



INDIA | EMBO  
Lecture Course

# Structure, Function, And Quality Control Of Proteins In Cell Organelles

10<sup>th</sup> November 2025

## Day 1

Time	Activity	Venue
10:00-11:30	<b>Interaction session: Cell organelles, protein quality control, and human diseases</b> with <i>Mark Hipp, Oliver Mueller-Cajar, Parul Mishra, Heidi Olzscha, Giriraj R Chandak</i>	PM Bhargava Auditorium
11:30-12:30	<b>Photo exhibition on proteins in cell organelles</b>	Foyer of PM Bhargava Auditorium
12:30-14:00	Lunch and Registration	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
14:00-14:30	<b>Welcome remarks, Information and Overview</b> <i>Vinay K. Nandicoori and Basuthkar Jagadeeshwar Rao</i>	PM Bhargava Auditorium
14:30-15:10	<b>IRE1 regulates autophagy in concert with chaperone changes promotes thermotolerance in Arabidopsis thaliana seedlings during priming</b> <i>Basuthkar Jagadeeshwar Rao</i>	PM Bhargava Auditorium
15:10-15:50	<b>Functional analysis of the GroE nano-machine</b> <i>Amnon Horovitz</i>	
15:50-16:30	<b>Quality control in and at the ER</b> <i>Ineke Braakman (online)</i>	
16:30-17:10	<b>Boosting cellular defense mechanisms as a treatment for neurodegenerative diseases</b> <i>Anne Bertolotti (online)</i>	
17:10-18:00	Coffee break	Foyers
18:00-18:40	<b>Chiral Proofreading and its Implications for Organellar Translation Quality Control</b> <i>Rajan Sankarnarayanan</i>	PM Bhargava Auditorium
18:40-19:20	<b>Looking under the hood of cells from micron to atomic scales</b> <i>Jennifer Lippincott-Schwartz (online)</i>	
19:30-21:00	Dinner	Terrace of PM Bhargava Auditorium



# Structure, Function, And Quality Control Of Proteins In Cell Organelles

11<sup>th</sup> November 2025



## Day 2

Time	Activity	Venue
09:00- 09:40	<b>Protein Quality Control In The Nucleus</b> <i>Mark Hipp</i>	PM Bhargava Auditorium
09:40- 10:20	<b>Differential Stress Response by sub-mitochondrial compartments during proteotoxic stress</b> <i>Koyeli Mapa</i>	
10:20- 10:40	Selected from abstracts: <b>Fuelling life: Synergy in mitochondrial proteins and lipids</b> <i>Pooja Gupta</i>	
10:40- 11:00	Selected from abstracts: Balanced interplay among the structured and disordered domains of Ataxin2, a protein capable of forming membraneless organelles <i>Amanjot Singh</i>	
11:00- 11:30	Coffee break	Foyers
11:30- 12:10	<b>Redox processes in mitochondrial biogenesis and maintenance</b> <i>Jan Reimer</i>	PM Bhargava Auditorium
12:10-12:50	<b>Mitochondrial Import or Cleavage of PINK1 Controlled by Trans-Membrane-Domain Structural Plasticity</b> <i>Ian Collinson</i>	
12:50-13:00	Group Photograph	Near Auditorium
13:00-14:30	Lunch/Round table/Meet the speaker	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
14:30-15:10	<b>Molecular Triage at the Mitochondrial Ribosome: Early Fate Decisions for Mitochondrially Encoded Proteins</b> <i>Andreas Kohler (online)</i>	PM Bhargava Auditorium
15:10-15:50	<b>Quality control of mitochondrial precursor proteins</b> <i>Fabian den Brave</i>	
15:50-16:10	Selected from abstracts: <b>Crosstalk Between Peroxisomes and Mitochondria: A New Regulatory Axis in Huntington's Disease</b> <i>Shuvadeep Maity</i>	
16:10-16:30	<b>Flash Talks</b> (selected from abstracts) <i>Rani Ojha, Antara Chakraborty, Sayanika Banerjee, Shivapura Jagadeesha Mukul, Pallavi Rao T</i>	
16:30-17:00	Coffee break	Foyers
17:00-18:30	<b>Preparing for the next steps</b> <i>Shradha Goenka, Janine Kirstein, Richa Rikhy, Dhanasekaran Shanmugam, Rashna Bhandari, Siuli Mitra, N Madhusudan Rao, Krishnaveni Mishra</i>	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
18:30-20:00	<b>Poster session 1</b> Abstract number 1 to 61	1 <sup>st</sup> Floor Corridors of Auditorium
20:00-22:00	Dinner	Terrace of Auditorium



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## Day 3

Time	Activity	Venue
09:00- 09:40	<b>Roles of a stress-dedicated ubiquitin form in proteostasis and mitochondrial surveillance</b> <i>Mafalda Escobar-Henriques</i>	PM Bhargava Auditorium
09:40- 10:20	<b>Spatiotemporal control on <math>\alpha</math>-Synuclein amyloidogenesis</b> <i>Swasti Raychaudhuri</i>	
10:20- 11:00	<b>Mitochondrial disorders of complex assembly: diagnosis and gene discovery</b> <i>David Stroud</i>	
11:00- 11:30	Coffee break	Foyers
11:30- 12:10	<b>Protein quality control systems modulate spatiotemporal trafficking and aggregation of polyglutamine containing proteins</b> <i>Heidi Olzscha</i>	PM Bhargava Auditorium
12:10-12:50	<b>How protease networks shape the mitochondrial proteome</b> <i>Nora Vögtle (online)</i>	
12:50-13:00	Buffer time	
13:00-14:30	Lunch/Round table/Meet the speaker	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
14:30-15:10	<b>Role of mitochondrial fission in embryogenesis in Drosophila</b> <i>Richa Rikhy</i>	PM Bhargava Auditorium
15:10-15:50	<b>Mitochondrial quality control in health and disease</b> <i>Oishee Chakraborti</i>	
15:50-16:10	Selected from abstracts <b>Selective Displacement of Kinesin-1 from Lipid Droplets Modulates Organelle-Specific Transport and Lipid SecretionS</b> <i>Archisman Mahapatra</i>	
16:10-16:30	<b>Flash Talks</b> (selected from abstracts) <i>Pritam Mukherjee, Sapan Borah, Mainak Pratim Jha, Aanchal Jain, Anasuya Moitra</i>	
16:30-17:00	Coffee break	Foyers
17:00-18:30	<b>Poster session 2</b> Abstract number 62-127	1 <sup>st</sup> Floor Corridors of Auditorium
18:30-20:00	<b>Cultural evening</b> Sitar Recital by Ustad Shahid Parvez	PM Bhargava Auditorium
20:00-22:00	Dinner	Terrace of Auditorium



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## Day 4

Time	Activity	Venue
09:00- 09:40	<b>The sweet-spot of molecular chaperones in regulating amyloid proteins</b> <i>Janine Kirstein</i>	PM Bhargava Auditorium
09:40- 10:20	<b>Small GTP-binding protein Arl8b regulates lysosome biogenesis by promoting lysosomal cargo sorting from early endosomes</b> <i>Mahak Sharma</i>	
10:20- 11:00	<b>Orchestrating Lysosome Quality Control: The Role of Condensate-Membrane Interactions</b> <i>Claudio Bussi</i>	
11:00- 11:30	Coffee break	Foyers
11:30- 12:10	<b>Initial events of inhibitory signaling in human natural killer cells</b> <i>Santosh Kumar</i>	PM Bhargava Auditorium
12:10-12:50	<b>Ubiquitin codes in proteostasis</b> <i>Parul Mishra</i>	
12:50-13:00	Buffer time	
13:00-14:30	Lunch/Round table/Meet the speaker	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
14:30-15:10	<b>Foundations and regulation of the flexibility of plant organelle metabolism</b> <i>Markus Schwarzländer</i>	PM Bhargava Auditorium
15:10-15:50	<b>The cellular biochemistry of the diatom pyrenoid</b> <i>Oliver Mueller-Cajar</i>	
15:50-16:30	<b>Fitness defects due to cytosolic protein misfolding in <i>S. cerevisiae</i> can be alleviated by decreasing mitochondrial protein import capacity</b> <i>Kausik Chakraborty</i>	
16:30-16:50	Selected from abstracts <b>A lipid acyl code-based signalling axis offers mitochondrial protection in eukaryotes</b> <i>Santhosh Kumar</i>	
16:50-17:00	Buffer time	
17:00-17:30	Coffee break	Foyers
17:30-18:00	<b>To Fold or degrade? Handholding between two machineries for Proteostasis balance in the malaria</b> <i>Niti Kumar</i>	PM Bhargava Auditorium
18:00-18:30	<b>Organelle compartmentalization and regulation of metabolic functions in <i>Toxoplasma gondii</i></b> <i>Dhanasekaran Shanmugam</i>	
18:30-20:00	<b>Intercultural conflicts in science</b> <i>Challenges and opportunities Jyotsna Dhawan, Claudio Bussi, Somdatta Karak</i>	
20:00-22:00	Dinner	



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## Day 5

Time	Activity	Venue
09:00- 09:40	<b>Functional characterization of small heat shock proteins</b> <i>Prasad Kasturi</i>	PM Bhargava Auditorium
09:40- 10:20	<b>Developmental remodelling of mitochondria</b> <i>Manish Jaiswal</i>	
10:20-11:00	<b>Nuclear condensates drive transcription regulation associated with eye development</b> <i>Amitabha Majumdar</i>	
11:00-11:20	Coffee break	Foyers
11:20-11:50	Selected from abstracts: <b>Leucine Aminopeptidase LyLAP enables lysosomal degradation of membrane proteins</b> <i>Aakriti Jain</i>	PM Bhargava Auditorium
11:50-12:10	Selected from abstracts: <b>TECPR2 is a Rab5 effector that regulates endosomal cargo sorting and recycling</b> <i>Sankalita Paul</i>	
12:10-12:30	Selected from abstracts: <b>Dynamic regulation of protein homeostasis underlies acquired thermotolerance in Arabidopsis thaliana</b> <i>Mayur Bajaj</i>	
12:30 - 12:40	<i>Sponsor Talk by Medispec</i>	
12:40-14:00	Lunch/Round table/Meet the speaker	2 <sup>nd</sup> Floor of PM Bhargava Auditorium
14:00-16:00	<b>Proteomics of Protein Complexes</b> <i>David Stroud, Tushar Kanti Maiti</i>	PM Bhargava Auditorium
16:00-16:30	<b>Concluding remarks</b>	
16:30-18:00	Free time	
18:00-23:00	Excursion and gala dinner	Hotel Marigold