# Cryo-EM from Cells to Molecules: Multi-Scale Visualization of Biological Systems 2018

Tahoe City, California, USA 4 - 8 February 2018

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#### **SUNDAY, FEBRUARY 4**

16:00–20:00 Pre Function Arrival and Registration

18:00–20:00 Granhall Welcome Mixer

18:00–20:00 Granhall Light Meal – Provided by Granlibakken

#### **MONDAY, FEBRUARY 5**

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\*Georgios Skiniotis, Stanford University, USA

\*Andrew B. Ward, The Scripps Research Institute, USA \*Elizabeth Villa, University of California, San Diego, USA

Patrick Cramer, Max Planck Institute for Biophysical Chemistry, Germany

Integrated Structural Biology of Gene Transcription.....2

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\*Elizabeth Villa, University of California, San Diego, USA

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**Grant J. Jensen**, California Institute of Technology, USA Structure and Function of the Bacterial Type IV Secretion System

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Mark H. Ellisman, University of California, San Diego, USA

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Christina Heroven, MRC Laboratory of Molecular Biology, UK (1031)

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**Kanika Khanna**, University of California, San Diego, USA (2008) *Short Talk: Understanding Morphological Changes Accompanying* 

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17:00-19:00	Mountain/Lake	Visualizilla Subcellular Collibar tillelits

Daniela Nicastro, University of Texas Southwestern Medical Center, USA

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Jun Liu, Yale School of Medicine, USA

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\*Kay Grünewald, University of Oxford, UK Trafficking Vesicles and Enveloped Viruses

Joshua Hutchings, Birkbeck College, UK (1032)

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Poster sessions provide exciting opportunities for engagement between all levels of investigators. Abstracts beginning with the number 1 are featured during this poster session. Don't miss the plasma screen e-posters during

this session!

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\*Andrew B. Ward, The Scripps Research Institute, USA

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Seungil Han, Pfizer Inc., USA

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Gregory Martin, Oregon Health & Science University, USA (2024)

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**Chitra Shintre**, University of Oxford, UK (3015)

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Harry Low, Imperial College, UK (2017)

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Andrej Sali, University of California, San Francisco, USA
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\*Sharon Grayer Wolf, Weizmann Institute of Science, Israel Deep Views into Vitrified Cells by Cryo-Scanning Transmission Electron Tomography.....9

David Baker, University of Washington, USA

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Yuxi Liu, University of California, Los Angeles, USA (2015)

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Poster sessions provide exciting opportunities for engagement between all levels of investigators. Abstracts beginning with the number 2 are featured during this poster session. Don't miss the plasma screen e-posters during this session!

20:00-21:00 Bay

Social Hour

<sup>\*</sup>Session Chair; ( ) = abstract number

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> Dmitry Lyumkis, The Salk Institute for Biological Studies, USA High-Resolution Cryo-EM Studies of Retroviral Intasomes.....6 Maofu Liao, Harvard Medical School, USA Single Particle Cryo-EM Studies of Lipid-Protein Interactions.....5

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\*Gabriel C. Lander, The Scripps Research Institute, USA

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Moran Shalev-Benami, Stanford University, USA (3014)

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Daniel Southworth, University of California, San Francisco, USA (3036)

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\*Gunnar Schroeder, Forschungszentrum Julich, Germany (3013) Fibril Structure of Amyloid-β(1-42) by Cryo-Electron Microscopy.....47

Jane S. Richardson, Duke University, USA (3007)

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Doo Nam Kim, Los Alamos National Laboratory, USA (2010)

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with User-Friendly Molecular Dynamics Simulation

Jianpeng Ma, Baylor College of Medicine, USA (2021)

Application of Parallel Continuous Simulated Tempering to Cryo-EM

Structural Refinement at Near-Atomic Resolution

**Abhishek Singharoy**, Arizona State University, USA (3016) Molecular Dynamics Flexible Fitting at sub-5 Å Resolution

Till Rudack, Ruhr University Bochum, Germany (3010)

ModelMaker: An Interactive Integrative Modeling Tool to Build Complete

Macromolecular Machines

Kelly Brock, Harvard Medical School, USA (1010)

Using Evolutionary Couplings to Help Build and Refine Cryo-EM Models

16:30-17:00 Pre Function Coffee Available

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Kiyoshi Nagai, Medical Research Council, UK

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**Gira Bhabha**, New York University School of Medicine, USA *Architectures of Lipid Transport Systems in Bacteria.....1*\*Adam Frost, University of California, San Francisco, USA Function Follows Form: Cryo-EM Insights into Cell Biology....N/A

Eva Nogales, University of California, Berkeley, USA

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Poster sessions provide exciting opportunities for engagement between all levels of investigators. Abstracts beginning with the number 3 are featured during this poster session. Don't miss the plasma screen e-posters during this session!

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20:00—21:00 Bay Social Hour

#### **THURSDAY, FEBRUARY 8**

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\*Georgios Skiniotis, Stanford University, USA

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Judy Hirst, University of Cambridge, UK

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Doreen Matthies, National Institutes of Health, USA

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Kei Saotome, The Scripps Research Institute, USA (3012)

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**Luke H. Chao**, Massachusetts General Hospital, USA (1017) Short Talk: Single Particle Cryo-EM Studies of Mitochondrial

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19:00–20:00	Granhall	Dinner

Congratulations to Dr. Joachim Frank on his 2017 Nobel Prize and his contributions to the Cryo-EM field!

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