

# The Complex Life of RNA - 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

Got something to say? Tweet it! #EESRNA

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

- The virtual conference includes live-streamed invited speakers with Q&A sessions after each talk. All short talks are pre-recorded with Q&A available in Slack throughout the duration of the meeting.
- Information on the live stream and access to the discussion platform and digital posters will be provided shortly before the start of the event.

 Access to the recorded talks will be available for 1 week after the start of the event.

The following times are used in the programme below:

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

### Day 1 - Wednesday 7 October 2020

Time	Speaker
13:00-13:15 (CEST) 07:00-07:15 (EDT)	<b>Opening remarks</b> by Scientific Organisers <b>Remembering Kiyoshi Nagai</b> by Wojtek Galej, EMBL Grenoble, France
13:15-16:15 (CEST) 07:15-10:15 (EDT)	<b>Virtual Session 1</b> Chairs: Wojtek Galej - EMBL Grenoble, France and Thomas Gonatopoulos Pournatzis - National Cancer Institute, USA
13:15-13:45 (CEST) 07:15-07:45 (EDT)	Insights into prespliceosome formation Soo-Chen Cheng - Institute of Molecular Biology, Academia Sinica, Taiwan <i>WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM</i>
13:45-14:15 (CEST) 07:45-08:15 (EDT)	Gene-specific functions of the mRNA cap Victoria Cowling - University of Dundee, UK WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
14:15-14:45 (CEST) 08:15-08:45 (EDT)	The core spliceosome self-regulatory network Juan Valcárcel - Centre for Genomic Regulation, Spain WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
14:45-15:00 (CEST) 08:45-09:00 (EDT)	Coffee break
15:00-15:45 (CEST) 09:00-09:45 (EDT)	Keynote lecture 1: Viral Noncoding RNAs: approaching answers Joan Steitz - Yale University, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM

Time	Speaker
15:45-16:15 (CEST) 09:45-10:15 (EDT)	Meet the Speakers of Session 1 and Keynote lecture 1 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
16:15-17:15 (CEST) 10:15-11:15 (EDT)	Virtual poster session 1 (all numbers)
17:15-17:30 (CEST) 11:15-11:30 (EDT)	Coffee break
17:30-19:30 (CEST) 11:30-13:30 (EDT)	Virtual Session 2 Chairs: Valerie Hilgers - Max Planck Institute of Immunobiology and Epigenetics, Germany and Carrie Bernecky - Institute of Science and Technology, Austria
17:30-18:00 (CEST) 11:30-12:00 (EDT)	A key role for the RNA-binding protein CPEB4 in inflammation resolution Raúl Mendéz - Institute for Research in Biomedicine, Spain
18:00-18:30 (CEST) 12:00-12:30 (EDT)	The complexity of COOLAIR Caroline Dean - John Innes Centre, United Kingdom <i>WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM</i>
18:30-19:00 (CEST) 12:30-13:00 (EDT)	An Xist-dependent protein assembly mediates Xist localization and gene silencing Kathrin Plath - University of California, Los Angeles, USA Presented by: Amy Pandya-Jones - University of California, Los Angeles, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
19:00-19:30 (CEST) 13:00-13:30 (EDT)	Meet the Speakers of Session 2 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
19:30 (CEST) 13:30 (EDT)	End of day 1 - Speed Networking Session and continued access to digital posters and discussion platforms, pre-recorded talks

## Day 2 - Thursday 8 October 2020

#### Time Speaker

13:00-15:30 (CEST) 07:00-09:30 (EDT)	Virtual Session 3 Chairs: Olivia Rissland - University of Colorado Anschutz Medical Campus, USA Ayala Shiber, Technion University, Israel
13:00-13:30 (CEST) 07:00-07:30 (EDT)	Translation initiation and regulation of translation: from mitochondria to SARS-CoV-2 infected cells Nenad Ban - ETH Zürich, Switzerland
13:30-14:00 (CEST) 07:30-08:00 (EDT)	Mechanisms of mRNA quality and quantity control at the ribosome Ramanujan Hegde - MRC Laboratory of Molecular Biology, United Kingdom WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
14:00-14:30 (CEST) 08:00-08:30 (EDT)	Roles of the RNA binding protein UNR/CSDE1 in cancer progression and suppression Fatima Gebauer - Centre for Genomic Regulation, Spain WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
14:30-15:00 (CEST) 08:30-09:00 (EDT)	A role for colliding ribosomes in determining cellular fate Rachel Green - Johns Hopkins School of Medicine, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
15:00-15:30 (CEST) 09:00-09:30 (EDT)	Meet the Speakers of Session 3 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
15:30-15:45 (CEST) 09:30-09:45 (EDT)	Coffee break

15:45-16:15 (CEST) 09:45-10:15 (EDT)	<ul> <li>Meet the following short talk speakers in individual Zoom rooms (The log in details will be published in Slack. The pre-recorded talk will be available for viewing ahead of the meeting)</li> <li><b>1.</b> The RNA export factor Mex67 functions as a mobile nucleoporin Elisa Dultz, ETH Zürich, Switzerland</li> <li><b>2.</b> Coordination of transcriptional and translational regulations in human epithelial cells infected by Listeria monocytogenes</li> <li>Alice Lebreton, Institute of Biology of ENS; INRAE, France</li> <li><b>3.</b> Early spliceosome assembly stimulates RNA polymerase II pause release</li> <li>Sara Monteiro Martins, Max Planck Institute for Biophysical Chemistry, Germany</li> <li><b>4.</b> LSM2-8 and XRN-2 mediate RNA decay of H3K27me3-marked genes in C. elegans</li> <li>Anna Mattout, CBI, France</li> <li><b>5.</b> Degradation of non-coding RNAs promotes recycling of termination factors at sites of transcription</li> <li>Tommaso Villa, Université de Paris, CNRS, Institut Jacques Monod, France</li> <li><b>6.</b> Localized mRNA translation fosters protein delivery at nuclear pore complexes</li> <li>Benoit Palancade, Institut Jacques Monod, CNRS-Université de Paris, France</li> <li><b>7.</b> Exon junction complex dependent mrna localization contributes to centrosome organization and ciliogenesis</li> <li>Oh Sung Kwon, ENS IBENS, France</li> <li><b>8.</b> Structural studies of the human transcription-export complex</li> <li>Clemens Plaschka, Research Institute of Molecular Pathology, IMP, Austria</li> <li><b>9.</b> Intrinsic and extrinsic mechanisms cooperate to ensure efficient termination of RNAPIII transcription</li> <li>Odil Porrua, Institut Jacques Monod, University of Paris, French National Centre for Scientific Research, France</li> <li><b>10.</b> Two microRNAs are sufficient for embryonic patterning in C. elegans Philipp Dexheimer, Research Institute of Molecular Pathology, Austria</li> <li><b>11.</b> Single-molecule imaging reveals translation of mRNAs localized to stress granules</li> <li>Daniel Mateju, Friedrich Miescher Institute for Bio</li></ul>
	translation initiation by modulating its conformational dynamics
	13. Pseudouridine synthases modify human pre-mRNA co-
	transcriptionally and affect splicing
	Nicole Martinez, Yale University, USA

16:15-17:15 (CEST) 10:15-11:15 (EDT)	Virtual poster session 2 (all numbers)
17:15-19:30 (CEST) 11:15-13:30 (EDT)	Virtual Session 4 Chairs: Daniel Cifuentes - Boston University School of Medicine, USA and Yiliang Ding - John Innes Centre, UK
17:15-17:45 (CEST) 11:15- 11:45 (EDT)	Global analysis of the networks controlling mRNA translation and decay Nicholas Ingolia - University of California, Berkeley, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
17:45-18:15 (CEST) 11:45- 12:15 (EDT)	Assembly of RNA-protein complexes during transcription Sarah Woodson - Johns Hopkins University, USA
18:15-19:00 (CEST) 12:15-13:00 (EDT)	Keynote lecture 2: Diversifying the function of a limited RNA genome: Innovation and complexity in positive strand viruses Anna Pyle - Yale University, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
19:00-19:30 (CEST) 13:00-13:30 (EDT)	Meet the Speakers of Session 4 and Keynote lecuture 2 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
19:30-19:50 (CEST) 13:30-13:50 (EDT)	Industry Session (Optional) Log in details can be found on Slack
20:00 (CEST) 14:00 (EDT)	End of day 2 - Bar Mixer and continued access to digital posters, discussion platforms, pre-recorded talks

# Day 3 - Friday 9 October 2020

#### Time Speaker

13:00-15:30 (CEST) 07:00-09:30 (EDT)	Virtual Session 5 Chairs: Daniel Zenklusen - Université de Montréal, Canada and Sebastian Falk - University of Vienna, Austria
13:00-13:30 (CEST) 07:00-07:30 (EDT)	Local protein synthesis mechanisms in neurons Erin Schuman - Max Planck Institute for Brain Research, Germany

13:30-14:00 (CEST) 07:30-08:00 (EDT)	Novel RNP Transport Granules Drive mRNA Localization Kimberly Mowry - Brown University, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
14:00-14:30 (CEST) 08:00-08:30 (EDT)	Regulation and remodeling of the RNA exosome helicases Elena Conti - Max Planck Institute of Biochemistry, Germany
14:30-15:00 (CEST) 08:30-09:00 (EDT)	Mechanisms that target RNA for destruction Christopher Lima - Sloan Kettering Institute, HHMI, USA
15:00-15:30 (CEST) 09:00-09:30 (EDT)	Meet the Speakers of Session 5 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
15:30-15:45 (CEST) 09:30-09:45 (EDT)	Coffee break

(CEST	-16:15 ) -10:15	Meet the following short talk speakers in individual Zoom rooms (The log in details will be published in Slack. The pre-recorded talk will be available for viewing ahead of the meeting) <b>1. Primary determinants of nuclear mRNA poly(A) tail length in</b> Saccharomyces cerevisiae Matti Turtola, Aarhus University, Denmark <b>2. Reconstitution and atomic structure of an active human histone pre- mRNA 3'-end processing machinery</b> Liang Tong, Columbia University, USA <b>3. The final step of 40S ribosomal subunit maturation is controlled by a</b> <b>dual key lock</b> Laura Plassart, CNRS - University of Toulouse, France <b>4. A ubiquitin ligase mediates target-directed microRNA decay</b> <b>independently of tailing and trimming</b> Jaeil Han, UT Southwestern Medical Center, USA <b>5. p53 regulates the hypusination of eIF5A to promote translation during</b> <b>cellular senescence</b> Fabricio Loayza-Puch, German Cancer Research Center (DKFZ), Germany <b>6. FUS-dependent phase separation initiates DNA double-strand break</b> <b>repair</b> Brunno Rocha Levone, University of Milano-Biococca, Italy <b>7. SRSF7 maintains its homeostasis through the expression of Split-</b> <b>ORFs and nuclear body assembly</b> Michaela Müller-McNicoll, Goethe University Frankfurt, Germany <b>8. A reconstituted mammalian APC-kinesin complex selectively</b> <b>transports defined packages of axonal mRNAs</b> Sebastian Baumann, Centre for Genomic Regulation, Spain <b>9. Adenylation and uridylation of aberrant microRNA precursors certifies</b> <b>faithful microRNA biogenesis in files and mammals</b> Angela Rodrigues Viana, IMBA-Institute of Molecular Biotechnology, Austria <b>10. Evolution of protein folding and assembly pathways: Deciphering the</b> <b>dynamics of divergent co-translational assembly pathways: Deciphering the</b> <b>dynal Shiber, Technion, Israel</b> <b>11. N6-methyladenosine in poly(A) tails stabilize VSG transcripts</b> Juan Macèdo, Institute of Molecular Medicine, Portugal <b>12. Morphologically-discrete, ER subdomains support translation of</b> <b>different types of mRNAs in response to ER-l</b>
		13. Base-pair conformational switch modulates miR-34a targeting of Sirt1 mRNA Katja Petzold, Karolinska Institutet, Sweden

16:15-17:15 (CEST) 10:15-11:15 (EDT)	Virtual poster session 3 (all numbers)
17:15-19:30 (CEST) 11:15-13:30 (EDT)	Virtual Session 6 Chairs: Marina Chekulaeva - Max Delbrück Center (MDC) for Molecular Medicine in the Helmholtz Association, Germany and Susanne Kramer - Biocenter, University of Würzburg, Germany
17:15-17:45 (CEST) 11:15-11:45 (EDT)	Diverse mechanisms of small RNAs Ian MacRae - The Scripps Research Institute, USA WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
17:45-18:15 (CEST) 11:45-12:15 (EDT)	<b>Nuclear fates of RNA 3'ends</b> Torben Heick Jensen - Aarhus University, Denmark <i>WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM</i>
18:15-19:00 (CEST) 12:15-13:00 (EDT)	Keynote lecture 3: Lighting up the complex life David Tollervey - The University of Edinburgh, United Kingdom WILL BE AVAILABLE ON DEMAND AFTER LIVE STREAM
19:00-19:15 (CEST) 13:00-13:15 (EDT)	Closing Remarks
19:15-19:45 (CEST) 13:15-13:45 (EDT)	Meet the Speakers of Session 6 and Keynote lecuture 3 in individual Zoom breakout rooms. The Zoom link and password can be found on Slack.
19:45 (CEST) 13:45 (EDT)	End of symposium - Continued access to digital posters, networking and discussion platforms, pre-recorded talks