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! #EMBOStructBio

— The virtual conference includes live-streamed invited speaker talks with live Q&A sessions after each talk as well as meet the speaker sessions.

— All digital poster presenters are encouraged to upload a recorded flash talk with their digital poster and to schedule video calls during poster session times.

— Information on the live stream and access to the discussion platform and digital posters will be provided 1 week before the start of the event.

The following times are used in the programme below:
To find out the equivalent time zone in your location, enter Berlin, the CET programme time and your city into the **Time Zone Converter**.

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### Day 1 - Sunday 6 December 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
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<tbody>
<tr>
<td><strong>15:00-15:10</strong> (CET)</td>
<td>Opening remarks</td>
</tr>
<tr>
<td><strong>09:00-09:10</strong> (EST)</td>
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<tr>
<td><strong>15:10-16:40</strong> (CET)</td>
<td>Virtual Session 1 - Imaging across scales</td>
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<tr>
<td><strong>09:10-10:40</strong> (EST)</td>
<td>Chair: Martin Beck - Max Planck Institute of Biophysics, Germany</td>
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<tr>
<td><strong>15:10-15:40</strong> (CET)</td>
<td>Fluorescence based in situ structural biology with residue precision</td>
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<tr>
<td><strong>09:10-09:40</strong> (EST)</td>
<td>Edward A. Lemke - IMB, JGU and EMBL Heidelberg, Germany</td>
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<tr>
<td><strong>15:40-16:10</strong> (CET)</td>
<td>Superresolution microscopy for structural cell biology</td>
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<tr>
<td><strong>09:40-10:10</strong> (EST)</td>
<td>Jonas Ries - EMBL Heidelberg, Germany</td>
</tr>
<tr>
<td><strong>16:10-16:40</strong> (CET)</td>
<td>From ion transport to mineral assembly and deposition in bone</td>
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<tr>
<td><strong>10:10-10:40</strong> (EST)</td>
<td>Lia Addadi - Weizmann Institute of Science, Israel</td>
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<tr>
<td><strong>16:40-16:45</strong> (CET)</td>
<td>Break</td>
</tr>
<tr>
<td><strong>10:40-10:45</strong> (EST)</td>
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</tbody>
</table>
### Panel discussion: Structural in situ biology of SARS-CoV-2
Chair: Martin Beck Max Planck Institute of Biophysics, Germany  
Panelists:  
- Gerhard Hummer, Max Planck Institute of Biophysics, Germany  
- Andrea Graziadei, TU Berlin, Germany  
- Luiza Mendonca, University of Oxford, United Kingdom  
- Jadson Santos, University of São Paulo, Brazil  
- Léonie Strömich, Imperial College London, United Kingdom  
- Sophie Winter, University Hospital Heidelberg, Germany  
- Georg Wolff, LUMC, The Netherlands

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<tr>
<td>16:45-17:30</td>
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<td>Panel discussion: Structural in situ biology of SARS-CoV-2</td>
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<tr>
<td>(CET)</td>
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<td>Chair: Martin Beck Max Planck Institute of Biophysics, Germany</td>
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<tr>
<td>10:45-11:30</td>
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<td>Panelists:</td>
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<tr>
<td>(EST)</td>
<td></td>
<td>Gerhard Hummer, Max Planck Institute of Biophysics, Germany</td>
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17:30-17:45   | Break   | Time                                                                 |
| (CET)        |         | Time                                                                 |
| 11:30-11:45  |         | Time                                                                 |
| (EST)        |         | Time                                                                 |

17:45-18:30   | Keynote lecture: Structural biology in situ or the power of seeing the whole picture |
| (CET)        | Wolfgang Baumeister - Max Planck Institute of Biochemistry, Germany |
| 11:45-12:30  | AVAILABLE ON DEMAND AFTER LIVE STREAM |
| (EST)        |                                             |

18:30-19:00   | Meet the speakers (E. Lemke, J. Ries, L. Addadi, W. Baumeister) in individual zoom rooms |
| (CET)        | Time                                                                 |
| 12:30-13:00  | Time                                                                 |
| (EST)        | Time                                                                 |

19:00-20:00   | Virtual Poster Session 1 (all posters) including live chats, recorded flash talks from poster presenters and discussion channels on Slack |
| (CET)        | Time                                                                 |
| 13:00-14:00  | Time                                                                 |
| (EST)        | Time                                                                 |

End of day 1 - Continued access to digital posters, networking and discussion platform

### Day 2 - Monday 7 December 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Details</th>
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<tbody>
<tr>
<td>13:00-13:20</td>
<td></td>
<td>Industry session (optional) - further details are available on Slack</td>
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<tr>
<td>(CET)</td>
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<td>Time</td>
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<tr>
<td>07:00-07:20</td>
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<td>Time</td>
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<tr>
<td>(EST)</td>
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<td>Time</td>
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<tr>
<td>13:20-13:30</td>
<td>Break</td>
<td>Time</td>
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<tr>
<td>(CET)</td>
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<td>Time</td>
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<tr>
<td>07:20-07:30</td>
<td></td>
<td>Time</td>
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<tr>
<td>(EST)</td>
<td></td>
<td>Time</td>
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</tbody>
</table>
13:30-15:00 (CET) 07:30-09:00 (EST) Virtual Session 2 - Structural analysis in situ
Chair: Julia Mahamid - EMBL Heidelberg, Germany

Towards a mechanistic understanding of motile and primary cilia with CLEM and cryo-electron tomography
Gaia Pigino - Max Planck Institute of Molecular Cell Biology and Genetics, Germany
AVAILABLE ON DEMAND AFTER LIVE STREAM

14:00-14:30 (CET) 08:00-08:30 (EST) Structure of the complete, membrane-assembled COPII coat reveals a complex interaction network
Giulia Zanetti - Birkbeck, University of London, UK
AVAILABLE ON DEMAND AFTER LIVE STREAM

14:30-15:00 (CET) 08:30-09:00 (EST) Elucidating dynamic landscape of SARS-COV-2 spike in situ
Beata Turonova - EMBL Heidelberg, Germany
AVAILABLE ON DEMAND AFTER LIVE STREAM

15:00-15:05 (CET) 09:00-09:05 (EST) Transition over to Meet the speakers from Virtual Session 2

15:05-15:30 (CET) 09:05-09:30 (EST) Meet the speakers (G. Pigino, G. Zanetti, B. Turonova) in individual zoom rooms

15:30-16:30 (CET) 09:30-10:30 (EST) Virtual Poster Session 2 (all posters) including live chats, recorded flash talks from poster presenters and discussion channels on Slack

16:30-16:45 (CET) 10:30-10:45 (EST) Break

16:45-18:40 (CET) 10:45-12:40 (EST) Virtual Session 3 - Molecular sociology
Chair: Julia Mahamid - EMBL Heidelberg, Germany

In situ structural studies of prokaryotic cell surface molecules
Tanmay Bharat - University of Oxford, UK
AVAILABLE ON DEMAND AFTER LIVE STREAM
17:15-17:45 (CET)  How membrane architectures contribute to cellular functions  Wanda Kukulski - MRC Laboratory of Molecular Biology, UK
11:15-11:45 (EST)  
17:45-18:15 (CET)  Cell-cell interactions studied by cryo-electron tomography  Martin Pilhofer - ETH Zürich, Switzerland
11:45-12:15 (EST)  
18:15-18:45 (CET)  The in situ structure of Parkinson's disease-linked LRRK2  Elizabeth Villa - University of California, San Diego, USA
12:15-12:45 (EST)  AVAILABLE ON DEMAND AFTER LIVE STREAM
18:45-18:50 (CET)  Transition over to Meet the speakers from Virtual Session 3
12:45-12:50 (EST)  
18:50-19:20 (CET)  Meet the speakers (T. Bharat, W. Kukulski, M. Pilhofer, E. Villa) in individual zoom rooms
12:50-13:20 (EST)  
19:20-20:30 (CET)  Live Jazz and Virtual Bar Mixer (grab a drink/fruit juice and meet repeatedly in randomly mixed groups for 10 min each time)  
13:20-14:30 (EST)  (Login details available on Slack)  
End of day 2 - Continued access to digital posters, networking and discussion platform

Day 3 - Tuesday 8 December 2020

Time  Speaker
13:00-13:30 (CET)  Meet the following editors in individual zoom rooms  
13:00-13:30 (EST)  (Login details available on Slack)  
Arunima Singh, Springer Nature, United States of America
Christine Mieck, SpringerNature/NatureCommunications, Germany
Marina Ostankovitch, Wiley, Germany
Mishtu Dey, Structure, Cell Press, United States of America
Nicole Neuman, Cell, United States of America
Sadaf Shadan, Nature, United Kingdom
Anke Sparmann, Nature Structural & Molecular Biology, Germany
13:30-15:00 (CET)  
**Virtual Session 4 - Biophysical analysis in cells**  
Chair: Martin Beck - Max Planck Institute of Biophysics, Germany

07:30-09:00 (EST)  
Proteomes in 3D: *in situ* protein structural states as a readout for proteome functional alterations  
Paola Picotti - ETH Zürich, Switzerland

13:30-14:00 (CET)  
**Proteomes in 3D: *in situ* protein structural states as a readout for proteome functional alterations**  
Paola Picotti - ETH Zürich, Switzerland

07:30-08:00 (EST)  
**AVAILABLE ON DEMAND AFTER LIVE STREAM**

14:00-14:30 (CET)  
Biophysical proteomics for understanding molecular biology  
Mikhail Savitski - EMBL Heidelberg, Germany

08:00-08:30 (EST)  
**AVAILABLE ON DEMAND AFTER LIVE STREAM**

14:30-15:00 (CET)  
In cell integrative structural biology by crosslinking mass spectrometry and cryo-electron tomography  
Juri Rappsilber - TU Berlin, Germany

08:30-09:00 (EST)  
**AVAILABLE ON DEMAND AFTER LIVE STREAM**

15:00-15:05 (CET)  
Transition over to Meet the speakers from Virtual Session 4

09:00-09:05 (EST)

15:05-15:30 (CET)  
Meet the speakers (M. Savitski, P. Picotti, J. Rappsilber) in individual zoom rooms

09:05-09:30 (EST)

15:30-15:40 (CET)  
Break

09:30-09:40 (EST)

15:40-17:10 (CET)  
**Virtual Session 5 - Integrative modelling**  
Chair: Jan Kosinski - EMBL Hamburg, Germany

09:40-11:10 (EST)

15:40-16:10 (CET)  
Putting it all together: From experiment and simulation to structure and dynamics  
Gerhard Hummer - Max Planck Institute of Biophysics, Germany

09:40-10:10 (EST)  
**AVAILABLE ON DEMAND AFTER LIVE STREAM**

16:10-16:40 (CET)  
Integrative modeling of biomolecular assembly structures  
Andrej Sali - University of California, San Francisco, USA

10:10-10:40 (EST)  
**AVAILABLE ON DEMAND AFTER LIVE STREAM**
16:40-17:10
(CET)
10:40-11:10
(EST)
Modeling molecular cell biology
David S. Goodsell - Scripps Research, USA
AVAILABLE ON DEMAND AFTER LIVE STREAM

17:10-17:20
(CET)
11:10-11:20
(EST)
Break

17:20-18:05
(CET)
11:20-12:05
(EST)
Keynote lecture:
Simulating the minimal cell: Integration of cryo-electron tomography, genomic information, theory and hybrid computational methodologies
Zaida (Zan) Ann Luthey-Schulten - University of Illinois at Urbana-Champaign, USA
AVAILABLE ON DEMAND AFTER LIVE STREAM

18:05-18:15
(CET)
12:05-12:15
(EST)
Closing remarks and poster prizes

18:15-18:45
(CET)
12:15-12:45
(EST)
Meet the speakers (G. Hummer, A. Sali, D. Goodsell, Z. Luthey-Schulten) in individual zoom rooms

End of day 3 - Continued access to digital posters, networking and discussion platform until 22 December 2020