

Biophysical Society 67th Annual Meeting

Cryo-EM Subgroup Symposium

Saturday February 18, 2023

San Diego, California

Subgroup Chair: Ariane Briegel, Leiden University, Netherlands

Program Co-Chairs:

Henriette Autzen, University of Copenhagen, Denmark

Rosemary Cater, Columbia University, USA

Gabriel Lander, Scripps Research Institute, USA

Cristina Santarossa, NYU Langone Health, USA

Meghna Gupta, University of California, San Francisco, USA

Symposium Time: 8:30 AM - 12:30 PM PST

Symposium Room: 6F

Subgroup Business Meeting: 12:15 PM

8:30 AM Opening Remarks

8:35 AM Oliver Clarke, Columbia University, USA

Architecture of Erythrocyte Ankyrin-1 Complexes

9:00 AM Ellen Zhong, Massachusetts Institute of Technology/Princeton University, USA

Machine Learning for Cryo-EM Reconstruction

9:25 AM Rebecca Thompson, University of Leeds, UK

How "Native" is Your Protein? Impacts of Cryo-EM Sample Preparation on Protein Structure

9:50 AM **Spotlight on Junior PIs:**

Melody G Campbell, Fred Hutch, USA

Untangling Integrin Dynamics Using Cryo-EM

Debnath Ghosal, University of Melbourne, Australia

Understanding Architecture, Assembly, and Regulation of Bacterial Toxin Delivery Systems by Electron Cryotomography

10:10 AM Break

10:30 AM Panel Discussion on Map Quality: *Single Particle Cryo-EM Validation - What to Submit with your Manuscript*

10:40 AM Abhay Kotecha, Thermo Fisher Scientific, USA

Towards High-Resolution and High-Throughput Structural Biology with Cryo-EM

10:55 AM Elizabeth Villa, University of California, San Diego, USA

Molecular Architecture of the Jumbo Bacteriophage Nuclear Shell

11:20 AM Yi-Wei Chang, University of Pennsylvania, USA

Rhoptry Secretion System Structures and Regulatory Mechanisms in Apicomplexan Parasites Revealed Using Cryo-ET

11:20 AM Flash Talks from Selected Abstracts

11:45 AM Closing Remarks

12:15 PM Subgroup Business Meeting

The Cryo-EM Subgroup is grateful for support from the following sponsors:

