

**From atoms to tissues.  
Electron microscopy within the Göttingen  
„Multiscale Bioimaging“ Cluster of Excellence**

**Thursday, September 23rd 2021, 9 am - 5 pm**

**ZOOM link: <https://bit.ly/3eJcJ0t>**

**09:00** **Welcome** by Rubén Fernández-Busnadiego, Patrick Cramer, Metin Tolan, Wolfgang Brück

**Session 1: From atoms to molecules**

*Chair: Rubén Fernández-Busnadiego*

**09:15** *Claus Ropers (University of Goettingen, Max Planck Institute for Biophysical Chemistry)*  
**“The Göttingen Ultrafast Transmission Electron Microscope”**

**09:45** *Holger Stark (Max Planck Institute for Biophysical Chemistry)*  
**“tba”**

**10:15** Coffee Break

**10:30** *Patrick Cramer (Max Planck Institute for Biophysical Chemistry)*  
**“Cryo-EM reveals how genes are controlled”**

**11:00** *Eri Sakata (University Medical Center Goettingen)*  
**“Structural dynamics of the 26S proteasome”**

**11:30** *Hauke Hillen (University Medical Center Goettingen, Max Planck Institute for Biophysical Chemistry)*  
**“From pathogens to symbionts: Cryo-EM of viral and mitochondrial gene expression machineries”**

**12:00** Lunch Break

**Session 2: From molecules to tissues**

*Chair: Hauke Hillen*

**13:00** *Rubén Fernández-Busnadiego (University Medical Center Goettingen)*  
**“Unravelling the structure of toxic protein aggregates in situ”**

**13:30** *Carolyn Wichmann (University Medical Center Goettingen)*  
**“Ribon synapses at work”**

**14:00** *Wiebke Möbius (Max Planck Institute of Experimental Medicine)*  
**“What we can learn from cellular volume imaging by focussed ion beam-scanning EM (FIB-SEM)”**

**14:30** Coffee Break

**14:45** *Ben Cooper (Max Planck Institute of Experimental Medicine)*  
**“Freeze-frame shots of synapses in action: Correlating presynaptic ultrastructure and function at the nanoscale”**

**Guest speaker**

*Chair: Rubén Fernández-Busnadiego*

**15:15** *Jürgen Plitzko (Max Planck Institute of Biochemistry, Martinsried)*  
**“Advances in cryo-electron tomography for in situ structural biology of cells and tissues”**