna-Liisa Laine,** What keeps pathogens in check in the wild?			
	S27: SOCIAL TRAITS	**S1: TRANS GEN PLAST**	**S19: GENO-PHENO**	**S24: MICROBIAL STRESS**
10.00	**S27.O1** The evolutionary implications of sociality: Population structuring associated with shifts in life history and behavior **S. Shultz**	**S1.O1** Stress responses within and across generations: From epigenetic regulation to selection in the wild **M. Saastamoinen**	**S19.O1** Colour evolution in birds and butterflies: From macro to micro and back again **N. Nadeau**	**S24.O1** Bacterial capsules as key referees in adaptation **O. Rendueles**
10.15				
10.30	**S27.O2** Epistemology and non-discrimination: Inclusive fitness still on top **A. Grafen**	**S1.O2** Insect immune memory, how does it work and why should we care? **S. Barribeau**	**S19.O2** A phylogenetic framework for the detection of trait-dependent shifts in patterns of sequence evolution **I. Mayrose**	**S24.O2** Phage-bacteria coevolution in the rhizosphere: Consequences for microbiome functioning and plant disease outbreaks **V.-P. Friman**
10.45				
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

FRIDAY, AUGUST 23

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S2: EXP EVOL	S26: SEX CONFLICT	S15: ANCIENT DNA
11.30	**S13.O23** Extreme morphological and genomic divergence underlies deep-water adaptation in Arctic charr (Salvelinus alpinus)morphs **T. Kess**	**S2.O3** Larval resource competition alters capability of adult reproductive interference **W. Mukaimine**	**S26.O12** Sexual conflict in the light of Caenorhabditis nematodes **J. Palka**	**S15.O3** 6,500-year-old Salmonella enterica genomes link human-host adaptation to animal domestication **A. Herbig**
11.45	**S13.O24** Exploring the joint effects of global and local selection on the emergence of reproductive barriers **G. Bisschop**	**S2.O4** Microevolutionary genomic signatures of sexual selection **R. R. Snook**	**S26.O13** Sex-specific adaptation to a high temperature in Drosophila **S.-K. Hsu**	**S15.O4** 2,000-year-old pathogen genomes reconstructed from mummies provide insights into the health status of ancient Egyptians **J. Neukamm**
12.00	**S13.O25** Genetic effects on phenotypic 'predictability' of guppy stress-response behaviour **P. M Prentice**	**S2.O5** Experimental evolution study on Drosophila melanogaster: manifold consequences of adaptation to unfavourable diets **E. Iakovleva**	**S26.O14** Sexual conflict over genes related to immunity: Evidence from a species with strong sexual selection **J. Roved**	**S15.O5** Studying the evolution of host-associated microbiome through time using ancient dental calculus **K. Guschanski**
12.15	**S13.O26** On (small) step at a time: Measuring adaptive potential of yeast populations under different stresses **I. Fragata**	**S2.O6** Consequences of adaptation to juvenile malnutrition on adult metabolism **C. Dupuis**	**S26.O15** Uncovering the role of sexually antagonistic selection on sex differences in immunity in Drosophila melanogaster **S. Sharda**	**S15.O6** Von Linné to today: -omics-based investigations of fungal adaptations to extreme environments with herbarium specimens **B. H. Conlon**
12.30	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events Meet the editors – a Royal Society Publishing workshop, MOVE 1 at 13:00-13:50 SciSparks, how to organise speed meetings in high-schools, Outreach stage in Teatro lobby at 12:45-13:55			

	MOVE1	MOVE2	LOGI2	GOTO33
	S27: SOCIAL TRAITS	S1: TRANS GEN PLAST	S19: GENO-PHENO	S24: MICROBIAL STRESS
11.30	S27.O3 The evolution of mechanisms to divide labour **G. Cooper**	S1.O3 Does maternal behavioural plasticity facilitate the evolution of viviparity? **A. Pettersen**	S19.O3 Gene expression evolution in Lake Tanganyika cichlid fishes: Novel insights through data integration **A. El Taher**	S24.O3 Antibiotic stresses modify the evolution of Pseudomonas aeruginosa phage resistance **T. Dimitriu**
11.45	S27.O4 Molecular signatures of kin selection: Are caste-associated genes nearly neutral? **G. Thompson**	S1.O4 Paternal contribution to transgenerational plasticity of the freshwater snail Physa acuta in response to predation **J. Tariel**	S19.O4 Differential gene expression underlying caste- and sex-specific gonad development in the honey bee (Apis mellifera) **D. Cavalcante Lago**	S24.O4 Bacterial biodiversity drives the evolution of CRISPR-based resistance against phage **E. Alseth**
12.00	S27.O5 Benefits of cooperation and its life-history costs in complex environments in a social pine sawfly **C. Lindstedt**	S1.05 Adaptive significance of Anticipatory Maternal Effects in Drosophila melanogaster **P. Kohlmeier**	S19.O5 A genetic and evolutionary perspective on foot feathering in a domestic avian species **C. Bortoluzzi**	S24.O5 Eco-evolutionary dynamics in a simple Cystic Fibrosis-like bacterial community treated with a low antibiotic concentration **J. Law**
12.15	S27.O6 Dispersal strategies of sessile superorganisms: the evolution of dispersal in ants **S. Hakala**	S1.O6 The role of genetic adaptation and phenotypic plasticity in response to changing salinity conditions **H. Goehlich**	S19.O6 The molecular basis of phenotypic evolution across a genus: cold acclimation in Drosophila **N. Cook**	S24.O6 The Evolutionary Design of the Type-6 Secretion System **W. Smith**
12.30	**LUNCH & EXHIBITION & SATELLITE EVENTS / OUTREACH**			
	Satellite events Meet the editors – a Royal Society Publishing workshop, MOVE 1 at 13:00-13:50 SciSparks, how to organise speed meetings in high-schools, Outreach stage in Teatro lobby at 12:45-13:55			

FRIDAY, AUGUST 23

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S2: EXP EVOL	S26: SEX CONFLICT	S15: ANCIENT DNA
14.00	**S13.O27** Interplay of microbiome and transcriptome shapes fitness in response to environmental change **J. Beninde**	**S2.O7** Experimentally altered sex ratios and the evolution of sex-specific life histories **J. Stångberg**	**S26.O16** Sex-limited experimental evolution on a simultaneous hermaphroditic flatworm leads to differential responses of sex allocation **Q. Li**	**S15.O7** The demographic history of woolly rhinoceros **E. Lord**
14.15	**S13.O28** Identification of chromosome subpopulations by recombination differences **C. Ruiz-Arenas**	**S2.O8** Evolution of reproductive efficiency in Caenorhabditis elegans under introduced obligatory outcrossing **W. Antoł**	**S26.O17** Intersexual conflict over seed size is stronger in more outcrossed populations of a mixed-mating plant **A. Raunsgard**	**S15.O8** Discovering the Legacy of Atlantic cod exploitation using ancient DNA **G. Ferrari**
14.30	**S13.O29** Understanding sex differences in crossing-over patterns **M. Kivikoski**	**S2.O9** Parental care relaxes selection and increases genetic variation **S. Pascoal**	**S26.O18** Coevolution of female fidelity and male help under interactions between intra- and inter-locus sexual conflict **Xiang-Yi Li**	**S15.O9** The aboriginal heritage project and the modern human colonization of Australia **J. Teixeira**
14.45	**S13.O30** Structural variants in a haplotype-resolved hybrid rabbit genome **E. Enbody**	**S2.O10** Dynamic phenotypic plasticity evolves in response to experimental environmental predictability **C. Leung**	**S26.O19** Sexual conflict and the diversity of warning patterns in Heliconius butterflies **M. Freire**	**S15.O10** The population dynamics of eastern Siberia revealed by Lake Baikal region **H. Yu**
15.00	**S13.O31** Positive selection on sociobiological traits in invasive fire ants **E. Privman**	**S2.O11** The Genomics of Selfing in Maize (Zea mays ssp. mays): Catching Purging in the Act **A. Muyle**	**S26.O20** Sexually antagonistic coevolution between the sex chromosomes of Drosophila melanogaster **C. Olito**	**S15.O11** Genome-wide ancient-DNA investigation characterizes a genetic contact point in the Eneolithic southwestern Russia **K. Majander**
15.15	**S13.O32** Genomic architecture underlying the evolution of a novel form of social organisation **R. Pracana**	**S2.O12** Optimizing the power to identify the genetic basis of complex traits with E&R studies **C. Vlachos**	**S26.O21** Sexually-antagonistic selection on dispersal in a cooperatively-breeding bird **J. Green**	**S15.O12** Genes and language in the prehistory of Uralic-speaking peoples **O. Vesakoski**
15.30	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
	S27: SOCIAL TRAITS	S1: TRANS GEN PLAST	S19: GENO-PHENO	S24: MICROBIAL STRESS
14.00	S27.O7 Helping Results in Indirect Fitness Gains in Cooperative Birds **P. Downing**	S1.O7 Evolutionary insights into transgenerational effects of pesticides **V. Castaño-Sanz**	S19.O7 The evolutionary history of Alba, a trans-specific Alternative life history strategy **K. Tunström**	S24.O7 Long lasting infections select for poorly transmitted bacterial variants **M. Cambon**
14.15	S27.O8 The design of the social hierarchy in spotted hyenas **A. Courtiol**	S1.O8 Longer life span is associated with elevated immune activity in a seasonally polyphenic butterfly **T. Esperk**	S19.O8 Evolution of photoperiodic flowering and the VRN2/-CO9 genes in temperate Pooideae grasses **S. Fjellheim**	S24.O8 Lysed bacterial cells inhibit population growth in multiple bacterial species **F. Smakman**
14.30	S27.O9 Social organization in ungulates: revisiting Jarman's hypotheses **K. Szemán**	S1.O9 Trans-generational effects of prenatal thyroid hormones in a wild bird species **T. Sarraude**	S19.O9 The genetic underpinnings of bird beak shape morphological evolution on a macroevolutionary scale **T. Gossmann**	S24.O9 Artificial selection for cooperative degradation of toxins in small bacterial communities **B. Vessman**
14.45	S27.O10 The fitness benefits of living with kin in a long-lived, social mammal **E. Lynch**	S1.O10 The effect of early-life stress on DNA methylation and exploratory behaviour in wild great tits **B. Sepers**	S19.O10 Many options, few solutions: over 60 million years snakes converged on few optimal venom formulations **A. Barua**	S24.O10 The evolution of mass suicide in bacterial warfare **E. Granato**
15.00	S27.O11 Towards richer game-theoretical models: How does uncertainty about the social environment influence reproductive skew? **L. Olivier**	S1.O11 Symbiont-mediated maternal effects on pathogen resistance in the pea aphid, Acyrthosiphon pisum **M. Hasoon**	S19.O11 A codon model for associating phenotypic traits with altered selective patterns of sequence evolution **K. Halabi**	S24.O11 Positive linkage between public goods suggests that generalist producers prevail in natural Pseudomonas communities **J. Kramer**
15.15	S27.O12 Human behaviour in economic games/social-dilemmas: designed to benefit the group, or the actor? **M. Burton-Chellew**	S1.O12 Role of epigenetic mechanisms during evolutionary adaptation to chronic malnutrition **B. Erkosar**	S19.O12 Phylogenetic comparative approaches to uncover the genomic basis of species' phenotypic differences **M. Hiller**	S24.O12 Eco-evolutionary approach to species coexistence **T. Hiltunen**
15.30	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

FRIDAY, AUGUST 23

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S2: EXP EVOL	S26: SEX CONFLICT	S3: NON-GEN INHERIT
16.00	**S13.O33** Predation effects on fitness: genotype-phenotype mapping in Daphnia **M. Cordellier**	**S2.O13** Identifying the mechanisms that underlie adaptation against oral bacterial infection in D. melanogaster **T. Paulo**	**S26.O22** The genetic architecture of intra-locus sexual conflict in a pedigreed wild population **L. Peters**	**S3.O8** What is 'non-genetic' inheritance? Insights from Molecular-Evolutionary Crosstalk **I. Adrian-Kalchhauser**
16.15	**S13.O34** The contribution of pleiotropy to repeatable patterns of genomic divergence in threespine stickleback **D. Rennison**	**S2.O14** Environmental heterogeneity disrupts the symmetry of host-parasite reciprocal selection, driving predictable variation in coevolutionary outcomes **S. Auld**	**S26.O23** Sex differences in genetic underlying of personality traits **S. Kralj-Fišer**	**S3.O9** Horizontal transmission and evolution of microbe-induced cooperation **O. Lewin-Epstein**
16.30	**S13.O35** Independent evolutionary trajectories underlie winter coat colour polymorphism in mountain hares **I. Giska**	**S2.O15** The feedback between selection and demography shapes coevolutionary genetic change **C. Retel**	**S26.O24** Temperature as a modulator of sexual selection and sexual conflict **P. Carazo**	**S3.O10** (In)exhaustible suppliers for evolution? Epistatic selection tunes the adaptive potential of non-genetic inheritance **S. Charlat**
16.45	**S13.O36** Characterizing the genetic basis of adaptation to arid environments in Drosophila melanogaster European populations **V. Horvath**	**S2.O16** The home advantage: Ancestral microbes aid host adaptation to novel environments **A. Agarwal**	**S26.O25** Sex-biased gene expression is repeatedly masculinized in asexual females **D. Parker**	**S3.O11** The impacts of epigenetic variation on the rate of speciation with gene flow **P. Greenspoon**
17.00	**S13.O37** Combining drug metabolism phenotypes and genomic diversity to understand evolution in metabolism of exogenous substances **M. Mouterde**	**S2.O17** Can parasite evolution reinforce the effects of climate warming? **J. Wolinska**	**S26.O26** Contrasting rates of molecular evolution in reproduction-related genes in Macrostomum flatworms with different reproductive strategies **R. A. W. Wiberg**	**S3.O12** Early-exposure to new sex pheromone blend alters mate preference in butterflies and in their offspring **E. Dion**
17.20 19.20	**POSTER SESSION II**			

	MOVE1	MOVE2	LOGI2	GOTO33
	S27: SOCIAL TRAITS	S36b: PHYLOGEO & SYST	S36d: GENOME EVOL	S36c: SPP INTERACT
16.00	S27.O13 A trait-based approach to map behaviour across species **M. E. Herberstein**	S36b.O6 Admixture among North American Canids: coyotes, wolves and the beasts between **A. Carmagnini**	S36d.O6 Polyploidy and floral evolution in a highly variable, coevolving plant species **K. Gross**	S36c.O1 Herbivores and plant defences affect selection on plant reproductive traits more strongly than pollinators **J. Santangelo**
16.15	S27.O14 Bellicose bias: how sex differences in dispersal influence intrasexual aggression **E. Bath**	S36b.O7 Enriching conserved genomic elements to resolve relationships among sawflies **W. Saskia**	S36d.O7 Mutation-rate plasticity and the germline of unicellular organisms **D. Aanen**	S36c.O2 Evidence for a chemical arms race: Lections from a chemical mimicry system of cuckoo wasps **T. Schmitt**
16.30	S27.O15 The Strategic Reference Gene: an organismal theory of inclusive fitness **L. Fromhage**	S36b.O8 ddRAD sequencing reveals the evolutionary history of the snail Charpentieria itala in the Southern Alps **J. Xu**	S36d.O8 Genomic introgression through newt hybrid zones – evidence from replicated transects **P. Zieliński**	S36c.O3 Mutualism mediates infection risk by an antagonist in experimental populations **J. Eck**
16.45	S27.O16 Genotype-by-environment interactions on sociability in threespine sticklebacks **N. Pilakouta**	S36b.O9 Environmental variables shaping the distribution and hybridization in Heliconius butterflies **N. Rueda**	S36d.O9 The role of chromosomal inversions in the speciation history of two Drosophila virilis group species **N. Poikela**	S36c.O4 Fitness trade-offs associated with host resistance in a natural insect host-ectoparasite symbiosis **M. Polak**
17.00	S27.O17 Ecological and social constraints promote social evolution in the clown anemonefish **R. Branconi**	S36b.O10 Phylogenomics of the Hyalella (Amphipoda: Crustacea) species-flock in Lake Titicaca, High Andes **F. Zapelloni**	S36d.O10 Exposure to environmental radionuclides associates with altered metabolic and immunity pathways in a wild rodent **J. Kesäniemi**	S36c.O5 High conspecific density reduces hoarding success and affects sex-specific spatial distribution among wintering pygmy owls **E. Koivisto**
17.20 19.20	POSTER SESSION II			

SATURDAY, AUGUST 24

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE V** **Rasmus Nielsen,** Human adaptation in time and space			
	S13: ADAPT GEN	**S2: EXP EVOL**	**S36a: SEX & SELECT MATING**	**S28: GAME THEORY**
10.00	**S13.O38** The impact of protein architecture on adaptive evolution **A. F. Moutinho**	**S2.O18** The genetic and molecular bases of real-time bacterial tRNA evolution **J. Gallie**	**S36a.O1** How diversity in parental care evolves: a phylogenetic comparative study in amphibians **A. Furness**	**S28.O1** Improving treatment of metastatic cancers through evolutionary game theory **K. Stankova**
10.15	**S13.O39** Adaptation to high soil trace metal element concentrations in Arabidopsis arenosa **C. Sailer**	**S2.O19** Bacterial predator-prey coevolution selects on virulence-associated prey defences **R. Nair**	**S36a.O2** Cobreeding females adjust their reproductive decisions by investing more in eggs and less in care **J. Richardson**	
10.30	**S13.O40** Regulatory evolution of metabolic adaptations in cavefish **N. Rohner**	**S2.O20** Forecasting experimental evolution in Pseudomonas **P. Lind**	**S36a.O3** Cannibalism rescues fitness impacts of skewed sex-ratios in red flour beetle Tribolium castaneum **I. Khan**	**S28.O2** N-player collaborative hunting in yellow yellow saddle goatfish (Parupeneus cyclostomus) **R. Bshary**
10.45	**S13.O41** True survivors: response to bat fungal pathogen varies according to exposure history **T. Lilley**	**S2.O21** Evolution of Multicellularity: Cheating Done Right **W. Veit**	**S36a.O4** Parental investment and sexual dimorphism in immunity **V. Revathi Venkateswaran**	
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

	MOVE1	MOVE2	LOGI2	GOTO33
8.55	**ESEB initiatives and practical information**			
9.05	**KEYNOTE V** **Rasmus Nielsen,** Human adaptation in time and space			
	S27: SOCIAL TRAITS	**S30: POLLINATOR**	**S9: MICROBES & FOOD**	**S5: AGING & CANCER**
10.00	**S27.O18** Cooperative adaptations and exploitation resistance in social amoebae **J. Strassmann**	**S30.O1** Preparedness and contra-preparedness in pollinator learning **A. Dunlap**	**S9.O1** Domestication of microbial communities for bread making : insights from a participatory research project **D. Sicard**	**S5.O1** Cancer resistance mechanisms in long-lived mammals **V. Gorbunova**
10.15	**S27.O19** Siderophore investment strategies in Pseudomonas aeruginosa **S. Mridha**			
10.30	**S27.O20** The social control of virulence and the mystery of defective viruses **A. Leeks**	**S30.O2** Eco-evolutionary feedbacks between floral traits and pollinator behaviour in deceptive pollination interactions **A. Ellis**	**S9.O2** The fungal genus Aspergillus as a model to study microbial domestication **J. Gibbons**	**S5.O2** Evolutionary genomics, aging and cancer **J. P. de Magalhaes**
10.45	**S27.O21** Evolutionary Forces Behind the Diversification of Public Goods in Bacteria **A. Figueiredo**			
11.00	**COFFEE & EXHIBITION & OUTREACH** (Art up your evolution, Outreach stage, Teatro lobby)			

SATURDAY, AUGUST 24

	LOGOMO HALL	TEATRO	GALLERIA	LOGI1
	S13: ADAPT GEN	S2: EXP EVOL	S36a: SEX & SELECT MATING	S28: GAME THEORY
11.30	**S13.O42** Genomic introgression facilitated adaptation of European aspen to short growing seasons in northern Scandinavia **M. Rendón-Anaya**	**S2.O22** Spatial selection and experimental evolution of parasite dispersal strategies **G. Zilio**	**S36a.O5** How does the environment influence the expression of animal mate choice and sexual signalling? **L. Dougherty**	**S28.O3** Microbial public goods games in a toxic environment: to degrade or to resist? **S. Shibasaki**
11.45	**S13.O43** Hitch-hiking laterally-acquired genes contribute to delayed adaptation **J. Olofsson**	**S2.O23** The effects of predation on body and fin morphology in replicated mesocosms **N. Alioravainen**	**S36a.O6** Genetic architecture of reproductive performance in response to thermal stress **M. Zwoinska**	**S28.O4** Adaptive dynamics in spatially structured populations **T. Priklopil**
12.00	**S13.O44** Evidence that viruses, particularly SIV, drove genetic adaptation in natural populations of eastern chimpanzees **A. Andrés**	**S2.O24** Reproductive interference as a driver of species exclusion and evolution in spider mites **M. Cruz**	**S36a.O7** Experimental evidence for genetic and phenotypic effects of sexual selection on germline mutation rate **J. Baur**	**S28.O5** Evolutionary Dynamics of Coordinated Cooperation **H. Ohtsuki**
12.15	**S13.O45** The role of sRNA dominance modifiers in transitions to selfing in Capsella **J. Bachmann**	**S2.O25** Multi dimensional niche evolution of a crop pest (Callosobruchus maculatus) under climate change **A. Leonard**	**S36a.O8** Evolution of sexual signals in closely related frog species occurring in sympatry **S. Goutte**	**S28.O6** Effects of uncertainty and learning on the behaviour predicted by evolutionary game theory **A. Higginson**
12.30	**S13.O46** Environmentally dependent rewiring of epistatic networks and their contributions to quantitative trait plasticity **Y. Zan**	**S2.O26** Eco-Evolutionary feedbacks in range expanding food webs: experimental evidence from small worlds **E. Fronhofer**	**S36a.O9** Evolution of female promiscuity in songbirds **J. T. Lifjeld**	**S28.O7** Reinforcement learning leads to bounded rationality in a public goods game **O. Leimar**
12.45	**LUNCH & EXHIBITION**			
13.30	**ESEB members meeting**			
14.30	**Incoming president's address** **Ophelie Ronce**, Integrating niche evolution with life history theory can help us better understand the consequences of climate change			
15.10	**Leg stretching break**			
15.20	**JMS award winner 2019** **Karl Grieshop,** Sexual conflict and the maintenance of genetic variance in fitness			
15.50 16.20	**Closing ceremony**			
18.30 02.00	**Congress dinner at Muuminworld**			

	MOVE1	MOVE2	LOGI2	GOTO33
	S27: SOCIAL TRAITS	S30: POLLINATOR	S9: MICROBES & FOOD	S5: AGING & CANCER
11.30	S27.O22 Farming plant cooperation for more sustainable agriculture **G. Montazeaud**	S30.O3 Nectar chemistry changes pollinator behavior with implications for plant fitness **P. Jones**	S9.O3 Rapid pathogen resistance evolution can shape the biocontrol efficiency of plant growth promoting Pseudomonas bacteria **S. Clough**	S5.O3 Competition and cancer invasiveness in ageing landscapes **S. P. Castillo**
11.45	S27.O23 Cooperation and cheating among germinating spores **S. Pande**	S30.O4 Pollinator preference and flowering phenology: how to solve reproductive conflicts between species that share pollinators **R. Pérez-Barrales**	S9.O4 Study of the domestication in the blue cheese fungus Penicillium roqueforti **T. Caron**	S5.O4 Cancer evolution in hierarchal organised tissues **P. Ashcroft**
12.00	S27.O24 Social plasticity in the wild **K. Strickland**	S30.O5 Mimicry and competition drive flower colour polymorphisms in sunbird-pollinated Erica **A. Coetzee**	S9.O5 New model to assess genomic and functional effects of microbial domestication in food environments **K. Chacon-Vargas**	S5.O5 Choose your death: adaptive cell senescence predicts a late-life decrease of cancer prevalence **T. Tissot**
12.15	S27.O25 The evolution of social bet-hedging strategies **T. Aubier**	S30.O6 Foraging preferences of bees and birds – assessing the adaptive value of heteranthery in Merianieae flowers **A. Dellinger**	S9.O6 Water kefir: metagenomic analysis of a drinkable symbiotic communities of bacteria and yeast **J.-B. Boulé**	S5.O6 Lifelong telomere dynamics in wild Soay sheep **H. Froy**
12.30	S27.O26 Greenbeard genes: theory and reality **P. Madgwick**	S30.O7 Should I stay or should I go? Diascia plants frequently shift their Rediviva pollinators **B. Kahnt**	S9.O7 Characterisation of microbial communities on different apple varieties and orchard management practices **E. Britt**	S5.O7 Limited longevity in a finite world **J. Lehtonen**
12.45	**LUNCH & EXHIBITION**			
13.30	**ESEB members meeting**			
14.30	**Incoming president's address** **Ophelie Ronce**, Integrating niche evolution with life history theory can help us better understand the consequences of climate change			
15.10	**Leg stretching break**			
15.20	**JMS award winner 2019** **Karl Grieshop,** Sexual conflict and the maintenance of genetic variance in fitness			
15.50 16.20	**Closing ceremony**			
18.30 02.00	**Congress dinner at Muuminworld**			

POSTER LIST

POSTER SESSION
TUESDAY 17.20-19.20

4. Cognitive evolution and environment

S4.P1
Do developmental changes in fitness trade-offs predict mechanosensory cues for escape-hatching decisions?
Chloe Fouilloux

S4.P3
Predator identification from salivary DNA left on artificial prey
Daniela Rößler

S4.P4
Ecology of cognitive evolution in Heliconiini butterflies
Fletcher Young

S4.P5
The sensory basis of distance estimation in a coral reef fish
Cecilia Karlsson

S4.P6
Visual specialisation and expansion of Heliconius mushroom bodies
Stephen Montgomery

S4.P7
Brain size affects responsiveness in mating behavior to variation in predation pressure and sex-ratio
Alberto Corral-Lopez

S4.P8
Proteomic profiling of cerebrospinal fluid in cognitively advanced birds: comparative approach
Eleni Voukali

S4.P9
Evolution of emotions and learning – a neural network model
Magdalena Kozielska

S4.P10
Artificial selection for schooling behaviour decreases individual learning ability in fish
Regina Vega-Trejo

S4.P11
The evolution of foraging innovation following colonisation of a less variable environment
Gábor Herczeg

S4.P12
Non-nestmate templates improve nestmate recognition
Volker Nehring

S4.P14
Effects of mating on female immune defence in a fruit fly
Keiko Oku

S4.P15
Head measures as promising indices of sensory capacity: a study on geometrid moths
Juhan Javoiš

S4.P16
Causes and consequences of individual variation in cognitive ability
Krista van den Heuvel

S4.P17
Decision-making in wild great tits, with real world consequences
Shana Caro

S4.P18
Norm followers, cheaters and costly signallers in a sport charity campaign
Judit Mokos

6. Eco-evolutionary approach to the antimicrobial resistance problem

S6.P1
Exploring the role of bacteria and phage genetic diversity for CRISPR-phage coevolution
Jack Common

S6.P2
Evolution of antibiotic resistance investigated by single cell genomics
Manu Tamminen

S6.P3
Ecology and evolution of plasmid-mediated antimicrobial resistance (pAMR) transfer in the chicken microbiome
Sarah Duxbury

S6.P4
Biotic stress response in Fagaceae: Focus on antimicrobial peptides
Tetyana Nosenko

S6.P5
Fight AMR evolution: predictive phage cocktails, plasmid-dependent phages and plasmids that re-sensitize bacteria to antibiotics
Matti Jalasvuori

S6.P6
Antibiotic resistance plasmids spread at diverse rates through recipient populations, in the absence of selection
Fabienne Benz

S6.P7
Evolutionary instability of collateral susceptibility networks in clinical Escherichia coli strains
Vidar Sørum

S6.P8
Fungal antimicrobial resistance towards termite mound defences
Nils Peereboom

S6.P9
Resistance management in a hospital setting: limited impact of a single drug intervention
Clare Kinnear

7. Human-induced evolution

S7.P1
Breeding in an agricultural land: effects on evolutionary potential of a wild bird population
Dany Garant

S7.P2
Toads respond to anthropogenic change by adjusting their chemical defence
Bálint Üveges

S7.P3
Cat behavior: an evolutionary perspective
Milla Salonen

S7.P4
Behavior and personality differences between cat breeds
Salla Mikkola

S7.P5
Is temperature-induced sterility important for predicting species' responses to climate change?
Steven Parratt

S7.P6
Intra-species diversification using "elite plants" reduces herbivory and increases resilience
Tuuli-Marjaana Koski

S7.P7
Genomic consequences of eutrophication induced speciation reversal in Alpine whitefish
Philine Feulner

S7.P8
Mining herbaria and roaming the forests: Land-use and climate change affect plant phenology
Franziska Merle Willems

S7.P9
Roles of acetylcholinesterase genes in organophosphate and carbamate resistance in Leptinotarsa decemlineata
Aigi Margus

S7.P10
Population genomic differentiation of the Asian long-horned beetle (Anoplophora glabripennis)
Iris Häußermann

S7.P11
Population genomics of the invasive Argentine ant
Ida Holmberg

S7.P12
Evolution of phenotypic variation of an invasive lizard following experimental introduction on small islands
Amelie Fargevieille

S7.P13
The ecological and genetic impact of interactions between domesticated and wild Atlantic salmon
Joshka Kaufmann

S7.P14
For better or for worse: How city life can alter the gut microbiome of species
Bethan Littleford-Colquhoun

S7.P15
Coping with change – how can chemical communication systems overcome disruptions?
Emily Burdfield-Steel

S7.P16
Winners and losers of the Anthropocene: evolutionary and ecological factors predict species invasion and extinction
Jacintha Ellers

S7.P17
Size-dependent harvesting modified the trophic niche of medaka Oryzias latipes in a mesocosm experiment
Charlotte Evangelista

S7.P18
Impact of host plant range on the evolution of insecticide resistance, and vice-versa, in insects
Kristina Karlsson Green

8. Genetics of small populations

S8.P1
Whole-genome sequencing helps unravel the evolutionary and demographic history of an endangered primate
Catalina Gonda

S8.P2
Clonal architecture in the endangered populations of the shrub birch Betula humilis Schrk
Agnieszka Bona

S8.P3
Assessing the genomic diversity and signatures of selection in Arabian Peninsula and African dromedary camels
Hussain Bahbahani

S8.P4
Is there a goose on the loose? investigating introgression into the Swedish Lesser White-fronted Goose
David Diez-del-Molino

S8.P5
Genetic Structure of Aedes albopictus from Asia
Jiyeong Shin

S6.P6
Capturing genetic variation in natural and planted stands of Picea abies using probes and WGS
Helena Eklöf

S8.P7
Identification of the homogametic sex chromosome
Charles Christian Riis Hansen

S8.P8
Non-parallel evolution of pelvic reduction in nine-spine sticklebacks
Petri Kemppainen

S8.P9
Genetic analyses of archaeological and historical barley grains
Mia Lempiäinen-Avci

S8.P10
Genetic consequences of geographical isolation: a case study of Betula nana in Poland
Katarzyna Jadwiszczak

S8.P11
Habitat change leads to shifting allopatric boundaries in coastal and pelagic island seabirds
Robin Cristofari

S8.P12
Selection efficiency in social and solitary Hymenoptera
Arthur Weyna

S8.P13
Genetic drift during a biological invasion
Eric J. Petit

S8.P14
Causes and consequences of TLR variation in a bottle-necked population
Charli Davies

S8.P15
Revisiting the role of inversions in maintaining genomic differentiation after secondary contact
Marina Rafajlović

S8.P16
Fitness consequences of dispersal in a house sparrow metapopulation
Dilan Saatoglu

S8.P17
Investigating adaptation in Swedish sand lizards
Mette Lillie

10. Rapid Evolutionary Adaptation: Potential and Constraints

S10.P1
Recipe for a rapid radiation: population divergence and repeated behavioral isolation through parallel genetic mechanisms
Thomas Blankers

S10.P2
Rapid adaptation of stress related traits in Drosophila melanogaster to seasonal changing environment
Banu Sebnem Onder

S10.P3
Understanding rapid evolution of insecticide resistance using genomic data from 100-year old pest moths
Angela McGaughran

S10.P4
Interspecific competition as a driver of ecological divergence in a songbirds secondary contact zone
Camille Sottas

S10.P5
Interaction between sex and gene flow modulates speed of adaptation during range expansions
Felix Moerman

S10.P6
Ecological opportunity promotes diversifying selection and facilitates rapid phenotypic divergence in Icelandic Arctic charr
Matthew Brachmann

S10.P7
Digging up rapidly evolved traits in Itallian Wall lizard (Podarcis siculus)
Óscar Mira

S10.P8
Real-time evolution under climate warming: an experimental approach in populations of contrasting biogeographical history
Pedro Simões

S10.P9
Investigating the adaptive role of noise in gene expression
Pierre Laye

S10.P10
Is timing of spring arrival genetically controlled in a long-distant migrant?
Miloš Krist

S10.P11
Rapid phenotypic diversification among new stickleback populations created by a huge earthquake and subsequent tsunamis
Takuya Hosoki

S10.P12
Raccoon MHC diversity in native and introduced ranges: reduced allele diversity but not allele divergence
Aleksandra Biedrzycka

S10.P13
The evolution of the genetic architecture of traits under artificial selection
Yvonne Wientjes

S10.P14
Perceived risk affects the genetic integration of behaviour and morphology in two stickleback populations
Niels J. Dingemanse

S10.P15
How to deal with environmental changes: Molecular characterisation of (non) genetic mechanisms on invasive species
Pierre Marin

S10.P16
Visual habitat choice in East African cichlids
Elodie Wilwert

S10.P17
Adaptive evolution and functional differentiation of testis expression genes in Theria
Yukako Katsura

S10.P18
Rapid evolution in highly fecund populations
Bjarki Eldon

S10.P20
The ghosts of evolutionary past: Phytoplankton´s adaptive potential in a crowded changing world
Maria Elisabetta Santelia

S10.P21
Sympatric stickleback in space: the role of selection and gene flow
Thijs M.P. Bal

S10.P22
The role of inversions in driving local and sex-specific adaptation
Filip Ruzicka

S10.P23
Effects of fungicide on a nontarget species, Colorado Potato Beetle (Leptinotarsa decemlineata)
Shahed Saifullah

S10.P24
Investigation of immune response in a seasonal Drosophila melanogaster population
Ekin Demir

S10.P25
Genetic perspective of seasonal adaptation in Drosophila phalerata
Chedly Kastally

S10.P26
Adaptation to seasonal fluctuations in desiccation tolerance in a natural population of Drosophila melanogaster
Nur Seda Coşkun

S10.P27
Plasticity and epigenetic inheritance in the aphid parasitoid Aphidius ervi
Mark Lammers

S10.P28
Unexpected evolutionary dynamics of phenotypically important tandem repeats: a model of flocculin evolution in brewing
Colette St. Mary

11. Quantitative trait effect size distributions and their impact on evolutionary processes

S11.P1
Investigating genetic bases of hybrid sterility using wild-derived inbred strains from mouse hybrid zone populations
Paigan Aspinall

S11.P2
Genomic region including major seed dormancy QTL strongly contributes to local adaptation in Arabidopsis thaliana
Giulia Zacchello

S11.P3
Estimation of proportions of additive and non-additive genetic variance components
Anna-Margarete Staehler

S11.P4
Unravelling the mechanisms of population phenotypic changes: does individual differences matter for colonisation?
Marion Nicolaus

S11.P5
A polygenic network for pupation site choice behavior in Drosophila melanogaster
Wenyu Zhang

S11.P6
Genetic architecture of sexual dimorphism in the seed beetle Callosobruchus maculatus
Philipp Kaufmann

S11.P7
Reconstructing the evolutionary dynamics of a functional variant in a spatially distributed natural population
Ahmed Elfarargi

12. Quantifying selection and evolvability in wild plant populations: methods and measurements

S12.P1
Genomic quantification of selection on regions of open chromatin in Capsella grandiflora
Robert Horvath

S12.P2
Evolution of plant phenotypic plasticity to grassland management
Anna Kirschbaum

S12.P3
Linking dendroecology and association genetics in forest trees
Katrin Heer

S12.P4
Quantum speciation and genetic swamping in a range-limited Species
Mitch Cruzan

S12.P5
Assessing differences on evolutionary rates between haploid and diploid tissues in Pinus sylvestris
Sandra Cervantes

S12.P6
The effects of natural and artificial selection on seedling traits in Scots pine
Outi Savolainen

S12.P7
Using seed banks to investigate shifts in drought resistance in four Mediterranean herbs
Robert Rauschkolb

S12.P8
Evolutionary-based resilience of wild populations
Ivan Scotti

14. The mechanisms of evolutionary change: moving from genomic signatures to functional validation

S14.P1
Seasonal and allele-specific expression dynamics of a major age-at-maturity gene in Atlantic salmon
Jukka-Pekka Verta

S14.P2
Six6 expression in Atlantic salmon suggests a role in the development of body shape
Jacqueline Moustakas-Verho

S14.P3
Dissecting the genetic architecture underling mouth dimorphism in Pristionchus pacificus identifies a supergene locus
Mohannad Dardiry

S14.P4
Association study reveals genes underlying flower size plasticity in Arabidopsis thaliana
Roosa Laitinen

S14.P5
From GWAS to function: expression patterns of age-at-maturity-associated genes in Atlantic salmon
Johanna Kurko

S14.P6
Genetic and nutrition effects on lipid amount and composition in juvenile Atlantic salmon
Andrew House

S14.P7
miRNA expression during the development of different Arctic charr morphologies
Dagny A. Runarsdottir

S14.P8
Understanding functional changes of cold acclimation using ribosomal footprint profiling
Jenni Prokkola

S14.P9
Functional validation of genes involved in fat storage in Atlantic salmon adipocytes using CRISPR
Erica H Leder

S14.P10
Bacteria-derived tail anchors target to discrete organelles when expressed in eukaryotic cells
Cory Dunn

S14.P11
Investigating germ cell specific gene expression across panarthropods
Matthias Janeschik

S14.P12
Functional investigation of plasticity in wing morph determination in a water strider
Erik Gudmunds

S14.P13
Unexpected fructan motifs in Nardus stricta: cloning, purification, and functional analysis of an invertase enzym
Camilla Lorange Lindberg

S14.P14
Narrowing in on the Red Queen: QTL and fine mapping parasite resistance in Daphnia magna
Maridel Fredericksen

S14.P15
Genotype-phenotype mapping of skull development and adaptation in squamate reptiles
Joni Ollonen

S14.P16
The genetic underpinnings of bill length variation in great tits (Parus major)
Judith Risse

17. Selfish genetic elements

S17.P1
Sex chromosomes suppress vertical transmission of feminizing Wolbachia symbionts in an isopod
Richard Cordaux

S17.P2
The genetic basis of meiotic drive in Podospora
S. Lorena Ament Velasquez

S17.P3
Burst of transposable elements is associated with vertebrate differentiation
Feng Shao

S17.P4
Population genetics of a segregation distorter in fungal systems
Ivain Martinossi-Allibert

S17.P5
Do spider mites evolve antagonistic traits against cytoplasmic incompatibility induced by Wolbachia?
Flore Zélé

S17.P6
Contribution of TEs mobilization to tomato improvement
Marisol Dominguez

S17.P7
The extent of DNA transfer between plasmids and chromosomes in prokaryotes
Ahmad Samer Kadib Alban

S17.P8
Tracing the onset of the 'green beard' signal in fire ant Solenopsis invicta
Qiaowei Pan

S17.P9
Allorecognition genes in Basidiomycetes - a genetic stalemate?
Benjamin Auxier

18. The genetic architecture of polygenic adaptation: sweeps, small shifts and everything in between

S18.P1
Tracking allele trajectories over 20 generations of selection for long limbs in mice
Layla Hiramatsu

S18.P2
Genomic footprints of polygenic adaptation in Theobroma cacao
Tuomas Hämälä

S18.P3
Natural selection and the lengths of fixed chromosomal inversions
Tim Connallon

S18.P4
Origin and dynamics of adaptive alleles in physiological adaptation in sticklebacks
Jun Kitano

S18.P5
A chromosomal rearrangement explains variation in age of seaward migration in Atlantic salmon
Sarah Lehnert

S18.P6
The resolution of genomic conflicts following admixture in a polygenic hybrid incompatibility model
Flávia Schlichta

S18.P7
Polygenic adaptation of a quantitative trait
Benjamin Wölfl

20. The evolutionary consequences of social transmission and animal culture

S20.P1
To be or not to be...when individual performance interacts with group composition
Frederic Mery

S20.P2
Role of different types of social information in learning to avoid aposematic prey
Alice Exnerova

S20.P3
Host group relatedness and social transmission of the gut microbiome: an experimental study on ostriches
Hanna Bensch

S20.P4
Informed movement: how information shapes the co-evolutionary outcomes of range-expansion
Katja Rönkä

S20.P5
Social information transfer during dispersal in Zootoca vivipara: mechanisms and implications for population dynamics
Mathieu Brevet

S20.P6
The Neolithic transition to large-scale societies is favoured by the co-evolution of cooperation and institutions
Claire Guérin

S20.P7
Evolution of personal and social immunity in the context of family life
Michelle Ziadie

21. Colour across the evolutionary spectrum: from production to perception

S21.P1
Patterns of sex-specific selection and inheritance of a colour pattern polymorphism in an Australian lizard
Genevieve Matthews

S21.P2
Examining the link between relaxed predation and bird colouration on islands
Louis Bliard

S21.P3
Sparring stomatopods: Do coloured patches signal weapon performance?
Amanda Franklin

S21.P4
The molecular basis of continuous flower colour in Oncocyclus irises
Esther Senden

S21.P5
The repeated evolution of wasp colour-pattern mimicry in hoverflies
Tom Reader

S21.P7
Uncovering the genomic basis of an aposematic colour polymorphism in the wood tiger moth
Eugenie Charley Yen

S21.P8
Potential and realized costs associated with ultraviolet signals in a lizard
Arnaud Badiane

S21.P9
Changing colour in a polluted environment
Asma Althomali

S21.P10
Sexual selection, predation, and the maintenance of polymorphic Y-linked colour genes in the Trinidadian guppy
Josephine Paris

S21.P11
Color evolution in European butterflies evolved via Darwin's, not Wallace's, model of evolution
Christopher W. Wheat

S21.P12
The genetics and condition-dependence of structural colour in mimetic Heliconius butterflies
Melanie Brien

S21.P13
Sexual selection predicts the rate and direction of colour evolution in a large avian radiation
Christopher Cooney

S21.P14
Micro-scale architecture of the blue tit feathers
Katarzyna Janas

S21.P15
Phenotypic variation in poison frogs: From predator perception to the molecular basis of color variation
Heike Pröhl

S21.P16
Carotenoid coloration signals a males' tendency to invest in parental care in passerines
Alejandro Gonzalez-Voyer

S21.P17
Genetics and selection of ventral colouration in oviparous and viviparous common lizards
Hans Recknagel

S21.P18
Evaluation of phenotypic resemblance across multiple mimicry rings in Heliconius
Maria González-Rojas

S21.P19
Revisiting male colour and opsin polymorphism along the predation regime continuum in the Trinidadian guppy
Lengxob 'Lenny' Yong

S21.P20
Stabilizing selection on individual, conspicuous colour pattern elements of an aposematic nudibranch
Anne Winters

S21.P21
Red and green plumage colouration in a wild x domestic intercross
Jesper Fogelholm

S21.P22
Continuous variation in scale ultrastructure in two Heliconius mimics
Juan Enciso-Romero

S21.P23
The effects of genetic and environmental factors on Drosophila body color components
Lafuente Elvira

S21.P24
"Fretted with golden fire": structural colouration based on micron and sub-micron structures in selected insects
Dragana Cvetković

S21.P25
Gene expression profiling of aposematism in Anisomorpha stick insects
Victor Soria-Carrasco

S21.P26
The evolutionary maintenance of ontogenetic colour polymorphism in wood frogs (Rana sylvatica)
Debora Goedert

S21.P27
Effect of natural and sexual selection on wing colour variation of butterflies
Bhavya Dharmaraj

23. Parasite community dynamics and their role in the evolution of host immunity

S23.P1
Parasite-mediated sexual selection in moths
Ke Gao

S23.P3
Social antimicrobial wound care in a predatory ant
Erik Thomas Frank

S23.P4
Pathogens, species distribution and migration: molecular evolution of genes of immunity in cetaceans
Maria Luiza Andreani

S23.P5
Apparent manipulation: How parasites may modify their host's behaviour without using any tricks
Camilla Håkonsrud Jensen

S23.P6
Towards the understanding of zoonotic events in infectious diseases: Tracing animal reservoirs in Switzerland
Christian Urban

S23.P7
Humic-acid-driven escape from eye parasites
Kristina Noreikiene

S23.P9
Seasonal variation in endoparasite biodiversity with age and sex of semi-captive Asian elephant hosts
Carly Lynsdale

S23.P10
Invasions create competitors: How novel interactions among native and invasive parasites modify host parasite coevolution
K. Mathias Wegner

S23.P12
Thermal plasticity in immunity in association with different seasonal strategies for reproduction
Yara Rodrigues

S23.P13
Does gut passage help keep fungus-growing termite gardens disease free?
Leandro Guimaraes

S23.P14
Selection on MHC class II haplotypes in a free-living ruminant
Wei Huang

S23.P18
Less or more? Protective microbe density and defence against parasites
Georgia C Drew

S23.P19
Seasonal patterns of parasite infection and larval developmental mode variation in the polychaete Pygospio elegans
Anna-Lotta Hiillos

25. Assortative mating for quantitative traits: mechanisms, estimation, and evolutionary consequences

S25.P1
Hybridization reduces the variation of male sexual phenotype in F1 hybrids: A Meta-analysis
Keisuke Atsumi

S25.P2
Is assortative fertilisation after sperm competition driven by male environment or genetics in common bedbugs?
Jana Křemenová

S25.P3
Assortative mating based on circalunar and circadian timing of adult emergence in Clunio marinus
Sina Schirmer

S25.P4
Sperm fertilization capability is shaped by the gamete-level immunological incompatibility in humans
Annalaura Jokiniemi

S25.P5
Characterising genomic patterns of divergence underpinning reproductive isolation in the Drosophila virilis group
Leeban Yusuf

31. Life history evolution: bridging theory and data

S31.P1
Body size variation in European common lizards: a range-wide study of a wide-ranging species
Evgeny S. Roitberg

S31.P2
Reproductive costs in eastern grey kangaroo females, the bigger picture
Pauline Toni

S31.P3
Key to kangaroo siring success: be in the right place at the right time
Luca Montana

S31.P4
Optimal germination times in unpredictable environments: the importance of dormancy for among- and within-year variation
Hanna ten Brink

S31.P5
The evolution of reproductive diapause facilitates insect radiation into African savannahs during the late-Miocene
Sridhar Halali

S31.P6
Small eggs, large clutches and parental care: unexpected life-history evolution patterns in shield bugs
Shin-ichi Kudo

S31.P7
Individual variation and evolutionary potential of parasite traits in a songbird-tick system
Gerardo Fracasso

S31.P8
Variation in lifetime reproductive strategies in a self-compatible hermaphrodite: combining field data with laboratory experiments
Anja Felmy

S31.P9
Life history evolution: the constraints of sexual plasticity
Chiara Benvenuto

S31.P10
Experimental removal of sexual selection turns males in to couch potatoes
Martin Garlovsky

S31.P11
Co-evolution of maternal thyroid hormones and life history strategies: comparative and experimental tests
Bin-Yan Hsu

S31.P12
Family dynamics and age-related patterns in marriage probability in historical human population
Jenni Pettay

S31.P13
Seasonality as a predominant control factor of the moult dynamics in birds – a meta-analysis
Agnieszka Gudowska

S31.P14
Natural and laboratory competition experiments between sexual and parthenogenetic polyclonal species of brine shrimp (Artemia)
Robert Browne

S31.P15
Within individual variance in foraging behaviour mediates the fitness consequences of broad scale climate phenomena
Samantha Patrick

S31.P16
Alternative reproductive strategies are associated with distinct queen and worker size in Temnothorax rugatulus ants
Marina Choppin

S31.P17
Thermal environment at the juvenile stage affects morph-specific offspring survival in a polymorphic damselfly
Maarit Mäenpää

S31.P18
The evolution of adult sex ratios in dragon- and damselflies
Martin Alejandro Serrano-Meneses

S31.P19
Waiting for love – Reproductive delay and assurance under fluctuating population density
Chantal Stock

S31.P20
Maternal resources, early-life care and life-history outcomes: why some mongooses are more equal than others
Emma Vitikainen

S31.P21
Lifespan in wild butterfly populations: genomic determinants and maintenance of standing variation
Vicencio Oostra

S31.P22
Aiming for the moon: Maintenance of local adaptation to tidal regime
Runa Kvamme Ekrem

S31.P23
Survival costs of sons and daughters in Asian elephants
Vérane Berger

S31.P24
Evolutionary trade-offs in antigen-presentation mediate risk for infection and autoimmunity
Jatin Arora

S31.P25
Dietary restriction, sexual selection, and the life history trade-off between reproduction and somatic maintenance
Elisabeth Bolund

S31.P26
A model for the evolution of interspecific obligate brood parasitism in fish
Pierick Mouginot

32. Niche width evolution and its (mal) adaptive significance

S32.P1
The evolution of habitat choice facilitates niche expansion
Eva Kisdi

S32.P2
Cumulative stress or acclimation? Thermal performance in all life stages of a thermal generalist butterfly
Loke von Schmalensee

33. Evolutionary Ecology of Ageing: from mechanisms to life-history consequences

S33.P1
Deleterious mutations show increasing negative effects with age in Drosophila melanogaster
Martin Brengdahl

S33.P2
RNAi screening of lifespan and fecundity genes in Drosophila melanogaster TOR and IIS pathways
Daniel Pritchard

S33.P3
Reversal of the fecundity-longevity trade-off across the spectrum of sociality in the bees
Andreia Teixeira

S33.P4
The effect of food restriction on ageing and fecundity in termite
Silu LIN

S33.P5
Pedigree-based estimation of germline mutation rate of Rhesus macaque (Macaca mulatta) linked to parental age
Lucie Bergeron

S33.P6
The evolutionary and developmental dynamics of life history
Mauricio González-Forero

S33.P7
The role of laying and hatching order in early-life telomere dynamics in a wild passerine
Tiia Kärkkäinen

S33.P8
The harsh life of annual killifish – new insights from natural demography and life history
Milan Vrtilek

S33.P9
Diversity of ageing patterns in a highly promiscuous songbird
Eve Cooper

S33.P10
Ant workers' susceptibility to paraquat induced oxidative stress in relation to age and reproductive status
Megha Majoe

S33.P11
Nutrient balance as a mechanism to understand the longevity/fecundity trade-off in ants
Abel Bernadou

S33.P12
Why do dietary restricted animals live longer? Testing the evolutionary theories
Laura Travers

S33.P13
Trade-off between reproductive effort and oxidative status as a response to warming in marine environment
Ella von Weissenberg

S33.P14
A theoretical investigation of the effect of early-life somatic damage levels on senescence rates
Matthias Galipaud

S33.P15
An evolutionary explanation for longevity in naked mole rats
Robert Noble

S33.P16
Is age just a number? The role of senescence in the fish populations' eco-evolutionary dynamics
Silva Uusi-Heikkilä

S33.P17
Contributions of sperm and seminal fluid to ejaculate senescence, and its amelioration via insulin signalling
Irem Sepil

34. Mathematical models in evolutionary biology

S34.P1
Evolutionary rescue and dispersal: the effect of habitat choice on successful adaptation
Peter Czuppon

S34.P2
Microbes can explain the evolution of paternal care
Yael Gurevich

S34.P3
Systemic consequences of reproductive strategies
Laura Hildesheim

S34.P4
Joint evolution of dispersal and connectivity
Petteri Karisto

S34.P5
Evolutionary and demographic consequences of temperature-induced masculinization: the role of sexual selection
Edina Nemesházi

S34.P6
Mutation bias in empirical genotype-phenotype landscapes
Alejandro V Cano

S34.P7
What phylodynamic skyline models can and cannot do
Veronika Boskova

S34.P8
Bet-hedging across generations can affect the evolution of variance-sensitive strategies within generations
Thomas Ray Haaland

S34.P9
Evolution of enzyme concentrations in metabolic pathways
Charlotte Coton

S34.P10
Horizontal transfer and phylogenetic calibration in linguistics: a Bayesian approach
Luke Maurits

S34.P11
Fitness versus risk: calculating a fitness-risk ratio that describes optimal seed heteromorphism
P. William Hughes

S34.P12
Life is not a long quiet river: modelling population genetic divergence when migration is fluctuating
Vincent Calcagno

S34.P13
Gene flow can also lead to a U-shaped site frequency spectrum
Nina Marchi

S34.P14
How does the occasional absence of resources for cooperation affect the evolution of direct reciprocity?
Shun Kurokawa

S34.P15
Coevolution in a hierarchically structured host-parasite metapopulation
Robert Pascal Dünner

S34.P16
Contrasting the impact of cytotoxic and cytostatic drug therapies on tumour progression
Jani Anttila

S34.P17
Sexual selection in stpace: The effect of spatial structure on sexual selection
Maximilian Tschol

S34.P18
Investigating the role of dispersal in African monarch butterflies and their male-killing endosymbiont
Franziska Brenninger

S34.P19
Modelling the killer T-cell and cancer cell sub-population dynamics under immuno- and chemotherapies
Anni S. Halkola

35. Evolution outreach projects: Keep SCREAMing (Science Communication Research Empowers AMazing outreach)

S35.P1
Connecting Mediterranean fishery stakeholders and scientists to resolve connectivity of fishery populations
Iva Sabolić

S35.P2
A competition in evolution
Barbora Trubenova

S35.P4
Evolution on the way - migrations with EvoCorner
Bojan Kenig

S35.P5
Experimental evolution of E. coli resistance to starvation: a practical course for undergraduate students
Christine Dillmann

S35.P6
Power of hands-on experience – DIY Biology and Bio-hacklabs in science outreach
Elzbieta Iwaszkiewicz

S35.P7
Hidden in soil: DNA barcoding and teaching microscopic diversity of soil mites (Acari:Oribatida)
Riikka Elo

36e. Phenotypic Evolution

S36e.P2
A time series model for estimating temporal variation in phenotypic selection
Yihan Cao

S36e.P4
Morphological integration in a cannibalism reaction norm
Kinya Nishimura

S36e.P5
Quantifying evolutionary bias from comparative datasets: a parametric bootstrapping approach for evolutionary covariance matrices
Junya Watanabe

S36e.P6
Capture from the wild and its consequences for Asian elephant reproduction
Mirkka Lahdenperä

S36e.P7
Local adaptation to photoperiod and the endogenous clock in Daphnia
Anke Schwarzenberger

S36e.P8
Physiological responses to seasonal environmental variation in a long-lived mammal
Sophie Reichert

S36e.P9
The chewing machine - evolution of mouth morphology in Drosophila larvae
Nuno Silva-Soares

S36e.P10
The evolutionary trajectory of consistency in behavioural traits across ontogeny in fast-slow life histories
Will Sowersby

S36e.P11
Fast Adaptive Plastic Responses to Diurnal Temperature Variation in an Arctic Specialist Arthropod
Natasja Krog Noer

S36e.P12
Predicting ecological responses to global warming in Iris pumila: an open-topped chamber experiment
Katarina Hočevar

S36e.P13
Assessing consequences of environmental stress on wild rodent gut health by transcriptomics, microbiomics and histology
Toni Jernfors

S36e.P14
Age and environment (but not genetics) affect mitochondrial function in a wild bird species
Coline Marciau

S36e.P15
Can female pheromone contribute to the co-existence of color morphs in a moth species?
Chiara De Pasqual

S36e.P16
Decomposing phenotypic skew into genetic and environmental components reduces the predicted response to strong selection
Jarrod Hadfield

S36e.P17
Evolution to temperate climates in the grass subfamily Pooideae
Marian Schubert

S36e.P18
Gender-specific variation in leaf shape under environmental stress in an understorey forest perennial
Dragana Cvetković

S36e.P19
The scent of divergence: chemical communication mediates reproductive isolation of two wood tiger moth populations
Cristina Ottocento

S36e.P21
Colour distribution in hummingbird communities results from the interplay between selection for camouflage and communication
Hugo Gruson

S36e.P22
Pheomelanin pigmentation and oxidative balance in Asian barn swallows
Emi Hasegawa

POSTER SESSION FRIDAY 17.20-19.20

1. Trans generational plasticity in animals

S1.P1
Gametic plastic responses in thermally evolving lines of Tribolium castaneum
Ramakrishnan Vasudeva

S1.P2
Trans-generational plasticity and bet-hedging: A framework and a meta-analysis on insect diapause reaction norms
Jens Joschinski

S1.P3
Trans-generational effects of commensal microbiota on pupal production and body weight of a polyphagous fly
Binh Nguyen

S1.P4
Influence of environmental heterogeneity on the evolution of phenotypic plasticity and bet-hedging
Zuzana Sekajova

S1.P5
Epigenetic reprogramming during gametogenesis and embryogenesis of threespine stickleback: windows for adaptation to climate change?
Lisa Shama

S1.P6
Effects of immune priming on honeybee pollination
Matti Leponiemi

S1.P7
Prenatal programming of mitochondrial function: a potential mediator of transgenerational plasticity in animals?
Antoine Stier

S1.P8
Parental age effects on offspring telomere length in a natural avian population
Hannah Dugdale

S1.P9
Trans-generational effects of early developmental stress on morphology and reproductive performance in captive zebra finches
Yifan Pei

S1.P10
Maternal effects are the predominant source of intraspecific variation in spider foraging traits
Jorge Henriques

S1.P11
Adaptation to climatic differences and the role of avian yolk thyroid hormones
Martje Birker

S1.P12
Thermal sensitivity and heat hardening capacity of Drosophila melanogaster vary during ontogeny
Neda Nasiri Moghadam

S1.P14
Phenotypic plasticity within and across generations in a polyphagous moth
Axel Rösvik

2. Evolution in real time: experimental evolution approaches

S2.P1
Natural selection drives leaf shape divergence in experimental populations of Senecio lautus under natural conditions
Thomas Richards

S2.P2
Evolvability of orthologous genes (effect of global suppressors)
Hind Abdalaal

S2.P3
The Evolution of Aggression in Response to Sexual Selection in male and female Drosophila melanogaster
Danielle Edmunds

S2.P4
Does sex-specific selection change mating behaviour in a hermaphrodite?
Aivars Cirulis

S2.P5
Rapid evolution of reproductive morphology and fitness in a model pest insect
Rebecca Lewis

S2.P6
Female-limited X chromosome evolution and its effect on sperm competitiveness
Yesbol Manat

S2.P7
Non-consumptive effects drive rapid evolution in a prey population
Chao Zhang

S2.P9
Experimental evolution of biological control agents
Sara Magalhães

S2.P10
Sexual selection favoured higher offspring production via evolution of both male and female traits
Daisuke Kyogoku

S2.P11
Role of phenotypic plasticity for evolutionary adaptation: Experimental approaches using Tribolium castaneum and Bacillus thuringiensis
Ana Sofia Lindeza

S2.P12
Experimental adaptation to malnutrition reveals trade-off in extraction of protein versus sugar from diet
Fanny Cavigliasso

S2.P13
Sexually-selected male weapon causes gender load and increases the risk of extinction
Jacek Radwan

S2.P14
Experimental evolution for collagen invasion in cancer cell lines
Louise Johnson

S2.P15
Combined effects of toxins on non-target dung breeding flies (Diptera: Sepsidae)
Natalia Gourgoulianni

S2.P16
No evidence found for sexual conflict over cuticular hydrocarbons in female-limited X chromosome evolution experiment
Katrine K. Lund-Hansen

S2.P17
Evolutionary ecology of multiple-interaction networks in bacterial communities
Marie Vasse

S2.P19
Examining the selective potential of artificial light at night in Drosophila melanogaster
Lucy McLay

S2.P20
Can we delimit individuals in species with blur concept of individuality?
Sundy Maurice

3. Exploring the role of nongenetic inheritance in evolution

S3.P1
More than methylation: does pleiotropy drive the complex pattern of evolution of dnmt1?
Patricia Moore

S3.P2
Sex-specific social learning in juvenile zebra finches
Boglárka Morvai

S3.P4
Eco-cultural range expansion of modern humans in Paleolithic
Joe Wakano

S3.P5
Indirect genetic effects genetic correlation contribute to the total heritable variance in parental care
Julia Schroeder

S3.P6
Genetic and linguistic histories in Central Asia inferred using Approximate Bayesian Computations
Frédéric Austerlitz

S3.P7
Offspring phenotype is shaped by the non-sperm fraction of semen
Jukka Kekäläinen

S3.P8
Comparative epigenomics unravels the evolutionary landscape of insect DNA methylation
Panagiotis Provataris

S3.P9
Differential maternal and paternal effects on offspring fitness traits
Valérian Zeender

S3.P10
Plasticity, inheritance and epigenetics in plants: Can these be linked ?
Morgane Van Antro

S3.P11
Epigenetic contribution to phenotypic plasticity and biotic stress-induced memory in Populus nigra
Cristian Peña-Ponton

S3.P12
Evolutionary and plastic cytosine methylation responses to embryonic rearing temperature in European grayling
Tiina Sävilammi

5. Aging & cancer through the lens of evolution

S5.P1
Predicting tumor evolution and estimating its evolutionary unpredictablity using cancer progression models
Ramon Diaz-Uriarte

S5.P2
Extreme-downregulation of chromosome Y and male disease
Alejandro Caceres

9. Microbial genome and community evolution in food environments

S9.P1
Microbial community dynamics in Gwell, a fermented milk specialty from Brittany. A participatory study
Lucas von Gastrow

S9.P2
Triphosphate nucleotide transport by bacteria is constrained by the oxidative environment
Enrique Gonzalez-Tortuero

S9.P3
Contributions of plasticity and evolution to trait change in a community context
Lynn Govaert

S9.P4
Cheese shapes its Penicillium fungi
Jeanne Ropars

13. Genetics and genomics of adaptation

S13.P1
Rapid divergence of a 'great speciator' following a human-mediated introduction
Ashley Sendell-Price

S13.P2
Local continuous genetic Isolation-by-Environment in the threespine stickleback in the Baltic Sea following predator collapse
Casey Yanos

S13.P3
Detecting deleterious variants in the pig
Martin Johnsson

S13.P4
Inter- and intra-population gene expression variation in the fat body during Drosophila melanogaster development
Amanda Glaser-Schmitt

S13.P7
Genomics of adaptation in the Alpine whitefish radiation
Rishi De-Kayne

S13.P8
Genomics of Microphallus parasite adaptation to its host, Potamopyrgus antipodarum
Natalia Zajac

S13.P9
Metabolic Efficiency Variation Across Bird Families Measured with Relative Mitochondrial Abundance
Sergio Andreu-Sánchez

S13.P10
Convergent expansion in gene-families and their role on the blood-feeding diet in Insecta lineages
Lucas Freitas

S13.P11
Genomics of clinal adaptation with gene flow in parapatric lake-stream stickleback
Quiterie Haenel

S13.P12
Susceptibility to gapeworm parasite has both additive and dominant genetic components in house sparrows
Sarah Lundregan

S13.P13
The genomes of Poeciliopsis retropinna and Poeciliopsis turrubarensis reflect differences in reproductive strategy
Henri van Kruistum

S13.P14
Comparative transcriptome profiling of Triplophysa bleekeri and Triplophysa rosa, reveals potential mechanisms of eye degeneration
Qingyuan Zhao

S13.P15
Winter moth adaptation to climate change: genetic changes in thermal plasticity of embryonic development rate
Natalie E. van Dis

S13.P16
Discovering genetic diversity and structural variation underlying local adaptation in Scots pine
Tanja Pyhäjärvi

S13.P17
Investigating genetic basis of geographic variation in innate immunity of a butterfly
Naomi L.P. Keehnen

S13.P18
A Flutter of Genomes: New and revised high quality genomic resources for 50 Heliconiini species
Francesco Cicconardi

S13.P19
Gene Trf2 and the microbiome underpin the expression of dormancy in Drosophila
Manolis Lirakis

S13.P20
Disperse, acclimatise or adapt: seascape genomics along a thermal gradient
Anna Muir

S13.P21
The genetic basis of convergent adaptation to altitude in Arabidopsis thaliana
Pádraic Flood

S13.P22
Genomics of expanded avian sex chromosomes shows predisposition of certain chromosomes towards sex-linkage in vertebrates
Hanna Sigeman

S13.P23
Genome-wide effects of selection in two outcrossing plant species
Tiina Mattila

S13.P25
Nordic conquest: Post-glacial radiation and evolutionary history of lunar-rhythmic and lunar-arrhythmic reproduction in marine midges
Nico Fuhrmann

S13.P26
Natural Variation of defense response genes in Arabidopsis thaliana reveals evidence for balancing selection
Mehmet Göktay

S13.P27
The role of gene interactions and gene interaction networks in speciation
Ina Satokangas

S13.P28
Sex-specific alternative splicing in Drosophila melanogaster
Julia Raices

S13.P29
Linking genotype, phenotype, and environment to understand climate adaptation in the Glanville fritillary butterfly
Michelle DiLeo

S13.P30
Non-neutral impact of synonymous mutations: example of an antibiotic resistance gene expressed in human cells
Marion AL Picard

S13.P31
White to brown and back: circannual genic regulation of coat colour change in snowshoe hares
João Pimenta

S13.P32
Integration of proteomic data into constraint-based models reveals the molecular bases of yeast life-history trade-offs
Marianyela Petrizzelli

S13.P33
Muller's Ratchet and the Long-Term Fate of Chromosomal Inversions
Alexandre Blanckaert

S13.P34
Cross-temperature comparisons of gene expression between heat tolerant and heat sensitive Brachionus species
Sofia Paraskevopoulou

S13.P35
Genomic basis of rapid parallel ecological adaptation to heterogeneous environments
Hernan Morales

S13.P37
Chance and predictability: the genomic basis of convergent dietary specializations in an adaptive radiation
Joel Vizueta

S13.P38
Co-speciation in bed bug Wolbachia
Ondřej Balvín

S13.P39
The genomic basis of humic substance-driven adaptation in Eurasian perch
Mikhail Ozerov

S13.P40
Mito-jay-nomics: Signatures of environmental adaptation in the first assembled mitogenomes from New World Jays (Corvidae)
Katia Bougiouri

S13.P41
Effects of selection on haplotypes and genealogy trees of subdivided populations
Yichen Zheng

S13.P42
Genomics of feralization processes on Hawaiian and Bermudan chickens
Maria Luisa Martin Cerezo

S13.P43
Keeping pace with fast environmental changes, a science-based approach for sustainable Cork Oak forests
Octávio Paulo

S13.P44
Detection of phylogenetically-informative SNPs in human Y-chromosome from next-generation sequencing data
Koji Ishiya

S13.P45
Identifying the genomic and sex-specific characters underlying recombination rate variation
Suvi Ponnikas

S13.P46
Transposable Elements as agents of adaptation in the invasive species Drosophila suzukii?
Vincent Merel

S13.P47
Local adaptation of phenotypic plasticity: pupal diapause in the butterfly Pieris napi
Peter Pruisscher

S13.P48
Repetitive DNA: a force shaping karyotype evolution in blue butterflies (Lycaenidae, Lepidoptera)
Martina Dalikova

S13.P49
Transcriptomes from four Iberian Squalius fish species indicate stronger positive selection in Mediterranean climate type
Carlos Ramirez

S13.P50
Evolution of AT/GC content in vertebrates
Radka Symonova

S13.P51
The role of host plant in symbiosis stability of Arbuscular mycorrhizal fungi
Shadi Eshghi Sahraei

S13.P52
Heritability of intra-individual variation in body temperature in the wild yellow-necked mouse, Apodemus flavicollis
Rohan Raval

S13.P53
Landscape genomics of the wood decay fungus Phellopilus nigrolimitatus
Jørn Henrik Sønstebø

S13.P54
Comparative genomics and lineage specific adaptations in Lepidoptera
Karin Näsvall

S13.P55
Genomic architecture of divergence between parasitic and non-parasitic lamprey ecotypes
Ahmed Souissi

S13.P56
New Insights into the Genetic Basis and Evolutionary History of Lactase Persistence in Africa
Alessia Ranciaro

S13.P57
Complete plastid genome sequence of African nightshade (Solanum scabrum)and its comparative plastomics across Solanales
Gaurav Sablok

S13.P58
Antagonistic coevolutionary selection patterns in the Galerucella-Asecodes host-parasitoid system
Xuyue Yang

S13.P59
Icefish genome reveals key role of mitochondria for a life without hemoglobin at sub-zero temperature
Chiara Papetti

15. Tracing evolution through time using ancient DNA

S15.P1
Distinguishing among complex evolutionary models using unphased whole-genome data through Approximate Bayesian Computation
Maria Teresa Vizzari

S15.P2
Ancient DNA screening from Finnish Stone Age sediments
Sanni Peltola

S15.P3
Archaeological sediments from Finland as a source for ancient microbiomes
Enrique Rayo

S15.P4
Mitochondrial DNA from Iron Age to present in Eastern Fennoscandia
Sanni Översti

S15.P5
Inferring population dynamics of the genera Oryx and Addax using modern and historical DNA
Elisabeth Hempel

S15.P6
The first historic Treponema pallidum genomes from Colonial Mexico
Aditya Kumar Lankapalli

S15.P7
Temporal and spatial insights into the genomic evolution of Yersinia pestis through comparative analysis
Aida Andrades Valtueña

S15.P8
Optimization of double-stranded library preparation methods for ancient and degraded DNA
Marianne Dehasque

S15.P9
Ancient DNA provides insights into the population history of the reindeer
Matti Heino

16. Mito-nuclear interactions across levels of biological organisation

S16.P1
The role of selection in maintaining sympatric mito-nuclear variation in Drosophila subobscura
Pavle Erić

S16.P2
Mitochondrial Haplotypes and Gene Expression in Laying Hens
Elisabeth HempelClara Heumann-Kiesler

S16.P3
A new layer of genetic regulation in the mitochondrial genome: small mitochondrial RNAs
Andrea Pozzi

S16.P4
The mtDNA-encoded COX2 protein: bivalves have the longest
Eric Pante

S16.P5
Sex-specific effects of candidate Trojan Female Technique haplotype on fertility in pest species Acanthoscelides obtectus
Lea Vlajnić

S16.P6
How mitochondrial genetic variation affects longevity in Drosophila melanogaster
Ekta

S16.P7
Mito-nuclear interactions in innate immunity and life-history traits
Tiina Salminen

S16.P8
Mitochondrial Diseases and Compensated Pathogenic Deviations
Abhilesh Dhawanjewar

S16.P9
Ancestry Package - Merging uniparental and autosomal genetic histories into one picture
Vladimir Bajić

19. Gene-phenotype associations across evolutionary scales

S19.P1
Identifying host genomic regions influencing microbial traits in mice
Shauni Doms

S19.P2
Convergence, common ancestry and novelty: Genomics of sex chromosome diversity in cichlid fishes
Astrid Böhne

S19.P3
Evolution of vernalization response in the PACMAD clade of the grass family (Poaceae)
Martin Paliocha

S19.P4
Natural selection on immune defence: a genome-wide gene expression analysis
Teo Cereghetti

S19.P5
Phenotypic associations of arbuscular mycorrhizal fungi to their taxonomy
Merce Montoliu-Nerin

S19.P6
The relationship between the genotypic and phenotypic variation in ringed seals
Mia Valtonen

22. Evolution of host-plant use in arthropods

S22.P1
Host plant phytochemicals influence life history of butterfly Papilio polytes apparently effecting recent host shift
Sarika Baidya

S22.P2
Nutritional dimension underlying symbiosis stability in the leafcutter ant system
Antonin Crumière

S22.P3
Effects of gossypol, a toxic cotton secondary metabolite, on two generalist herbivores
Corinna Krempl

S22.P4
Escalating evolutionary responses to pollen predation
Mario Vallejo-Marin

S22.P5
Host-herbivore dynamics in a changing climate
Erik van Bergen

S22.P6
Summer drought changes the host plant quality and impacts its insect herbivore
Ana Salgado

S22.P7
Eavesdropping trees: phylogeny affects to the reaction of VOCs emitted by the neighbouring tree
Elina Mäntylä

S22.P8
A model of how defense trait interactions shape the evolution of defense following enemy loss
Martijn L. Vandegehuchte

S22.P9
Maize resistance to herbivores: life-cycles synchronisation matters
Christine Dillmann

S22.P10
Species traits limit changes in voltinism to climate warming in moths and butterflies
Tiit Teder

S22.P11
Do host availability and interspecific competition affect habitat selection?
Maud Charlery de la Masselière

24. Microbial evolution under biotic stress

S24.P1
Rapid loss of CRISPR-mediated herd immunity from bacterial populations
Sean Meaden

S24.P2
Local adaptation of the gut microbiome of Daphnia magna under cyanobacterial stress
Shira Houwenhuyse

S24.P3
Ecology, death (by lysis) and evolutionary history – the trinity disentangled
Luisa Listmann

S24.P4
Tracing mobile adaptive traits within complex microbial communities at single-cell resolution
Reetta Penttinen

S24.P6
Microbiome localization and dynamics in blood feeding insects
Giampiero Batani

S24.P7
Effects of long-term exposure to ionizing radiation on Chernobyl's treefrogs and its microbiome
Javier Edo Varg

26. Sexual conflict: linking behavior, genetics and ecology

S26.P1
Molecular evolution in the "double-clonal" longhorn crazy ant
Hugo Darras

S26.P2
The evolution of sperm gigantism in Caenorhabditis nematodes – causes and consequences
Rebecca Schalkowski

S26.P3
Differential gene expression is associated with mating-type chromosomes degeneration in the absence of sexual antagonism
Wen-Juan Ma

S26.P4
Finding thresholds to separate sexual conflict and sex-specific selection in sex-biased genes
Benjamin Furman

S26.P5
Coevolution of female fidelity and male help under interactions between intra- and inter-locus sexual conflict
Xiang-Yi Li

S26.P6
Intralocus sexual conflict on the X chromosome
Thomas Hitchcock

S26.P7
Kin selection and sexual conflict: the role of kin discrimination and patterns of dispersal
Gonçalo S. Faria

S26.P8
Condition-dependence and intensity of sexual conflict in the mite Sancassania berlesei
Aleksandra Łukasiewicz

S26.P9
Sons that lose their father's genes: Sexual conflict over gene expression and inheritance
Laura Ross

S26.P10
Parallel sexual selection processes in both sexes: a test using tardigrades
Sara Calhim

S26.P11
Sex-specific dominance for fitness at a sexually antagonistic insecticide resistance locus
Andreas Sutter

S26.P12
Sex-biased gene expression, sexual antagonism and levels of diversity in the collared flycatcher genome
Ludovic Dutoit

S26.P13
Sex differences in gene expression across multiple tissues in Lake Tanganyika cichlids
Nicolás Lichilín

S26.P15
Paternity uncertainty and asymmetric information about extra-pair copulations
Agnieszka Rumińska

S26.P17
Population genomics of the pseudoautosomal region in primates
Juraj Bergman

S26.P18
Sex-biased gene expression in a sexually dimorphic viviparous fish
Yolitzi Saldívar Lemus

S26.P19
Mechanisms of sexual conflict resolution and evolution of sexual dimorphism
Gemma Puixeu

S26.P20
Sexual conflict amongst gut microbial symbionts over vertical transmission
Justinn Renelies-Hamilton

S26.P21
Mate choice evolves in response to selection pressure by alteration of sex ratio
Tejinder Singh Chechi

S26.P22
Patterns of Nucleotide Diversity and Linkage Disequilibrium along the Ostrich Pseudoautosomal Region
Homa Papoli Yazdi

S26.P23
A hybridogenetic beetle with a skewed sex ratio: genetic conflicts, mate choice or Wolbachia?
Kim Rohlfing

S26.P24
Sexually antagonistic loci in the facultatively anadromous brown trout, Salmo trutta
Joe Colgan

S26.P25
Sex-specific cellular immunity in wild birds: a meta-analytic approach
José Valdebenito

S26.P27
Mutual sexual cannibalistic behavior: female and male of wood-feeding cockroach eat the wings each other
Haruka Osaki

S26.P28
Ecology of sex differences in parasite infection in populations of wild wood mice
Saudamini Venkatesan

S26.P29
High-resolution recombination mapping of sex chromosome-autosome fusions in two stickleback species
Matthew Josephson

27. Design of social traits: genes, individuals, and social groups

S27.P1
Competition paves the way for extortionate strategies in the Prisoner's Dilemma - an economic experiment
Manfred Milinski

S27.P2
Determining selection patterns in canonical and novel immune genes across different social lifestyles in bees
Lauren Mee

S27.P3
Correlational selection and the shape of social polymorphism
Charles Mullon

S27.P4
Cooperation persists despite genetic differentiation in a native, geographically widespread unicolonial ant
Jonathan Brown

S27.P5
The provisioning rules underpinning group-level performance in cooperative birds
Fumiaki Nomano

S27.P6
Extended maternal care enhances brood survival and may be precursor to sociality in Euglossa viridissima
Anna Friedel

S27.P7
Molecular mechanisms of socially mediated behavioral changes in ant queens
Romain Libbrecht

S27.P9
Molecular regulation of social organization and the evolution of alternative reproductive strategies in ants
Marah Stoldt

S27.P10
How can division of labour in social insects evolve?
Daniel Elsner

S27.P11
Negotiation and enforcement: an experimental test of pay-to-stay
Lorenzo Arduini

S27.P12
Early-life manipulation of the stress axis affects learning abilities in cooperative breeders
Maria Reyes-Contreras

S27.P13
Bacillus subtilis interstrain DNA exchange and its effects on evolution of social discrimination
Katarina Belcijan

S27.P14
The physiologial function of oxytocin/vasopressin-like peptide, inotocin in social insects, ants
Akiko Koto

S27.P15
The true nature of conflict in public goods cooperation
Laurie Belcher

S27.P16
Kin competition affects kin-biased behaviour in a cichlid fish
Timo Thünken

S27.P17
Altruistic bet-hedging in an arid zone cooperative breeder
Pablo Capilla-Lasheras

28. Evolutionary Game Theory: Modern development and interdisciplinary applications

S28.P1
The cancellation eect at the group level
Aslihan Akdeniz

S28.P2
The effect of spatial heterogeneity on evolution in spatial models
Kalle Parvinen

S28.P3
Strict and soft assessment rules in cooperation: reputation comes on foot and leaves on horseback
Martijn Egas

29. Moving beyond a quantification of eco-evolutionary dynamics

S29.P1
Extremely slow ecological dynamics of intragenomic sequence populations
Frederic Bertels

S29.P2
Comparative study of the morphological and physiological adaptations of three Actinopterygii species to sandy substrates
Jérôme Canei

S29.P3
Can salmon carcasses drive evolutionary changes in their offspring? An experimental approach
Neil Metcalfe

S29.P4
Delayed climatic drivers of life-history and long-term population viability in Asian elephants
John Jackson

S29.P5
Uncovering the epigenetic contribution of plant response to herbivore
Anupoma Troyee

30. Eco-evolutionary feedback between pollinator behaviour and floral evolution

S30.P1
How natural selection drives and maintains floral colour variation: irises, pollinators and beyond
Yuval Sapir

S30.P2
The nature of interspecific interaction and coevolutionary patterns, as illustrated by the fig microcosm
Ai-Ying Wang

S30.P3
Evolution of floral shape in Pelargonium (Geraniacaeae)
Sara J. van de Kerke

S30.P4
Back to purple: Restoration of floral color in Petunia and its impact on pollinator behavior
Martina N. Lüthi

S30.P5
Smells like death: how bacteria might mediate carrion mimicry in Araceae
Andrew Matthews

Open symposium

S36.P1
The scientific impact of gender in ecology and evolutionary biology
Marina Papadopoulou

36a. Sexual selection and reproductive strategies

S36a.P1
Mating system, reproductive success and the opportunity for sexual selection in bluntnose klipfishes (Clinus cottoides)
Martinus Scheepers

S36a.P2
Guppy boldness is associated with higher reproductive success, but not due to condition-dependence
Magdalena Herdegen-Radwan

S36a.P3
Sociosexual Networks: social structure and sexual selection under the focus of Network Theory
David Pablo Quevedo Colmena

S36a.P4
Costs and benefits of multiple mating in a species with first male sperm precedence
Leonor R Rodrigues

S36a.P5
No support for the fitness-associated sex hypothesis in natural populations of facultatively sexual Daphnia
Isobel Booksmythe

S36a.P6
The influence of parental isolation on offspring proactive-reactive personality axis
Tiffany Armstrong

S36a.P7
Reciprocity and partner symmetry in egg-trading hermaphrodites
Maria-Cristina Lorenzi

S36a.P8
Short-term changes in DNA methylation shape timing of reproduction in great tits (Parus major)
Melanie Lindner

S36a.P9
Environmental variation in sex-specific fitness in a simultaneous hermaphrodite
Jessica Abbott

S36a.P10
Effects of warming climate on evolutionary potential of reproductive timing in boreal passerines
Emma Vatka

S36a.11
The individuality in stability: Intra-individual variation in birdsong and how it relates to male quality
Alexander Hutfluss

S36a.P12
Within-pair reproductive success drives the opportunity for sexual selection in a genetically promiscuous migratory songbird
Ryan Germain

S36a.P13
Does animal personality define within-individual behavioural variation? A meta-analysis
Gergely Horváth

S36a.P14
How heterospecific mating influences the adaptive value of guarding versus roaming in spider mitestory songbird
João Alpedrinha

S36a.P15
Mate fidelity in a polygamous shorebird, the snowy plover (Charadrius nivosus)
Naerhulan Halimubieke

S36a.P16
Personality and locomotion in wall lizards - alternative strategies of colour morphs
Lekshmi Bhuvanendran Pillai Sreelatha

36b. Phylogeography ,biogeography, speciation, systematics

S36b.P1
Pattern of genetic diversity and population structure in silver butter catfish from African river system
Adeniyi C. Adeola

S36b.P2
Southern and northern populations of Drosophila obscura show similar pattern of mtDNA variation
Mihailo Jelić

S36b.P3
The Demography of Divergence in the Non-Adaptive Radiation of Chorthippus Grasshoppers
Zachary Nolen

S36b.P4
Populations genomics of Royal and Macaroni penguins across the Southern Ocean
María José Frugone

S36b.P5
Evolutionary perspective in management of exploited marine fishery resources – what about the octopus?
Iva Sabolić

S36b.P6
The genetic history of modern humans in Siberia: a bacterial perspective
Noemi De Serio

S36b.P7
To be or not to be Padogobius
Jasna Vukić

S36b.P8
Hybridization as a consequence of climate change in Argia damselflies
Angela Nava-Bolanos

S36b.P9
Molecular systematics of the family Sepiidae
Nik Lupše

S36b.P10
Climate Change, Models and Niches: Future inferences on range shifts of the European Woodpeckers
Utku Perktaş

S36b.P11
An integrative approach to genus delimitation in a new jumping spider lineage from the Andes
Asceneth Charry

S36b.P12
How Quaternary sea level change mediates evolutionary history on subtropical coasts of Kentish plover complex
Nan Zhang

S36b.P13
Comparative phylogeography of a marine bivalve based on male- and female-type mitochondrial DNA
Amelia Viricel

S36b.P14
Divergence and speciation in the Greater and Lesser Sand-plover complex
Chentao Wei

S36b.P15
Testing evolutionary forces maintaining a clinal inversion polymorphism
Esra Durmaz

S36b.P16
Mitochondrial gene order of an archigregarine shows similarities to divergent Apicomplexa
K. Emily Knott

S36b.P17
First approximations of demographic history and structure in the African golden wolf
Carlos Sarabia

S36b.P18
Investigating genetic differentiation in an Afro-Palaearctic migratory bird species using genome-wide SNPs
Céline Kowalczyk

S36b.P19
Microinversions on the evolutionary path connecting human and primates
Nadezhda Potapova

S36b.P20
Effects of geology, and climate on the biogeography of freshwater snail family Viviparidae in India
Maitreya Sil

S36b.P21
Integrative taxonomy reveals the Himalayan langurs as one species Semnopithecus schistaceus, Hodgson 1840
Kunal Arekar

S36b.P22
Using habitat suitability models to understand diversification within Philisca tripunctata in Argentina and Chile
Maria Pia Pacheco

S36b.P23
Inter- & intra-specific call variation between two closely related microhylid frog species from the Indian subcontinen
Megha Srigyan

S36b.P24
Within-river genetic population structure in an important Atlantic salmon population
Antti Miettinen

36c. Species interactions

S36c.P1
It's about time: how host circadian rhythms affect malaria transmission
Mary Westwood

S36c.P2
Aiding the Red Queen: A hidden link in the mutualistic interaction between squirrels and pines
Roberta Bisconti

S36c.P3
Parasite load reveal condition-dependent selection for local adaptation in a wild population
Miguel Gomez

S36c.P4
Immunity, parental care and response to infection in a burying beetle
Tom Ratz

S36c.P5
Habitat-dependent and parallel evolution of parasite resistance in geographically distinct river-lake three-spined stickleback pairs
Christoph Gahr

S36c.P6
Looking for introgression: is STRUCTURE a solution?
Sara Ravagni

S36c.P7
Association mapping after common-garden migration experiment reveals candidate genes for migration propensity in brown trout
Alexandre Lemopoulos

S36c.P8
Genetic trade-offs between parasite defence mechanisms in salmonid hosts
Ines Klemme

S36c.P9
Diversity of the mosquito microbiome: matching ecology and epidemiology
Sonia M. Rodríguez-Ruano

S36c.P10
Fungus-growing termites prioritise protecting their fungal garden over themselves
Nick Bos

S36c.P11
Role of symbiotic bacteria in the efficacy of wood tiger moth defence fluids
Liam Murphy

S36c.P12
Childhood infections in a pre-health care society: epidemic dynamics and the impact of vaccination
Michael Briga

S36c.P13
Village rich parishes decreased smallpox and pertussis mortality, but increased measles mortality in pre-health-care Finland
Michael Briga

36d. Genome Evolution

S36d.P1
X chromosome characterisation in a damselfly and its role in divergence in contemporary hybrid zones
Janne Swaegers

S36d.P2
Divergence of cuticular hydrocarbons in a plump bush-cricket species group of the genus Isophya (Orthoptera)
Hasan Sevgili

S36d.P4
Antimicrobial peptide (AMP) variation along a latitudinal gradient in two ranid species
Maria Cortázar-Chinarro

S36d.P5
Rearrvisr: an R package to detect, classify, and visualize genome rearrangements
Doro Lindtke

S36d.P6
Evolution of sex chromosomes in boas and pythons: a molecular-cytogenetic perspective
Barbora Augstenová

S36d.P7
A Draft genome of Ischnura elegans (Odonata) characterizes X chromosome, sex-biased genes and dosage compensation
Pallavi Chauhan

S36d.P8
The strength of GC biased gene conversion is conserved across two passerine species
Henry Barton

S36d.P9
Assessing the social consequences of cell death on bacterial public goods cooperation via single-cell tracking
Özhan Özkaya

S36d.P11
Sex chromosomes are conserved across cockroaches
Katerina Vasileiadou

S36d.P12
When the species name is not a reproductive barrier: cases of interspecific hybridization in turtles
Sofia Mazzoleni

S36d.P13
Little evidence for switches to environmental sex determination and sex-chromosome turnovers in lacertid lizards
Lukáš Kratochvíl

S36d.P14
Codon usage preference similarities between viruses infecting humans and their host(s)
Zachary Bailey

S36d.P15
Metapopulation genetic dynamics of brown trout (Salmo trutta) in a sub-arctic transnational riverine system
Cornelya F.C. Klütsch

S36d.P16
Intraspecific variability and heritability of personality traits in the micro-wasp Trichogramma evanescens
Silène Lartigue

S36d.P17
Structural variants and repetitive elements in the genome of the Glanville fritillary butterfly
Daniel Blande

S36d.P18
Genomics of divergence between multiple flycatcher species
Madeline A Chase

S36d.P19
Investigating the genetic mechanims of sex determination and differentiation in lampreys
Guillaume Evanno

WE WISH TO THANK THE FOLLOWING SPONSORS FOR THE SUPPORT:

TURKU

UNIVERSITY OF TURKU

visitturku.fi

FEDERATION OF FINNISH LEARNED SOCIETIES

RAJULIVE
VIDEOTUOTANTO I MEDIAPALVELUT

GOLD SPONSOR:

OXFORD UNIVERSITY PRESS

SILVER SPONSORS:

WILEY

HiLIFE
HELSINKI INSTITUTE OF LIFE SCIENCE

RESEARCH STATIONS

BRONZE SPONSOR:

frontiers in Ecology and Evolution

NON-PROFIT EXHIBITORS:

Current Zoology

Cambridge University Press

GUARANT International spol. s r.o. – ESEB2021

Nordic Society Oikos

Peer Community In

Royal Society Publishing

The New Phytologist Trust

SYMPOSIUM SPONSORS:

MOLECULAR ECOLOGY

Rapid Evolutionary Adaptation
DFG SPP1819

OTHER SPONSORS:

Physalia Courses