

The Molecular Basis and Evolution of Sexual Dimorphism - Virtual



EMBL Courses and Conferences during the Coronavirus pandemic

With the onsite programme paused, many of our events are now being offered in virtual formats.

Registration is open as usual for many events, with back-up plans in place to move further courses and conferences online as necessary. Registration fees for any events affected by the COVID-19 disruption are fully refundable.

More information for participants of events at EMBL Heidelberg can be found here.

Programme

Registered participants for the virtual symposium were sent final details, including links to virtual platforms, on Thursday 10 September. The link to the live stream will be sent on Friday 11 September.

Got something to say? Tweet it! #EESDimorphism

- The virtual symposium includes live-streamed keynote, invited speaker and short talks with Q&A sessions after each talk.
- Access to any talks that are recorded will be available until Wednesday 23 September 2020.

The following times are used in the programme below:

- Central European Summer Time (CEST): e.g. Berlin, Amsterdam, Paris
- Eastern Daylight Time (EDT): e.g. New York, Quebec

To find out the equivalent time zone in your location, enter Berlin, the CEST programme time and your city into the Time Zone Converter.

SHOW ALL

Day 1 - Monday 14 September 2020

Time Speaker	
11:50-12:00 (CEST) 05:50-06:00 (EDT)	Opening remarks about evolution of sex chromosomes
12:00-15:15 (CEST) 06:00-09:15 (EDT)	Virtual Session 1: The diversity of genetic sex-determining regions and sex chromosomes Chair: Deborah Charlesworth
12:00-12:30 (CEST) 06:00-06:30 (EDT)	Young sex chromosomes Deborah Charlesworth - University of Edinburgh, UK AVAILABLE ON DEMAND AFTER LIVE STREAM
12:30-13:00 (CEST) 06:30-07:00 (EDT)	Roles of sex chromosome turnover in the evolution of sexual dimorphism and speciation in fishes Jun Kitano - National Institute of Genetics, Japan AVAILABLE ON DEMAND AFTER LIVE STREAM
13:00-13:30 (CEST) 07:00-07:30 (EDT)	The unusual diversity of sex chromosomes in African cichlids William Gammerdinger - Institute of Science and Technology, Austria AVAILABLE ON DEMAND AFTER LIVE STREAM
13:30-14:00 (CEST) 07:30-08:00 (EDT)	Break
14:00-15:15 (CEST) 08:00-09:15 (EDT)	Virtual Session 1 (continued)
14:00-14:30 (CEST) 08:00-08:30 (EDT)	Sexual differentiation in haploid UV sexual systems Susana Coelho - Sorbonne University, France AVAILABLE ON DEMAND AFTER LIVE STREAM

14:30-14:45 (CEST) 08:30-08:45 (EDT)	A neutral model for the suppression of recombination between sex chromosomes Daniel Jeffries - University of Lausanne, Switzerland AVAILABLE ON DEMAND AFTER LIVE STREAM
14:45-15:15 (CEST) 08:45-09:15 (EDT)	The molecular basis and evolutionary origin of complementary sex determination in honeybees Martin Beye - Heinrich-Heine-University Düsseldorf, Germany AVAILABLE ON DEMAND AFTER LIVE STREAM
15:15-15:30 (CEST) 09:15-09:30 (EDT)	Break
15:30-16:45 (CEST) 09:30-10:45 (EDT)	Virtual Poster Session (odd numbers) with discussion channel on slack
16:45-18:30 (CEST) 10:45-12:30 (EDT)	Virtual Session 2: Evolutionary challenges for sex-linked genome regions: Genetic degeneration and dosage compensation Chair: Stephen Wright
16:45-17:30 (CEST) 10:45-11:30 (EDT)	Keynote lecture Tales of the Y chromosome: Heterochromatin, aging & meiotic conflicts Doris Bachtrog - University of California, Berkeley, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
17:30-18:00 (CEST) 11:30-12:00 (EDT)	Fish with three tales: Rapid divergence of the sex chromosomes of the threespine stickleback and its two closest relatives Mark Kirkpatrick - University of Texas, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
18:00-18:30 (CEST) 12:00-12:30 (EDT)	Evolutionary genomics of Y chromosome degeneration Stephen Wright - University of Toronto, Canada AVAILABLE ON DEMAND AFTER LIVE STREAM
18:30-18:45 (CEST) 12:30-12:45 (EDT)	Break
18:45-19:15 (CEST) 12:45-13:15 (EDT)	Meet the speakers in indivudual zoom rooms Mark Kirkpatrick, Susana Coelho, Doris Bachtrog
19:30-20:00 (CEST 13:30-14:00 (EDT)	Meet the speakers in indivudual zoom rooms Martin Beye, Deborah Charlesworth, Stephen Wright, William Gammerdinger
	Continued access to networking and discussion platforms as well as poster gallery

Day 2 - Tuesday 15 September 2020

Time	Speaker	
10:45-11:30 04:45-05:30	•	Optional: join the Virtual Coffee log-in details will be provided on the symposium Slack channel
12:00-13:30 06:00-07:30		Virtual Session 2 (continued) Chair: Henrik Kaessmann
12:00-12:30 06:00-06:30	` ,	The importance of null models in studies of sexually antagonistic genetic variation Tim Connallon - Monash University, Australia AVAILABLE ON DEMAND AFTER LIVE STREAM
12:30-12:45 06:30-06:45	` ,	Recombination suppression predates emergence of five Y chromosomes underlying alternative male reproductive morphs Ben Sandkam - University of British Columbia, Canada AVAILABLE ON DEMAND AFTER LIVE STREAM
12:45-13:00 06:45-07:00	` ,	Using ancestral reconstruction of chromosome expression states (ARChES) to understand the evolution of dosage compensation Ramesh Balan - University of Texas at Arlington, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
13:00-13:30 07:00-07:30	,	The cellular evolution of spermatogenesis across mammals Henrik Kaessmann - Heidelberg University, Germany AVAILABLE ON DEMAND AFTER LIVE STREAM
13:30-14:00 07:30-08:00		Break
14:00-17:45 08:00-11:45		Virtual Session 3: Adaptive evolution I: Sexual antagonism Chair: Max Reuter
14:00-14:30 08:00-08:30	` ,	Using marsupials to understand the evolution of mammalian X-dosage compensation James Turner - The Francis Crick Institute, UK AVAILABLE ON DEMAND AFTER LIVE STREAM
14:30-14:45 08:30-08:45	` ,	Sex-dependent dominance maintains migration supergene in rainbow trout Nicola Barson - Norwegian University of Life Sciences, Norway AVAILABLE ON DEMAND AFTER LIVE STREAM
14:45-15:00 08:45-09:00	` ,	Understanding the genetic basis of sexual dimorphism: Sex- bias eQTLs Gemma Puixeu - Institute of Science and Technology, Austria AVAILABLE ON DEMAND AFTER LIVE STREAM

15:00-15:30 (CEST) 09:00-09:30 (EDT)	The genetics and evolution of sexual antagonism Max Reuter - University College London, UK AVAILABLE ON DEMAND AFTER LIVE STREAM
15:30-16:00 CEST 09:30-10:00 (EDT)	Break
16:00-16:30 (CEST) 10:00-10:30 (EDT)	Evolution of sexually dimorphic traits in Drosophila Patricia Wittkopp - University of Michigan, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
16:30-17:15 (CEST) 10:30-11:15 (EDT)	Keynote lecture Male ornamentation and the evolution of the guppy sex chromosomes: Birth (and death and rebirth?) of a classic system Judith Mank - The University of British Columbia, Canada AVAILABLE ON DEMAND AFTER LIVE STREAM
17:15-17:45 (CEST) 11:15-11:45 (EDT)	Dynamic control of sexual cell fate in the mammalian somatic gonad David Zarkower - University of Minnesota, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
17:45-18:15 (CEST) 11:45-12:15 (EDT)	Meet the speakers in individual zoom rooms Max Reuter, James Turner, Henrik Kaessmann
18:15-18:45 (CEST) 12:15-12:45 (EDT)	Meet the speakers in individual zoom rooms Patricia Wittkopp, David Zarkower, Judith Mank
	Continued access to networking and discussion platforms as well as poster gallery

Day 3 - Wednesday 16 September 2020

Time	Speaker	
11:00-13:00 05:00-07:00		Virtual Session 4: Adaptive evolution II: Evolution of sexually dimorphic phenotypes and gene expression Chair: Beatriz Vicoso
11:00-11:3	0 (CEST)	Sex differences in gene expression during vertebrate organ development
05:00-05:30	0 (EDT)	Margarida Cardoso - Heidelberg University, Germany AVAILABLE ON DEMAND AFTER LIVE STREAM

11:30-11:45 (CEST) 05:30-05:45 (EDT)	Sex and the TEs: Teleost fish gonad transcriptome analysis reveals clusters of sex biased genes and transposable elements Corentin Dechaud - IGFL - ENS de Lyon, France AVAILABLE ON DEMAND AFTER LIVE STREAM
11:45-12:15 (CEST) 05:45-06:15 (EDT)	Evolution of gene expression in sexual and asexual brine shrimp Beatriz Vicoso - Institute of Science and Technology, Austria AVAILABLE ON DEMAND AFTER LIVE STREAM
12:15-12:30 (CEST) 06:15-06:30 (EDT)	Transcriptional kinetics of X-chromosome upregulation Björn Reinius - Karolinska Institutet, Sweden AVAILABLE ON DEMAND AFTER LIVE STREAM
12:30-13:00 (CEST) 06:30-07:00 (EDT)	Understanding the molecular-genetic basis of sex differences in <i>Drosophila melanogaster</i> Michelle Arbeitman - Florida State University, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
13:00-13:30 (CEST) 07:00-07:30 (EDT)	Break
13:30-14:00 (CEST) 07:30-08:00 (EDT)	Meet the speakers in individual zoom rooms Jun Kitano, Tim Connallon, Margarida Cardoso
14:00-14:30 (CEST) 08:00-08:30 (EDT)	Meet the speakers in individual zoom rooms Michelle Arbeitman, Beatriz Vicoso
14:30-16:00 (CEST) 08:30-10:00 (EDT)	Virtual Poster Session (even numbers) with discussion channel on slack
16:00-16:30 (CEST) 10:00-10:30 (EDT)	Break Optional: join the Virtual Coffee (from 16:00-16:25) log-in details will be provided on the symposium Slack channel
16:30-18:45 (CEST) 10:30-12:45 (EDT)	Virtual Session 5: Sexual dimorphism in human disease Chair: Arthur Arnold
16:30-17:00 (CEST) 10:30-11:00 (EDT)	Sex differences in physiology and disease caused by diverse sex chromosome genes Arthur Arnold - University of California, Los Angeles, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
17:00-17:30 (CEST) 11:00-11:00 (EDT)	Detecting intralocus sexual conflicts in human genomes Elise Lucotte - INSERM, France AVAILABLE ON DEMAND AFTER LIVE STREAM

17:30-17:45 (CEST) 11:30-11:45 (EDT)	Sex dosage compensation: Breaking the balance by human pluripotent reprogramming Irene Cantone - University of Naples Federico II, Italy AVAILABLE ON DEMAND AFTER LIVE STREAM
17:45-18:00 (CEST) 11:45-12:00 (EDT)	Sex-specific genetic regulation of adipose mitochondria and their relationship to metabolic syndrome Karthickeyan Chella Krishnan - University of California, Los Angeles, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
18:00-18:45 (CEST) 12:00-12:45 (EDT)	Keynote lecture Sexual dimorphism in polygenic risk Andy Clark - Cornell University, USA AVAILABLE ON DEMAND AFTER LIVE STREAM
18:45-19:00 (CEST) 12:45-13:00 (EDT)	Closing remarks
19:00-19:30 (CEST) 13:00-13:30 (EDT)	Meet the speakers in individual zoom rooms Arthur Arnold, Elise Lucotte, Andrew Clark
	Continued access to networking and discussion platforms as

well as poster gallery