



ACCADEMIA NAZIONALE DEI LINCEI
CENTRO LINCEO INTERDISCIPLINARE
“BENIAMINO SEGRE”

Workshop on:
**Cryo-electron microscopy. From subcellular structure
to molecular mechanism**

Rome, 17-18 March 2022 (virtual event)

Registration link: <https://forms.gle/19qB7TzjegYDjLWn8>

★ Thursday, March 17

14.15 – 14.30 Opening address from Academy members

Mario Stefanini, Director of Comitato Direttivo del Centro Linceo “Beniamino Segre”
Maurizio Brunori, Presidente emerito, Classe di Scienze FMN, Accademia dei
Lincei, Emeritus Professor of Biochemistry, University of Rome La Sapienza

14.30 – 15.15 Keynote Lecture: Richard Henderson, MRC LMB, Cambridge
The electron cryomicroscopy revolution in structural biology
(Chairperson Martino Bolognesi)

•**SESSION 1: Organelles and Viruses** (Chairperson Elena Conti)

15.15 – 15.45 John Briggs, MPI Martinsried

“In situ” structural biology of enveloped viruses

15.45 – 16.15 Gaia Pigino, Human Technopole, Milano

Structural cell biology of cilia and eukaryotic flagella

16.15 – 16.45 Giulia Zanetti, Birkbeck College, London

Cryo-electron tomography reveals the COPII coat complex architecture

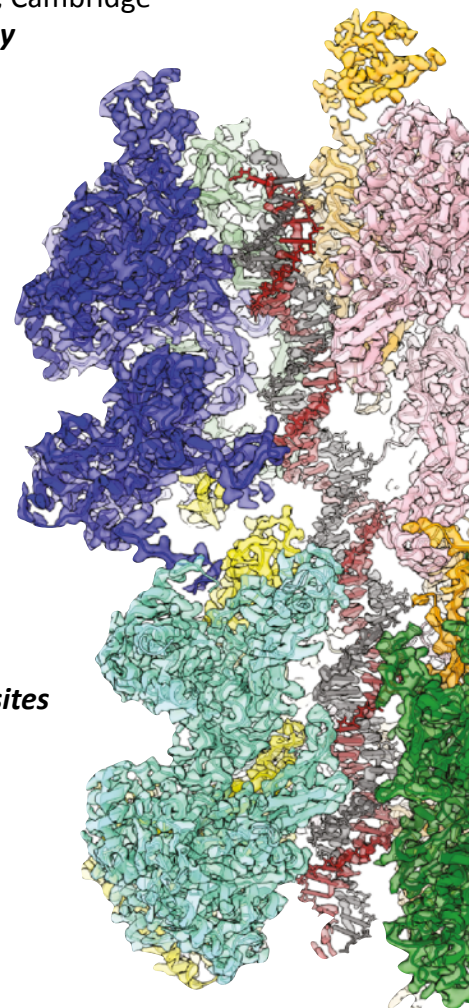
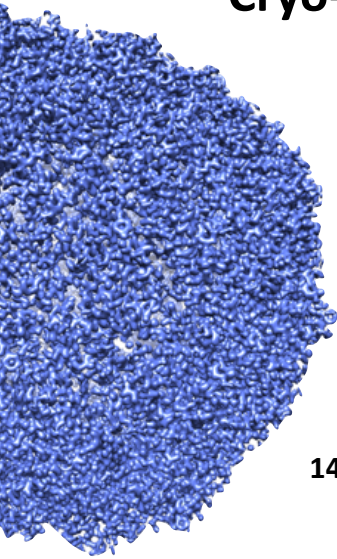
•**SESSION 2: Membrane proteins** (Chairperson Beatrice Vallone)

17.00 – 17.30 Wanda Kukulski, University of Bern

Revealing the molecular architecture of organelle contact sites by correlative microscopy

17.30 – 18.00 Martin Beck, MPI Frankfurt

Nuclear pores dilate and constrict in cellulo



18.00 – 18.30 Filippo Mancia, Columbia University, New York City
***Molecular Mechanisms Underlying Omega-3 Fatty Acid Uptake
Across the Blood-Brain Barrier***

★ Friday, March 18

•SESSION 3: Cytoplasm & assemblies
(Chairperson Alessandro Costa)

14.30 – 15.00 Andrew Carter, MRC LMB, Cambridge
How cytoplasmic dynein selects its cargo

15.00 – 15.30 Rubén Fernández-Busnadiego, University of Goettingen
***Unravelling the structure of toxic protein
aggregates in situ***

•SESSION 4: Nucleus (Chairperson Alessandro Vannini)

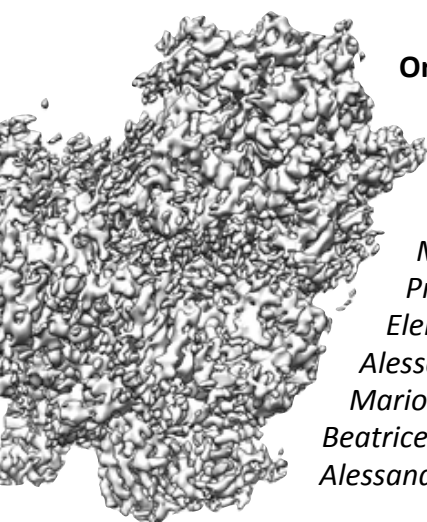
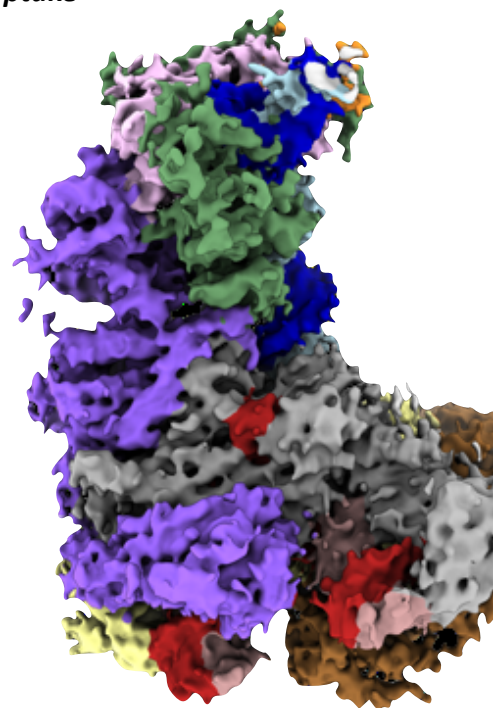
15.45 – 16.15 Lori Passmore, MRC LMB Cambridge
Molecular insights into mRNA 3'-end processing

16.15 – 16.45 Peter Cherepanov, The Francis Crick Institute, London
Using cryo-EM to study retroviral DNA integration and HIV integrase inhibitors

16.45 – 17.15 Karim Jean Armache, NYU Langone
Structures and mechanisms of chromatin regulators

17.15 – 18.00 **Keynote Lecture:** Patrick Cramer, MPI Goettingen
Molecular and cellular mechanisms of gene transcription
(Chairperson Pietro Benedetti)

18.00 **Closing remarks** (Paolo Ascenzi, Pietro Benedetti)



Organizing Committee:

Paolo Ascenzi, University Roma Tre and Accademia dei Lincei
Pietro Benedetti, University of Padua and Centro Linceo "Beniamino Segre"
Martino Bolognesi, University of Milano and Accademia dei Lincei
*Maurizio Brunori, Emeritus Classe MFSN Accademia dei Lincei. Emeritus
Professor of Biochemistry University of Rome La Sapienza*
Elena Conti, Max Planck Institute Martinsried and Accademia dei Lincei
Alessandro Costa, The Francis Crick Institute, London
Mario Stefanini, Director of Comitato Direttivo del Centro Linceo "Beniamino Segre"
Beatrice Vallone, University of Rome La Sapienza
Alessandro Vannini, Human Technopole, Milano

the workshop will be available in streaming at the link: <https://www.lincci.it/it/live-streaming-lincei-secondo-canale>