

The 11th New England Cryo-EM Symposium

Challenges, Solutions, and Best Practices in Cryo-EM/ET

Tue. Nov. 12, 2024 9:00 a.m. - 6:00 p.m.

Keller Auditorium (CG099), Main Building 263 Farmington Ave, Farmington, CT 06030

UConn
HEALTH

EVENT
SCHEDULE

TIME	EVENT	TIME	EVENT
08:00 AM - 09:00 AM	Arrival, Registration & Breakfast	02:20 PM - 04:20 PM	Session 3 Host: Steven Chou
09:00 AM - 09:10 AM	Opening remarks: Steven Chou & Stephen King	02:20 PM - 02:40 PM	Chunxiang Wu , Yale University "Structural insights into inhibitor mechanisms on HIV-1 revealed by high-resolution in situ single-particle cryo-EM"
09:10 AM - 10:40 AM	Session 1 Host: Stephen King	02:40 PM - 03:00 PM	Judy Huang , UMass Chan Medical School "Virion-associated influenza hemagglutinin clusters upon sialic acid binding visualized by cryo-electron tomography"
09:10 AM - 09:40 AM	Jiansen Jiang , invited speaker National Heart, Lung, and Blood Institute "Channel or transporter: a simple alternating access mechanism of urea/amide channels"	03:00 PM - 03:20 PM	Shoichi Tachiyama , Yale University "Combination of cryo-ET and molecular genetics revealed a novel spoke-ring network in H. pylori flagellar motor"
09:40 AM - 10:00 AM	Johannes Elferich , UMass Chan Medical School "Label-based and label-free approaches for in-situ Cryo-EM"	03:20 PM - 03:40 PM	Michelle Fry , MGH "In situ characterization of alterations to mitochondrial ultrastructure by a pathogenic Opa1 mutation"
10:00 AM - 10:20 AM	Kexin Zhang , UMass Chan Medical School "A new statistical metric for robust target detection in Cryo-EM images using 2DTM"	03:40 PM - 04:00 PM	Pascal Lill , Thermo Fisher Scientific "Future horizons of Cryo-Electron microscopy"
10:20 AM - 10:40 AM	Emmanuel Smith , JEOL USA "The JEOL cryoARM: Workflows for single particle analysis and tomography"	04:00 PM - 04:20 PM	Refreshment break
10:40 AM - 11:00 AM	Refreshment break	04:20 PM - 05:45 PM	Session 4 Host: Wolfgang Peti
11:00 AM - 12:20 PM	Session 2 Host: Jianbin Ruan	04:20 PM - 04:40 PM	Ivan Lomakin , Yale University "Mechanistic basis for the translation inhibition of Cutibacterium acnes by Clindamycin"
11:00 AM - 11:20 AM	Sathish Padi , UConn Health "Leveraging Cryo-EM to unveil substrate recruitment mechanisms used by the PP2A:B55 holoenzyme"	04:40 PM - 05:00 PM	Abdallah Mohamed , MIT "The structural basis for RNA slicing by human Argonaute2"
11:20 AM - 11:40 AM	Ruili Cao , Harvard Medical School "Molecular Mechanism of PP2A/B55a Phosphatase Inhibition by IER5"	05:00 PM - 05:20 PM	David Flesher , Yale University "Structure of a mutated photosystem II complex reveals changes to the hydrogen-bonding network that affect proton egress during O-O bond formation"
11:40 AM - 12:00 AM	Gerardo Perez Goncalves , MIT "Cryo-EM visualization of a multiprotein complex between human ribonucleotide reductase and a novel protein-based activity regulator"	05:20 PM - 05:30 PM	Awards Host: Wolfgang Peti
12:00 AM - 12:20 PM	Jiawei Zhao , Harvard Medical School "Structural mechanisms of olfaction in insects"	05:30 PM - 05:45 PM	Closing remark: Steven Chou & Wolfgang Peti
12:20 PM - 02:20 PM	Lunch, poster session & vendor demos	05:45 PM	Dinner

<https://health.uconn.edu/molecular-biology-biophysics/new-england-cryo-em-symposium/>

