EMBL

From Functional Genomics to Systems Biology - Virtual

EMBL CONFERENCE

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 conference will receive final details, including links to virtual platforms, on Monday 09 November. The link to the live stream will be sent on Friday 13 November.

Got something to say? Tweet it! #EMBLOmics

- The virtual conference includes live-streamed invited speakers with Q&A sessions after each talk. All talks will be live-streamed with Q&A sessions after each talk.
- Information on the live stream and access to the discussion platform and digital posters will be provided shortly before the start of the event.
- Digital posters and pre-recorded e-short talks from Agnieška Brazovskaja, Ibrahim Taskiran and Chengzhe Tian will be available for registered participants throughout the virtual conference. E-short talk presenters will attend the dedicated panel discussion and will be available for discussion during the dedicated 'Meet the Speaker' sessions.
- Access to the recorded talks will be available for 2 weeks after the start of the event.

— Live music concert by Lazy Fur available for all the registered participants.

The following times are used in the programme below:

— Central European Time (CET): eg. Berlin, Amsterdam Paris

— Eastern Standard Time (EST): eg. New York, Quebec

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

Day 1 - Monday 16 November 2020

Time	Speaker
13:00-13:10 (CET) 07:00-07:10 (EST)	**Opening remarks by Prisca Liberali & Mikhail Savitski**
	Virtual Thematic Session - QUANTITATIVE GENOMICS
13:10-15:10 (CET) 07:10-09:10 (EST)	**Sub-session 1** Chair: Arnaud Krebs - EMBL Heidelberg, Germany
13:10-13:20 (CET) 07:10-07:20 (EST)	**Introduction by Session Chair**
13:20-13:45 (CET) 07:20-07:45 (EST)	**Transcriptionally dependent spatial organization of a multi-enhancer locus** Thomas Gregor - Princeton University, USA
13:45-14:05 (CET) 07:45-08:08 (EST)	**Eukaryotic-wide reconstruction of RNA-binding protein specificities** Alexander Sasse - University of Toronto, Canada *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:05-14:30 (CET) 08:05-08:30 (EST)	**Investigating gene expression regulation using quantitative interaction proteomics technology** Michiel Vermeulen - Radboud University, The Netherlands *AVAILABLE ON DEMAND AFTER LIVE STREAM*

Time	Speaker
14:30-14:40 (CET) 08:30-08:40 (EST)	Short Break
14:40-15:10 (CET) 08:40-09:10 (EST)	Panel Discussion with Arnaud Krebs (moderator), Thomas Gregor, Alexander Sasse, Michiel Vermeulen and Ibrahim Taskiran *AVAILABLE ON DEMAND AFTER LIVE STREAM*
15:10-15:40 (CET) 09:10-09:40 (EST)	Meet the speakers in individual Zoom breakout rooms (Thomas Gregor, Michiel Vermeulen, Alexander Sasse & Ibrahim Taskiran)
15:40-16:10 (CET) 09:40-10:10 (EST)	Break
	Virtual Thematic Session - QUANTITATIVE IMAGING
16:10-18:35 (CET) 10:10-12:35 (EST)	Sub-session 1 Chair: Prisca Liberali - Friedrich Miescher Institute for Biomedical Research, Switzerland
16:10-16:20 (CET) 10:10-10:20 (EST)	Introdution by Session Chair
16:20-16:45 (CET) 10:20-10:45 (EST)	Advancing molecular imaging with DNA probes Peng Yin - Harvard University, USA
16:45-17:10 (CET) 10:45-11:10 (EST)	Phenotypic landscape of intestinal organoid regeneration Prisca Liberali - Friedrich Miescher Institute for Biomedical Research, Switzerland *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:10-17:30 (CET) 11:10-11:30 (EST)	Large-scale phenotypic profiling of yeast subcellular compartments using high-content screening at single-cell resolution Mojca Mattiazzi Usaj - The Donnelly Centre, University of Toronto, Canada *AVAILABLE ON DEMAND AFTER LIVE STREAM*

Time	Speaker
17:30-17:55 (CET) 11:30-11:55 (EST)	**Emergent cellular ecosystems in melanoma revealed by single cell analysis** Arjun Raj - University of Pennsylvania, USA *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:55-18:05 (CET) 11:55-12:05 (EST)	Short Break
18:05-18:35 (CET) 12:05-12:35 (EST)	**Panel Discussion with Prisca Liberali (moderator), Peng Yin, Mojca Mattiazzi Usaj, Arjun Raj and Chengzhe Tian** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
18:35-19:05 (CET) 12:35-13:05 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Peng Yin, Prisca Liberali, Arjun Raj, Mojca Mattiazzi Usaj & Chengzhe Tian)
19:05-19:25 (CET) 13:05-13:25 (EST)	**Special Lecture by Arjun Raj** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
19:25-19:35 (CET) 13:25-13:35 (EST)	Short break
19:35-20:35 (CET) 13:35-14:35 (EST)	**Optional Virtual Speed Networking: 1:1 (visit Slack for more details)**
	End of day 1 - Continued access to digital posters, networking and discussion platforms

Day 2 - Tuesday 17 November 2020

Time	Speaker
	Virtual Thematic Session - QUANTITATIVE IMAGING
13:10-15:35 (CET) 07:10-09:35 (EST)	**Sub-session 2** Chair: Prisca Liberali - Friedrich Miescher Institute for Biomedical Research, Switzerland

13:10-13:20 (CET) 07:10-07:20 (EST)	**Introduction by Session Chair**
13:20-13:45 (CET) 07:20-07:45 (EST)	**Spatiotemporal dissection of the human proteome** Emma Lundberg - KTH Royal Institute of Technology, Sweden *AVAILABLE ON DEMAND AFTER LIVE STREAM*
13:45-14:05 (CET) 07:45-08:05 (EST)	**Non-redundant multimodal signaling enables accurate contextual responses in single mammalian cells** Bernhard Kramer - University of Zurich, Switzerland *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:05-14:30 (CET) 08:05-08:30 (EST)	**Our first choices: decoding signals during developmental transitions** Silvia Santos - The Francis Crick Institute, UK
14:30-14:55 (CET) 08:30-08:55 (EST)	**Mitochondrial genome maintenance is linked to fission at the single organelle level** Suliana Manley - École Polytechnique Fédérale de Lausanne, Switzerland *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:55-15:05 (CET) 08:55-09:05 (EST)	Short break
15:05-15:35 (CET) 09:05-09:35 (EST)	**Panel Discussion with Prisca Liberali (moderator), Emma Lundberg, Bernhard Kramer, Silvia Santos and Suliana Manley** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
15:35-16:05 (CET) 09:35-10:05 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Emma Lundberg, Bernhard Kramer, Silvia Santos, and Suliana Manley)
16:05-16:35 (CET) 10:05-10:35 (EST)	Break
	Virtual Thematic Session - QUANTITATIVE PROTEOMICS
16:35-19:00 (CET) 10:35-13:00 (EST)	**Sub-session 1** Chair: Mikhail Savitski - EMBL Heidelberg, Germany

16:35-16:45 (CET) 10:35-10:45 (EST)	Introduction by Session Chair
16:45-17:10 (CET) 10:45-11:10 (EST)	Proteome activity landscapes of tumor cell lines determine drug responses Bernhard Küster - Technical University of Munich, Germany *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:10-17:30 (CET) 11:10-11:30 (EST)	Small molecule-induced polymerization triggers degradation of BCL6 Mikolaj Slabicki - Harvard University, USA *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:30-17:55 (CET) 11:30-11:55 (EST)	Spatial proteomics reveals the complexity of RNA protein interactions Kathryn Lilley - University of Cambridge, UK *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:55-18:20 (CET) 11:55-12:20 (EST)	Ribosomes in gene regulation: controlling the diversity of proteins made in specific cells, tissues, & organisms Maria Barna - Stanford University, USA *AVAILABLE ON DEMAND AFTER LIVE STREAM*
18:20-18:30 (CET) 12:20-12:30 (EST)	Short break
18:30-19:00 (CET) 12:30-13:00 (EST)	Panel Discussion with Mikhail Savitski (moderator), Bernhard Küster, Mikolaj Slabicki, Kathryn Lilley and Maria Barna *AVAILABLE ON DEMAND AFTER LIVE STREAM*
19:00-19:30 (CET) 13:00-13:30 (EST)	Meet the speakers in individual Zoom breakout rooms (Bernhard Küster, Mikolaj Slabicki, Kathryn Lilley and Maria Barna)
19:30-20:30 (CET) 13:30-14:30 (EST)	Virtual Poster Session 1
	End of day 2 - Continued access to digital posters, networking and discussion platforms

Day 3 - Wednesday 18 November 2020

Time	Speaker

Virtual Thematic Session - QUANTITATIVE GENOMICS

13:10-15:10 (CET) 07:10-09:10 (EST)	**Sub-session 2** Chair: Arnaud Krebs - EMBL Heidelberg, Germany
13:10-13:20 (CET) 07:10-07:20 (EST)	**Introduction by Session Chair**
13:20-13:45 (CET) 07:20-07:45 (EST)	**Decoding evolution and development : from gene-regulatory structure to function** Justin Crocker - EMBL Heidelberg, Germany *AVAILABLE ON DEMAND AFTER LIVE STREAM*
13:45-14:05 (CET) 07:45-08:05 (EST)	**Towards a systematic map of the functional role of protein phosphorylation** Cristina Viéitez - EMBL Heidelberg, Germany *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:05-14:30 (CET) 08:05-08:30 (EST)	**A chronic lymphocytic leukemia-protective non-coding variant mediates variable chromatin module formation through long-range transcription factor nucleation** Bart Deplancke - École Polytechnique Fédérale de Lausanne, Switzerland *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:30-14:40 (CET) 08:30-08:40 (EST)	Short Break
14:40-15:10 (CET) 08:40-09:10 (EST)	**Panel Discussion with Arnaud Krebs (moderator), Justin Crocker, Cristina Viéitez and Bart Deplancke** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
15:10-15:40 (CET) 09:10-09:40 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Justin Crocker, Cristina Viéitez and Bart Deplancke)
15:40-16:10 (CET) 09:40-10:10 (EST)	Break

Virtual Thematic Session - SINGLE CELL GENOMICS

16:10-18:10 (CET) 10:10-12:10 (EST)	**Sub-Session 1** Chair: Dana Pe'er - Memorial Sloan Kettering Cancer Center, USA
16:10-16:20 (CET) 10:10-10:20 (EST)	**Introduction by Session Chair**
16:20-16:45 (CET) 10:20-10:45 (EST)	**The cellular evolution of spermatogenesis across mammals** Henrik Kaessmann - Heidelberg University, Germany *AVAILABLE ON DEMAND AFTER LIVE STREAM*
16:45-17:05 (CET) 10:45-11:05 (EST)	**The X chromosome – a balancing act of two alleles** Antonio Lentini - Karolinska Institutet, Sweden *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:05-17:30 (CET) 11:05-11:30 (EST)	**Single cell RNA sequencing with split pool barcoding** Georg Seelig - University of Washington, USA *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:30-17:40 (CET) 11:30-11:40 (EST)	Short Break
17:40-18:10 (CET) 11:40-12:10 (EST)	**Panel Discussion with Dana Pe'er (moderator), Henrik Kaessmann, Antonio Lentini and Georg Seelig** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
18:10-18:40 (CET) 12:10-12:40 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Henrik Kaessmann, Antonio Lentini and Georg Seelig)
18:40-18:50 (CET) 12:40-12:50 (EST)	Short break
18:50-19:20 (CET) 12:50-13:20 (EST)	**Live Living Room Concert by** Lazy Fur **(details available in Slack)**

19:20-20:20 (CET) 13:20-14:20 (EST)	Virtual Poster Session 2
	End of day 3 - Continued access to digital posters, networking and discussion platforms

Day 4 - Thursday 19 November 2020

Time	Speaker
	Virtual Thematic Session - QUANTITATIVE PROTEOMICS
13:10-15:10 (CET) 07:10-09:10 (EST)	Sub-session 2 Chair: Mikhail Savitski - EMBL Heidelberg, Germany
13:10-13:20 (CET) 07:10-07:20 (EST)	Introduction by Session Chair
13:20-13:45 (CET) 07:20-07:45 (EST)	How unique is our plasma proteome? Answers from quantiative native MS Albert Heck - Utrecht University, The Netherlands *AVAILABLE ON DEMAND AFTER LIVE STREAM*
13:45-14:05 (CET) 07:45-08:05 (EST)	Widespread and conserved substitution of paralog proteins during neurogenesis Domenico Di Fraia - Leibniz-Institute on Aging, Germany *AVAILABLE ON DEMAND AFTER LIVE STREAM*
14:05-14:30 (CET) 08:05-08:30 (EST)	Exploring the global scope and function of lysine acetylation Chuna Ram Choudhary - University of Copenhagen, Denmark
14:30-14:40 (CET) 08:30-08:40 (EST)	Short Break
14:40-15:10 (CET) 08:40-09:10 (EST)	Panel Discussion with Mikhail Savitski (moderator), Albert Heck, Domenico Di Fraia and Chuna Ram Choudhary *AVAILABLE ON DEMAND AFTER LIVE STREAM*

15:10-15:40 (CET) 09:10-09:40 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Albert Heck, Domenico Di Fraia and Chuna Ram Choudhary)
15:40-16:10 (CET) 09:40-10:10 (EST)	Break
	Virtual Thematic Session - SINGLE CELL GENOMICS
16:10-18:10 (CET) 10:10-12:10 (EST)	**Sub-session 2** Chair: Dana Pe'er - Memorial Sloan Kettering Cancer Center, USA
16:10-16:20 (CET) 10:10-10:20 (EST)	**Introduction by Session Chair**
16:20-16:45 (CET) 10:20-10:45 (EST)	**Cellular plasticity in development and cancer** Dana Pe'er - Memorial Sloan Kettering Cancer Center, USA *AVAILABLE ON DEMAND AFTER LIVE STREAM*
16:45-17:05 (CET) 10:45-11:05 (EST)	**KCML: a machine-learning framework for inference of multi-scale gene functions from genetic perturbation screens** Heba Sailem - University of Oxford, United Kingdom *AVAILABLE ON DEMAND AFTER LIVE STREAM*
17:05-17:30 (CET) 11:05-11:30 (EST)	**Integrative, Multiomic, Single-Cell Dissection of Mixed-Phenotype Acute Leukemia** William James Greenleaf - Stanford University, USA
17:30-17:40 (CET) 11:30-11:40 (EST)	Short Break
17:40-18:10 (CET) 11:40-12:10 (EST)	**Panel Discussion with Dana Pe'er (moderator), Heba Sailem, William James Greenleaf and Agnieška Brazovskaja** *AVAILABLE ON DEMAND AFTER LIVE STREAM*
18:10-18:20 (CET) 12:10-12:20 (EST)	**Closing remarks by Dana Pe'er & Arnaud Krebs**

18:20-18:50 (CET) 12:20-12:50 (EST)	**Meet the speakers in individual Zoom breakout rooms** (Dana Pe'er, William James Greenleaf, Heba Sailem & Agnieška Brazovskaja)
	End of Conference