

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Frontiers in Cryo-Electron Microscopy (EK19)

February 3-4, 2021 • Virtual at your computer • , CO, USA

Scientific Organizers: Sriram Subramaniam, Nenad Ban, Dorit Hanein and Pamela Williams

Supported by the Directors' Fund

Scholarship Deadline: / Abstract Deadline: December 17, 2020 / Discounted Registration Deadline:

WEDNESDAY, FEBRUARY 3

Large and Dynamic Assemblies (8am Denver/Mountain Time Start)

Nenad Ban, ETH Zürich, Switzerland
Ribosomal Assemblies

John Rubinstein, University of Toronto, Canada
ATPase Structure and Dynamics

Sriram Subramaniam, University of British Columbia, Canada
Cryo-EM in Cancer Biology

Natalie Strynadka, University of British Columbia, Canada
Large Membrane Protein Assemblies

Steven J. Ludtke, Baylor College of Medicine, USA
A Complete Software Pipeline for in-situ Subnanometer Resolution Subtomogram Averaging

Methods Development and Correlative Microscopy (3pm Denver/Mountain Time Start)

Jose Rodriguez, University of California, Los Angeles, USA
New Frontiers in Electron Diffraction

Bridget Carragher, New York Structural Biology Center, USA
Atomic Resolution CryoEM Is Here! Why Won't Our Protein Samples Cooperate?

Paul D. Adams, Lawrence Berkeley Laboratory, USA
Cryo-EM Model Building and Refinement Approaches in Phenix

Dorit Hanein, Scintillon Institute, USA
Regulation of Actin Cytoskeleton

Peijun Zhang, University of Oxford, UK
In situ Structure Study of Virus Infection

Pamela Williams, Astex Pharmaceuticals, UK
CryoEM Applications in Industry

Giovanna Scapin, Nanolmaging Services, USA
Bringing Cryo-EM to Drug Discovery: Lessons Learned

Patrick M. Sexton, Monash University, Australia
From Apo to Active to Small Molecule Discovery; Unlocking the Mysteries of Class B GPCRs Using Cryo-EM

Nieng Yan, Princeton University, USA
Ion Channel Structures

THURSDAY, FEBRUARY 4

Keynote Address (8am Denver/Mountain Time Start)

Werner Kühlbrandt, Max-Planck-Institute of Biophysics, Germany
Talk Title to be Announced

Cellular Ultrastructure and Microbial Complexes (8:30am Denver/Mountain Time Start)

Daniela Nicastro, University of Texas Southwestern Medical Center, USA
Probing the Molecular Organization of Cells and Organelles Using Cryo-Electron Microscopy

Ohad Medalia, Zurich University, Switzerland
Sub-Volume Averaging

Martin Pilhofer, ETH Zurich, Switzerland
Multiscale Models of Bacterial Contractile Injection Systems

Jun Liu, Yale School of Medicine, USA
Dissecting a Molecular Machine by Cryo-Electron Tomography

Elizabeth R. Wright, University of Wisconsin-Madison, USA
Host-Pathogen Interactions

Drug Discovery (3pm Denver/Mountain Time Start)