

## An Interdisciplinary Approach to Biological Sciences 5<sup>th</sup> IABS, 6-8<sup>th</sup> February 2025



Indian Association for Cultivation of Sciences, Kolkata, India

## Day 1 (6<sup>th</sup> February, 2025)

TIME	SESSION / LECTURE TITLE	SPEAKER	
8:00-9:00	Registration (In front of MLS Hall) / Poster set up (Centenary Building 1st floor)		
9:00-9:30	Inaugural Session: by IACS Director, Dr. Arindam Banerjee (MLS HALL)		
Session 1: Cell Signalling 1, Chairs: Dr. Chandrima Shaha and Dr. Prasanta Kumar Das			
09:30-09:55	<b>(L1)</b> Epigenetic maneuvering is an emerging strategy of <i>M. tuberculosis</i> for its mycobacterial intracellular survival	Dr. Valakunja Nagaraja	
09:55-10:20	<b>(L2)</b> Heterochromatin ensures kinetochore integrity and 3D genome assembly in the human fungal pathogen <i>Cryptococcus neoformans</i>	Dr. Kaustav Sanyal	
10:20-10:45	<b>(L3)</b> Convergent and divergent determinants of heterogeneity, biomarkers, and plasticity in thoracic and prostate neuroendocrine tumors	Dr. Triparna Sen	
10:45-11:10	<b>(L4)</b> Deciphering the Renal Consequences of Intravascular Hemolysis in Sickle Cell Disease	Dr. Samit Ghosh	
11:10-11:30	11:10-11:30 Tea/ coffee Break (Adjacent to MLS Hall)		
Session 2: Cell Signalling 2, Chairs: Dr. Shunichi Takeda and Dr. Triparna Sen			
11:30-11:55	<b>(L5)</b> Coagulation proteases release extracellular vesicles from endothelial cells: their potential therapeutic effects in treating bleeding and inflammatory disorders	Dr. Vijaya Mohan Rao Lella	
11:55-12:20	<b>(L6)</b> CHK1-mediated regulation of TOP1 catalytic activity suppresses replication and transcription-associated genomic instability	Dr. Birija Sankar Patro	
12:20-12:45	(L7) Vascular view on spatial heterogeneity in Glioblastoma	Dr. Saran Kumar	
12:45-13:10	<b>(L8)</b> Metabolic Control of Regulatory T Cell (Treg) Plasticity, Stability, and Functionality in the Tumor Microenvironment	Dr. Shilpak Chatterjee	
13:10-13:35	<b>(L9)</b> CMTM6-driven membrane lipid remodeling modulates CMTM6-PD-L1 interactions and stabilizes PD-L1 by inhibiting lysosomal and proteasomal degradation	Dr. Prosenjit Sen	
13:35-15:00	<b>Lunch</b> (Food Court)		
15:00-17:30	POSTER SESSION I + Tea/coffee (Centenary Building 1 <sup>st</sup> floor)		
Session 3: Cellular and Molecular Biophysics 1, Chairs: Dr. Vijaya Mohan Rao Lella and Dr. Valakunja Nagaraja			
17:30-17:55	<b>(L10)</b> Polymer models for chromatin domain structure and dynamics: Interplay between cohesin kinetics and polymer relaxation	Dr. P. B. Sunil Kumar	
17:55-18:20	<b>(L11)</b> Proteolytic and non-proteolytic functions of MMP9 in cancer invasion	Dr. Shamik Sen	
18:20-18:45	(L12) Building Computer and AI with Genetically Engineered Cell	Dr. Sangram Bagh	
18:45-19:10	(L13) Receptor density dictates TNFR1 clusters' signaling efficacy	Dr. Deepak K. Sinha	
19:10-22:00	<b>Dinner</b> (Food Court)		