

Computational Biology Conference 2.0

December 8 – 10, 2025

Program






Organized by

**Indian Biological Data Centre
Regional Centre for Biotechnology
Faridabad, Haryana, INDIA**






Day 1: December 8, 2025

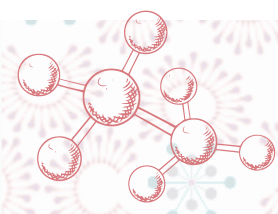


9:30 AM – 11:10 AM	CBC2.0 Inaugural Ceremony	
11:10 AM – 11:30 AM	Tea Break	
Session I		
11:30 AM – 12:10 PM	Prof. Shankar Subramaniam University of California, San Diego (UCSD), USA <i>Why have we not cured Alzheimer's disease? Reprogramming of the human brain</i>	
12:10 PM – 12:50 PM	Dr. Richi Mahajan Department of Biotechnology, India <i>From Information to Innovation: Building India's Integrated Bioinformatics Ecosystem</i>	
12:50 PM – 1:00 PM	Conference Photograph	
1:00 PM – 02:00 PM	Lunch Break	
Session II		
02:00 PM – 02:40 PM	Dr. Thomas Keane EMBL-European Bioinformatics Institute (EMBL-EBI), UK <i>The structural diversity of telomeres and centromeres across mouse subspecies revealed by complete assemblies</i>	
02:40 PM – 03:20 PM	Dr. Shantanu Chowdhury CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, India <i>The Breast Cancer Genome Atlas from India: Biomarker Panels Predicting Cancer Recurrence among Indian patients</i>	
03:20 PM – 04:00 PM	Prof. Andrew Lynn Jawaharlal Nehru University (JNU), New Delhi, India <i>Hybrid Physics-Based and Machine Learning Frameworks for Predicting Fragment and Small-Molecule Binding Affinities</i>	
04:00 PM – 04:20 PM	Tea Break	
Session III		
04:20 PM – 05:00 PM	Dr. Lipi Thukral CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, India <i>AI/ML applications in structural biology</i>	


05:00 PM – 05:40 PM (Online)	Dr. Analabha Basu National Institute of Biomedical Genomics (NIBMG), Kalyani, West Bengal, India <i>From Diversity to Equity: Population-Structured Genomics of India as a Framework for Discovery and Equitable Health Prediction</i>
5:40 PM – 6:10 PM	Mr. Amit Deshmukh Hitachi Vantara <i>Accelerating Scientific Workloads with Hitachi HCSF and VSP One Data Platform</i>
6:10 PM – 6:40 PM	Ms. Lavanya Sood Amazon Web Services (AWS) <i>Design considerations for securely storing and efficiently accessing large biological datasets on cloud</i>
6:40 PM Onwards	Gala Dinner 

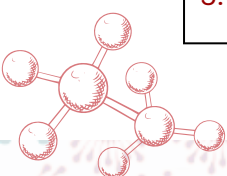
Day 2: December 9, 2025

Session IV		
09:30 AM – 10:10 AM	Dr. Juan Antonio Vizcaino EMBL-European Bioinformatics Institute (EMBL-EBI), UK <i>Status of open data practices in proteomics and metabolomics: Making proteomics and metabolomics data FAIR</i>	
10:10 AM – 10:50 AM	Prof. Himanshu Sinha Indian Institute of Technology Madras, India <i>Bridging the Gap between Variant-to-Function for Genetic Interactions through Integrative Multiomics Approaches</i>	
10:50 AM – 11:10 AM	Tea Break	
11:10 AM – 11:50 AM	Prof. David Westhead University of Leeds, United Kingdom <i>Towards personalized medicine: machine learning methods applied to lymphoma</i>	
11:50 AM – 12:30 PM	Dr. Susan Thomas ICMR-National Institute for Research in Reproductive and Child Health (ICMR-NIRRH), Mumbai, India <i>Integrative Computational Strategies to Decipher Metabolic Syndrome Pathophysiology</i>	
12:30 PM- 1:10 PM	Dr. Shachi Gosavi National Centre for Biological Sciences (NCBS), Bengaluru, India <i>A role for the transmembrane domains of class I viral fusion proteins in viral fusion</i>	
1:10 PM – 2:10 PM	Lunch Break	
02:10 PM – 05:30 PM	Poster Session / Sponsors Exhibition (Tea break at 3:30PM)	
5:30 PM – 06:30 PM	Cultural Program	
6:30 Onwards	Dinner	



Day 3: December 10, 2025

Session V	
09:30 AM – 10:10 AM	Dr. Leelavati Narlikar Indian Institute of Science Education and Research (IISER) Pune, India <i>Decoding DNA signatures behind genome organization and regulation</i>
10:10 AM – 10:50 AM	Dr. Chetan Gadgil CSIR-National Chemical Laboratory (CSIR-NCL), Pune, India <i>Quantitative Systems Pharmacology model for EPTB</i>
10:50 AM – 11:20 AM	Tea Break 
11:20 AM – 12:00 PM	Dr. Debarka Sengupta Indraprastha Institute of Information Technology, Delhi <i>Cancer Research in the Age of AI and Agents</i>
12:00 PM – 12:40 PM	Prof. Angshuman Bagchi University of Kalyani, West Bengal, India <i>Non-coding RNAs & their protein products - new players in disease onsets</i>
12:40 PM – 2:00 PM	Lunch Break 
Session VI	
02:00 PM – 02:40 PM (Online)	Prof. Nagasuma Chandra IISc, Bengaluru, India <i>Multiscale modelling of immune responses to Influenza and Covid-19</i>
02:40 PM – 03:20 PM	Dr. Shweta Ramdas Indian Institute of Science, Bengaluru, India <i>Capturing India's phenotypic diversity: health insights from the GenomeIndia cohort</i>
3:20 PM – 03:40 PM	Dr. Sunitha M Kasibhatla Centre for Development of Advanced Computing (CDAC), Pune, India <i>Integrated Computing Environment for Precision Public Health: Initiatives at Centre for Development of Advanced Computing, Pune</i>
3:40 PM - 04:10 PM	Tea Break 
4:10 PM – 05:00 PM	Selected Flash talks (three talks 20 mins)
5:00 PM – 05:30 PM	Prize Distribution and closing Remarks





Abstract Booklet

CBC 2.0 Feedback

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Organized by

**Indian Biological Data Center,
Regional Centre for Biotechnology,
NCR Biotech Science Cluster, 3rd Milestone, Faridabad-Gurugram
Expressway, Faridabad – 121 001**
IBDC: <https://ibdc.dbtindia.gov.in>
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