SBC(I) 94th Annual Meeting

International Conference on

Biological Communications in Disease and Development

ABSTRACT BOOK

December 17-19, 2025

Organized by
Department of Biochemistry, School of Life Sciences
University of Hyderabad, Hyderabad, Telangana, India.



SBC(I) 94th ANNUAL MEETING

at the University of Hyderabad, Hyderabad, Telangana
Scientific Theme:

'Biological Communications in Disease and Development'

About the SBCI

The Society of Biological Chemists, India [SBC(I)] is one of India's oldest and most prominent scientific organizations dedicated to advancing the field of biological chemistry. Founded in 1930 and headquartered at the Indian Institute of Science (IISc), Bengaluru, it aims to coordinate research efforts among biological chemists across India and connect with the world.

The SBC(I) organizes annual meetings as part of its major activities. The 94th Annual Meeting and International conference on the theme 'Biological Communications in Disease and Development' (ICBCDD) is being organized at the University of Hyderabad, Hyderabad and is scheduled for December 17-19, 2025. About 400 plus delegates, including 300 students and 100 national & international scientists are being participated in this scientific event.

About the Host: University of Hyderabad

The University of Hyderabad (UoH) is a premier academic institution with an Institute of Eminence (IoE) status, founded in 1974, and offers various courses for UG, PG, and PhD programs. This conference is being organised by the Department of Biochemistry (DoB), School of Life Sciences, University of Hyderabad. The DoB offers quality teaching at Master's level and cutting-edge research program for PhD students as well as Postdoctoral Fellowships (PDFs) at the University of Hyderabad.

About the Conference

The international conference on Biological Communications in Disease and Development is a focused scientific gathering that explores the vital roles of cellular and molecular communication in shaping organismal development and driving disease processes. This interdisciplinary conference brings together researchers from developmental biology, pathology, molecular biology, neuroscience, systems biology, etc., to examine how signaling networks govern health and contribute to disease.

This conference offers a collaborative platform for presenting cutting-edge research and fostering dialogue on the following thematic areas such as:

- Signaling networks in disease and development
- Neuronal communication; Immunological signaling and network
- Novel therapeutic strategies targeting signaling networks for various diseases
- Genomic and genetic networks in disease and development
- Molecular mechanisms of developmental disorders
- Microbial communications in disease progression
- Plant cell communications in growth, development, and responses to stress
- Structural insights of biomolecules
- Systems and Synthetic Biology
- Enzyme catalysis and Enzyme engineering
- Various disease models and mechanisms

Chief Patron



Prof. B. J. Rao
Vice Chancellor
University of Hyderabad

Patron



Prof. Anand Kumar Kondapi
Dean, School of Life Sciences
University of Hyderabad

National Advisory Committee



Dr. Ullas S Kolthur
Director, CDFD



Dr. Bharati Kulkarni
Director, NIN



Prof. S. Dayananda
University of Hyderabad



Dr. Srinivas Oruganti
Director, DRILS

Convenors

Prof. Bramanandam Manavathi

Prof. Naresh Babu Sepuri

Prof. Krishnaveni Mishra

Organizing Secretary

Prof. Suresh Babu Pakala

Local Advisory Committee

Prof. Naresh Babu Sepuri
Prof. Nagarajaram HA
Prof. Arun Kumar Kota
Prof. Ragiba Makandar
Prof. M. Venkataramana

Scientific Committee

Prof. Mrinal Kanti Bhattacharyya
Prof. Sharmistha Banerjee
Prof. Prakash Prabhu
Prof. Sunanda Bhattacharyya
Prof. Rahul Kumar
Prof. Irfan Ahmad Ghazi
Dr. Arunasree Kale

Dr. Akash Gulyani
Dr. Seema Mishra
Dr. Parul Mishra
Dr. Mrigya Babuta
Dr. Vivek Thakur
Dr. Shashi Kiran

Accommodation and Transportation Committee

Prof. Ravi Kumar Gutti
Dr. Vijay Morampudi
Dr. Syam Lal M
Dr. Venkata Prasuja

Registration and Reception Committee

Prof. Padmaja Gudipalli
Dr. Jogi Madhuprakash
Dr. Manjari Kiran
Dr. Moumita Saharay

Food and Logistics Committee

Prof. Rajagopal Subramanyam
Prof. A Bindu Madhav Reddy
Prof. Ajay W. Tumaney
Dr. Roy Karnati

Cultural,
AudioVisual &
Stage Logistics Committee

Prof. Santosh Kumar Padhi
Dr. Mohd. Akif
Dr.Anil Kumar Pasupulati
Dr.Parul Mishra
Dr.Ganji Rakesh

Volunteers

Many Volunteers from the School of Life Sciences, UoH

Scientific Program

Wednesday, 17th December, 2025 (Day 1)

9:00 AM - 1:00 PM: **Registration**
Venue: **Dr Zakir Husain UPE Lecture Hall complex (ZHLH)**

09:30 AM - 11.00 AM

Inauguration & Presidential address:
Venue: Savitribai Phule DST Auditorium

1. Invocation (Lightning of the lamp; Saraswati Vandanam)
2. Welcome address by the Convenor, SBC(I) 94th Annual meeting
3. Address by HoD, Biochemistry & Dean SLS, UoH
4. Inaugural Address by Vice Chancellor, UoH
5. Introduction of the President, SBC(I)
Presidential address: Prof.Hemalatha Balaram
Title: An unusually stable succinimide in a hyper thermostable GATase: investigations on formation, stability and function.
6. Vote of Thanks

11:00 AM - 11.30 AM – HIGH TEA

11.30 AM-12:00 PM: **Keynote Address**

Chairperson: Prof. B. J. Rao

Keynote Speaker: Prof. Sandhya Visweswariah, IISc., Bengaluru

Title: Gut reactions and gut instincts: the role of cGMP

12.00 PM-1:00 PM: SBC(I) Award Lectures

Chairperson: Prof. Hemalatha Balaram

1. P. S. Sarma Memorial Award lecture: Dr. Sanjeev Shukla, IISER Bhopal
   Title: A Hypoxia-Induced Epigenetic-Splicing Axis Promotes EMT in Breast Cancer
2. P. A. Kurup Endowment Award lecture: Dr. Ravishankar Ramachandran, CDRI, Lucknow.
   Title: Novel Mechanisms of AP-Site Recognition and Repair in DNA and mRNA: Insights from Mycobacterium tuberculosis

1:00 PM - 2:00 PM - LUNCH

02:00 PM - 03:40 PM

Session I (Parallel): Molecular Microbiology
Venue: ZHLH- G9
Chairpersons: Prof. Umesh Varshney & Prof. S. Dayananda
Speakers: 4 (25 min talks)
Session Coordinator: Jayshree Singh

Mechanism of multistep inhibition of Mycobacterium tuberculosis Topoisomerase I by a mAB	Prof. V. Nagaraja, IISc, Bengaluru
A conserved editing mechanism for the fidelity of bacterial cell wall biosynthesis	Dr. Manjula Reddy, CCMB, Hyderabad
A tale of two transporters	Dr.Anand Bachhawat, IISER Mohali
A face-off between pro- and anti-recombinases: implications on *Plasmodium* pathogenesis	Prof. Mrinal Kanti Bhattacharyya, UoH, Hyderabad

<table>
<tr><td rowspan="5">02:00 PM - 03:40 PM</td><td colspan="2">Session II (Parallel): Cancer Biology I
Venue: ZHLH- F6
Chairpersons: Prof. Sandhya Visweswaraiah & Prof. P. Reddanna
Speakers: 4 (25 min talks)
Session Coordinator: A. Indumathi</td></tr>
<tr><td>Distinct Functions of IGF2BP2 and HNRNPA2B1 in the m^{6}A-Dependent Processing of H19 lncRNA</td><td>Prof. Kumaravel Somasundaram, IISc, Bengaluru</td></tr>
<tr><td>Deconvolution of Intratumoral heterogeneity to devise better therapeutic options in metastatic breast cancer</td><td>Dr. Radhika Nair, CHG, Bengaluru</td></tr>
<tr><td>Transcriptomic diversity with associated biological relevance in head and neck cancer</td><td>Dr. Rana Pratap Singh, JNU, New Delhi</td></tr>
<tr><td>Stem Cell Plasticity in Regenerative Medicine and Cancer</td><td>Dr. Thamil Selvee Ramaswamy, University of Malaya, Malasia</td></tr>
<tr><td rowspan="5">02:00 PM - 03:40 PM</td><td colspan="2">Session III (Parallel): Structural Biology
Venue: ZHLH- S5
Chairpersons: Dr. Aravind Penmatsa and Prof. S. Rajagopal
Session Coordinator: Kousamvita Das
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Chirality based proofreading systems and their evolutionary implications</td><td>Dr.R Sankarnarayanan CCMB, Hyderabad</td></tr>
<tr><td>Poly (ADP) ribose is a nucleic acid-like polymer: Allosteric agonist, antagonist, and inverse agonist of Poly (ADP-ribose) polymerase 1</td><td>Dr. Rajakumara Eerappa, IIT Hyderabad</td></tr>
<tr><td>Overcoming Resistance: Dual Targeting of SARS-CoV-2 Proteases</td><td>Dr.Anthony Adlagatta, IICT, Hyderabad</td></tr>
<tr><td>Cryo-EM structure of a helper NLR–effector complex reveals a stepwise resistosome assembly mechanism</td><td>Dr.J Madhu Prakash, UoH, Hyderabad</td></tr>
<tr><td colspan="3">3:40 PM- 4:00 PM- TEA BREAK</td></tr>
</table>

<table>
<tr><td rowspan="5">04:00 PM - 05:40 PM</td><td colspan="2">Session IV (Parallel): Cell Biology
Venue: ZHLH- G9
Chairpersons: Dr. R. Purusharth and Dr. Manjula Reddy
Session Coordinator: M. Manikandan
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Aurora A regulates the material properties of spindle poles to orchestrate nuclear organization at mitotic exit</td><td>Dr. Sachin Kotak, IISc, Bengaluru</td></tr>
<tr><td>The many facets of the epigenetic regulators</td><td>Dr.Shweta Tyagi, CDFD</td></tr>
<tr><td>The Builders Behind mTOR: How Phosphatases Shape a Kinase Machinery</td><td>Dr. Maddika Subba Reddy, CDFD</td></tr>
<tr><td>Matrix - Mechanosensing - More: A Golgi Story</td><td>Prof. Nagaraj Balasubramanian, IISER Pune</td></tr>
<tr><td rowspan="5">04:00 PM - 05:40 PM</td><td colspan="2">Session V (Parallel) : Metabolic Regulation in Disease and Development
Venue: ZHLH- F6
Chairpersons: Prof. N. Siva Kumar & Prof. Krishnaveni Mishra
Session Coordinator: Satarupa Sarkar
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Mitochondrial tuning of stem cell fate.</td><td>Prof. Maneesha S. Inamdar, InStem, Bengaluru</td></tr>
<tr><td>Methylglyoxal burden defines metabolic vulnerabilities in glioma</td><td>Dr. Ellora Sen, NBRC, Gurgaon</td></tr>
<tr><td>Functions of P311 in Regulating Adipocyte Plasticity and Heterogeneity</td><td>Dr. Kameswara Rao Badri, MSM, USA</td></tr>
<tr><td>Unravelling a Novel MAPK7-EZH2 molecular Axis linking Ox-LDL–Induced Metabolic Stress to Endothelial Dysfunction</td><td>Dr.Umesh Chand, JNU, New Delhi</td></tr>
</table>

<table>
<tr><td rowspan="5">04:00 PM - 05:40 PM</td><td colspan="2">Session VI (Parallel): Plant Biology I
Venue: ZHLH- S5
Chairpersons: Prof. Apparao Podile & Prof. Ragiba Makandar
Session Coordinator: Sukadev Rana
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Molecules from dietary sources that convert white to brown adipose tissue</td><td>Prof. Ram Rajasekharan, CUTN, Tamil Nadu</td></tr>
<tr><td>The transcription factor PIF3 promotes thermosensory growth in Arabidopsis</td><td>Prof. Sreeramaiah Gangappa, IISER Kolkata</td></tr>
<tr><td>Cytokinin and Root Cap Signaling: Balancing Growth, Immunity, and Pathogen Susceptibility</td><td>Dr. Eswarayya Ramireddy, IISER Tirupati</td></tr>
<tr><td>Plants Epigenome Modulation in Land and Lab</td><td>Prof. Sribash Roy, UoH, Hyderabad</td></tr>
<tr><td colspan="3">5:40 PM - 7:30 PM: POSTER SESSION</td></tr>
<tr><td colspan="3">7:30 PM - 8:30 PM: Cultural Program :
Savitribai Phule DST Auditorium</td></tr>
<tr><td colspan="3">5:40 PM - 6:10 PM: EC Meeting (Conference Hall-ZHLH)</td></tr>
<tr><td colspan="3">6:10 PM - 7:00 PM: General Body Meeting (ZHLH -G9)</td></tr>
<tr><td colspan="3">8:30 PM ONWARDS: DINNER</td></tr>
</table>

Thursday, 18th December, 2025 (Day 2)

9:30 AM-10:00 AM: **Plenary Lecture**

Venue: DST Auditorium

Chairperson: Prof. Dipankar Nandi

Speaker: Prof. Balasubramanian Gopal, IISc, Bengaluru

Title: Design of synthetic biology tools for engineering biological systems

10:00 AM-10:30 AM: **SBC(I) Award Lecture**

Venue: Savitribai Phule DST Auditorium

Chairperson: Prof. Anand K. Kondapi

Burma Memorial Award lecture: Prof. KN Balaji, IISc, Bengaluru

Title: Altered regulation of iron metabolism and ferroptosis during Mtb infection

10:30 AM - 11.00 AM –TEA BREAK

11:00 AM - 1:05 PM

Session VII (Parallel): Neurobiology & Cellular Biochemistry

Venue: ZHLH- G9

Chairpersons: Dr. Ellora Sen and Prof. B. Senthilkumaran

Session Coordinator: Dipanwita Biswas

Speakers: 5 (25 min talk)

The chaperone-like activity of transthyretin prevents α-synuclein amyloid assembly	Dr. Neha Jain, IIT Jodhpur
Role of mitochondria, protein turn-over	Dr. Shasi Vardhan Kalivendi, IICT,

	mechanisms and paracrine pathways in the mechanisms mediating Parkinson's disease	Hyderabad
	Restoring the reproductive pulse: Precision KISSPEPTIN delivery to KNDY neurons	Dr.Taru Sharma, NIAB, Hyderabad
	Increased peroxisome number in yeast Parkinson's disease model is independent of the division proteins Vps1 and Dnm1	Dr.Sirisha Nagotu, IIT Guwahati
	Impact of Ubiquitination on the Morphogenesis and Virulence of Candida albicans and Host Response.	Dr.Ratna Prabha Chivukula, MSU, Vadodara
11:00 AM - 1:05 PM	**Session VIII (Parallel): Cancer Biology II** **Venue: ZHLH- F6** **Chairpersons:** Prof. K. Somasundaram and Prof. B. Manavathi **Session Coordinator:** Tanisha Singla **Speakers:** 5 (25 min talks)	
	Understanding the non-canonical functions of Caspases	Prof. Sanjeev Das, NII, New Delhi
	Novel pre-clinical models to study secondary resistance and toxicity of cancer chemotherapeutics	Dr.Kancha Ramakrishna Osmania University, Hyderabad
	Withaferin-A from Ashwagandha: A Promising Frontier in Oral Cancer Treatment	Prof. Ajaikumar B. Kunnumakkara, IIT Guwahati
	IGFBP-Mediated Regulation of Tumor Microenvironment Heterogeneity	Dr.Sharath C. Arandkar, ACTREC-TMC, Mumbai
	Presentation by Leica Biosystems-Tool for 3D High Multiplex Imaging in Cancer Immunology	

<table>
<tr><td rowspan="6">11:00 AM - 1:05 PM</td><td colspan="2">Session IX (Parallel): Organelle Biology and Energetics
Venue: ZHLH- S5
Chairpersons: Prof. Ganesh Nagaraju & Prof. Sreenivasulu Kurukuti
Session Coordinator: Dheeraj Pathak
Speakers: 5 (25 min talks)</td></tr>
<tr><td>TBA</td><td>Dr. Ullas Kolthur, BRIC-CDFD, Hyderabad</td></tr>
<tr><td>Mitochondrial Calcium Uniporter: Regulation, and Implications in Cellular Metabolism and Disease</td><td>Dr.Dharmendra Thomar, WFU, USA</td></tr>
<tr><td>Regulation of mitochondrial and Golgi dynamics</td><td>Prof. S. Murthy Srinivasula, IISER Trivandrum</td></tr>
<tr><td>A high energy phosphate jump - from pyro-phosphoinositol to pyro-phosphoproteins</td><td>Dr. Rashna Bhandari, BRIC-CDFD, Hyderabad</td></tr>
<tr><td>Understanding the Mechanism and Pathophysiology of Venous Thromboembolism</td><td>Dr.Vijay Sonkar, BHU, Varanasi</td></tr>
<tr><td colspan="3">1:05 PM - 2:00 PM - LUNCH</td></tr>
<tr><td rowspan="2">2:00 PM - 3:40 PM</td><td colspan="2">Session X (Parallel): Molecular Microbiology & Infection Biology
Venue: ZHLH- G9
Chairpersons: Dr. Saman Habib and Prof. Sunanda Bhattacharyya
Session Coordinator: Yashmita Choudhary
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Mycobacterial MutT1 regulates nucleoside diphosphate kinase (NDK)</td><td>Prof. Umesh Varshney, IISc,</td></tr>
</table>

	and two-component signalling (TCS) activities	Bengaluru
	Molecular Blueprints of Candida glabrata pathogenicity	Dr. Rupinder Kaur, BRIC-CDFD, Hyderabad
	Chemo-resistance of oral squamous cell carcinoma: Role of TLS DNA polymerases	Dr. Narottam Acharya, ILS, Bhubaneswar
	Interaction of hACE2 with SARS-CoV-2 Spike resembles a DNA-protein interaction.	Dr. Raghavendra Nidhanapati, IIT Hyderabad
2:00 PM - 3:40 PM	**Session XI (Parallel): Immunology** **Venue: ZHLH- F6** **Chairpersons:** Prof. Shailaja Singh and Prof. Sharmistha Banerjee **Session Coordinator:** Nandini Wankar **Speakers:** 4 (25 min talk)	
	Balancing Cisplatin's Potency and Kidney Safety with Urolithin A Nanoparticles	Dr. Ravi Majeti, UA, USA
	Inflammation in balance: How lipids keep the immune system in check !	Dr. Paras Anand, ICL, UK
	Bridging the Toll Pathways: The Pivotal Role of TIR Domain-Containing Adaptor Protein (TIRAP) in Chronic Inflammatory Signaling	Dr. Mirza Saqib Baig, IIT Indore
	Regulation of an Alternate SMC Complex in Mycobacteria: Insights from MksB and Its Accessory Proteins	Dr. Ravi Kumar, JNU, New Delhi

<table>
<tr><td rowspan="5">2:00 PM -3:40 PM</td><td colspan="2">Session XII (Parallel): Stem Cell Biology & Tissue Regeneration
Venue: ZHLH- S5
Chairpersons: Dr. Sandeep Eswarappa & Dr. Rashna Bhandari
Session Coordinator: Sandhya Ragula
Speakers: 4 (25 min talk)</td></tr>
<tr><td>Peg Cell is a Candidate Cell-of-Origin for High-Grade Serous Ovarian Cancer</td><td>Dr.Nagarajan Khannan, Mayo Clinic, USA</td></tr>
<tr><td>WDR62 on the Move: From Centrosome to Membrane in Glioblastoma</td><td>Dr. Pavithra Chavali, IISER Tirupati</td></tr>
<tr><td>Histone methylation regulates non-canonical Wnt signaling and metabolic reprogramming via c-Jun/Sox2/HIF1α in squamous cell carcinoma</td><td>Dr. Sanjeev Waghmare, ACTREC, Mumbai</td></tr>
<tr><td>‘Let there be light’: Discovery of new light sensing organs, photoreceptors and light dependent physiology provides a window into regeneration</td><td>Dr. Akash Gulyani, UoH, Hyderabad</td></tr>
<tr><td colspan="3">3:40 PM- 4:00 PM- TEA BREAK</td></tr>
<tr><td rowspan="5">4:00 PM-5:30 PM</td><td colspan="2">Session XIII (Parallel): Lectures by Young Scientists Infection Biology
Venue: ZHLH- G9
Chairpersons: Dr. Rupinder Kaur and Dr. Narottam Acharya
Student coordinator: Deepak Kumar Rout
Speakers: 6 (12+ 3 min)</td></tr>
<tr><td colspan="2">Pooja Kumari Kushwaha</td></tr>
<tr><td colspan="2">Shubhangi Chakraborty</td></tr>
<tr><td colspan="2">Asmita Chakraborty</td></tr>
<tr><td colspan="2">Chandan Kumar Verma</td></tr>
</table>

	Amit Lalwani
	Ankit Gupta
4:00 PM-5:30 PM	**Session XIV (Parallel): Lectures by Young Scientists** **Cancer Biology** **Venue: ZHLH- F6** **Chairpersons:** Dr. M. Subba Reddy and Prof. Suresh Pakala **Session Coordinator:** Adyasha Sarangi **Speakers: 6** (12+ 3 min)
	Ramakrishna Vadde
	Yasaswi Gayari Mishra
	GV Harshitha
	Namita Chutani
	Shaonlee Ghosh
	Shikha Sree
4:00 PM-5:30 PM	**Session XV (Parallel):** ***Lectures by Young Scientists*** **Enzymology and Drug Targets** **Venue: ZHLH- S5** **Chairpersons:** Prof. R. Maurya and Prof. P. Prakash Prabhu **Session Coordinator:** Y. Lahari **Speakers:** 6 (12+ 3 min)
	Harish Holla
	Anuska Agarwal
	Kavishankar Gawli
	Pramodh Rao N
	Prachi Garg
	Anindya Roy
5:30 PM- 6:00 PM: **Presentations by Sponsors: ZHLH- G9**	
6:00 PM - 7:30 PM: POSTER SESSION	
7:30 PM ONWARDS: DINNER	

Friday, 19th December, 2025 (Day 3)

9:30 AM-11:35 AM	**Session XVI (Parallel):** **Cell and Developmental Biology** **Venue: ZHLH- G9** **Chairpersons:** Prof. N. B. V. Sepuri and Prof. Gutti Ravi Kumar **Session Coordinator:** K. Vijay Prasad **Speakers: 5** (25 min talk)	
	Hidden Architects of Collective Cell Migration: Rethinking How Organelles Orchestrate Cellular Coordination	Dr. Tamal Das, TIFR Hyderabad
	Roles for secreted proteins in maintaining organismal proteostasis	Dr. Prasad Kasturi, IITMandi
	The Architecture of the Cell: Deep Evolutionary Roots and the Emergence of the Eukaryotic Cytoskeleton	Dr. Saravanan Palani, IISc, Bengaluru
	The Tragedy of Mitotic Catastrophe in Glomerular Podocytes and Implications in Kidney Disease	Dr. Anil Kumar Pasupulati, UoH, Hyderabad
	Human-Relevant, Non-Animal: Enabling India to Fast-Track Disease Modeling'	Dr. Madhusudhana Rao, AIC-CCMB

<table>
<tr><td rowspan="6">9:30 AM-11:35 AM</td><td colspan="2">Session XVII (Parallel): Genome Stability and Regulation
Venue: ZHLH- F6
Chairpersons: Prof. V. Nagaraja and Dr. Sachin Kotak
Student Coordinator: Bhaskar Das
Speakers: 5 (25 min talk)</td></tr>
<tr><td>Control of telomere and telomerase (hTERT) by the chromatin remodeling proteins</td><td>Prof. Samit Chattopadhyay, BITS, Goa</td></tr>
<tr><td>Visualization of Id3 transcription kinetics in response to TCR</td><td>Prof. Jagan Pongubala, UoH, Hyderabad</td></tr>
<tr><td>Role of RNF20 and RAD51 paralogs in replication stress responses and genome stability</td><td>Prof. Ganesh Nagaraju, IISc, Bangalore</td></tr>
<tr><td>Regulation of D-galactonate metabolism in enteric bacteria: implication in colonization and virulence</td><td>Dr. Rachna Chaba, IISER Mohali</td></tr>
<tr><td>Magical: A Systems and ML-Based Framework for Genetic Interactions Underlying Genome Stability</td><td>Dr Manjari Kiran, UoH, Hyderabad</td></tr>
<tr><td rowspan="2">9:30 AM-11:35 AM</td><td colspan="2">Session XVIII (Parallel): Chemical Biology and Drug Design
Venue: ZHLH- S5
Chairpersons: Dr. Anthony Adlagatta and Prof. Ajay Tumaney
Session Coordinator: Anupriya Shekhar
Speakers: 5 (25 min talk)</td></tr>
<tr><td>Dendritic Architectural Design for Smart Nanostructures as Targeting Agents for Tracking Ischemic Stroke:</td><td>Dr. Pramod Avti, PGIMER,</td></tr>
</table>

	Towards Theranostic Applications	Chandigarh
	Integrating CRISPR/Cas and Nanotechnology for Next-Generation Precision Therapeutics	Dr.Deepak Chitkara, BITS-Hyderabad
	Three-Dimensional Genome Architecture of Pathogenic Oomycetes holds cue for pathogenicity	Dr. Suchetha Tripathy, IICB,Kolkata
	Molecular insights of complementary diastereoselective nitroaldol synthesis by a hydroxynitrile lyase: An unusual promiscuous catalytic activity	Prof. Santosh Padhi, UoH, Hyderabad
	Clinical presentation of metabolic dysregulation in chronic pancreatitis-Pancreatogenic diabetes	Dr. Shashikala M, AIG, Hyderabad
11:35 AM- 11:50 AM- TEA BREAK		
11:50 AM - 1:30 PM	**Session XIX (Parallel): Genomics and Systems Biology** **Venue: ZHLH- G9** **Chairpersons:** H. A. Nagarajaram & Dr. Shweta Tyagi **Session Coordinator:** P. Vidya Vardhini **Speakers: 4** (25 min talk)	
	Cytochrome P450 Monooxygenases: Past Developments, Current Insights, and Future Directions	Prof. Syed Khajamohiddin, UZ, RSA
	Design principles underlying functionality of proteins with amino acid repeats	Dr. Sreenivas Chavali, IISER Trivandrum
	Mapping variant-to-function (V2F) for genetic interactions through integrative multiomics, metabolic flux and network modelling	Dr.Himanshu Sinha, IIT Madras
	The Glass-Walled World: What Diatom Diversity Tells Us About Ecosystems	Dr. Karthik Balasubramanian,

	and Biochemistry	Agarkar Institute, Pune
11:50 AM-1:30 PM	**Session XX (Parallel): Model Organisms for Diseases** **Venue: ZHLH- F6** **Chairpersons:** Prof. Mrinal Kanti Bhattacharyya and Prof. Kota Arun Kumar **Student coordinator:** Tanishka **Speakers: 4** (25 min talk)	
	Mitochondrial biogenesis and genome maintenance in the malaria parasite	Dr.Saman Habib CSIR-CDRI,Lucknow
	Cellular and molecular basis of the host-pathogen interactions: Unfolding new definitions towards therapeutic intervention strategies	Prof. Shailaja Singh, JNU, New Delhi
	Toxoplasma gondii RNA triphosphatase is a unique mRNA capping enzyme essential for transcript homeostasis and a potential drug target for protozoan infections.	Dr. Abhijit Deshmukh, NIAB, Hyderabad
	Delineating the role of small non-coding RNAs in pathophysiology of Acinetobacter baumannii	Dr. Ranjana Pathania, IIT Roorkee

11:50 AM-1:30 PM	**Session XXI (Parallel): Plant Biology II** **Venue: ZHLH- S5** **Chairpersons: Prof.** G. Padmaja and Prof. JSS Prakash **Student coordinator:** Sai Madhuri **Speakers: 5** (20 min talk)	
	Ralstonia pseudosolanacearum mutants in cytochrome-P450 gene are virulence deficiency through root inoculation but not through shoot inoculation in tomato plants	Prof. Suvendra Kumar Ray, Tezpur University, Tezpur
	Brassinolide Promotes Metabolic Interactions Between Chloroplasts and Mitochondria During the Optimization of Photosynthesis by the Mitochondrial Electron Transport Chain	Prof. KPMSV Padmasree, UoH, Hyderabad
	Coherent Genetic and Biotechnological Strategies for Enhancing Secondary Metabolite Production and Stress Resilience in the Medicinal and Aromatic Plant species Ocimum	Dr. Sunita Singh Dhawan, CIMAP, Lucknow
	Species-specific functional innovations of conserved regulators in orchestrating fibrous root system	Prof. Shriram Yadav, IIT-Roorkee, Roorkee
	HrpZ2: Expanding the Harpin Superfamily and Insights into Plant Immune Activation	Dr.Debashish Dey, BHU, Varanasi
1:30 PM - 2:15 PM – LUNCH		

2:15 PM-3:45 PM	**Session XXII (Parallel)** ***Lectures by Young Scientists:*** **Cell Biology** **Venue: ZHLH- G9** **Chairpersons:** Dr. Kasturi Prasad and Prof. Suresh Yenegu **Student coordinator:** Ayushi Mishra **Speakers: 6** (12+ 3 min)
	Rasmita Samal
	Priyanka Upadhyai
	Snehal Bhatia
	Kashif Gulam Mohammad
	Somesh Roy
	Chandreyee Datta
2:15 PM-3:45 PM	**Session XXIII (Parallel) Lectures by Young Scientists: Genome Regulation & Structural Biology** **Venue: ZHLH- F6** **Chairpersons:** Karthik Balasubramanian and Prof. Bindu Madhav Reddy **Student Coordinator:** Parneet Kaur **Speakers: 6** (12+ 3 min)
	Bhavana Tiwari
	Anwesha Manasingh
	Akhilesh Kumar
	Shrawan Kumar
	Abhishek Banerjee
	Deeptanshu Pandey
2:15 PM-3:45 PM	**Session XXIV (Parallel)** ***Lectures by Young Scientists:*** **Molecular basis of diseases** **Venue: ZHLH- S5** **Chairpersons:** Prof. M. Venkataramana and Dr. Abhijit Deshmukh **Student coordinator:** A. G. Darshini **Speakers: 5**(12+ 3 min)

	Arkaprabha China
	Ajay Kumar Chaudhary
	Shital Manohar Punekar
	Amrita Arpita Padhy
	Krishan Kumar
	Indumathi

3:45 PM- 4:00 PM- TEA BREAK

4:00 PM – 4:30 PM: Panel discussion

Topic: Disruptions in Biological Sciences- Current Trends and Future Prospective

4:30 PM onwards: **Valedictory Address by**

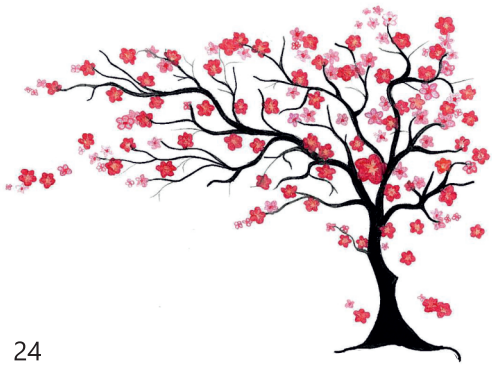
Dr Oruganti Srinivas
Director, DRILS, Hyderabad

Followed by

Oral and Poster Award Winners

&

Vote of Thanks



Sponsors



Aurobindo Pharma is a major Indian multinational pharmaceutical company, headquartered in Hyderabad, focused on making affordable medicines globally, specializing in generic drugs, branded specialties, and Active Pharmaceutical Ingredients (APIs). With a strong presence in over 150 countries, including leadership positions in the US and Europe, it offers products across key areas like cardiovascular, central nervous system (CNS), anti-infectives, and is expanding into oncology and biosimilars, supported by numerous regulatory-approved manufacturing sites.

Key Aspects

- **Global Reach:** Operates in over 150 markets, with significant operations in the US, Europe (top 10 generic company in many EU nations), and emerging markets.
- **Product Portfolio:** Broad range including generics, specialty drugs, APIs, covering therapeutic areas like CNS, cardiovascular, anti-retrovirals, antibiotics, gastroenterology, and more.
- **Manufacturing & R&D:** Owns numerous state-of-the-art facilities approved by major global regulators (USFDA, UK MHRA, etc.) and has strong in-house R&D for innovation.
- **Focus Areas:** Expanding into high-value areas like oncology, hormones, biosimilars, and Novel Drug Delivery Systems (NDDS) (inhalers, patches).
- **Market Position:** Ranks among the world's leading generic pharmaceutical companies, known for affordability and accessibility.

Company Details

- **Headquarters:** Hyderabad, India.
- **Founded:** 1986.

https://www.aurobindo.com/



Bharat Biotech International Limited is a multidimensional biotechnology company specializing in product-oriented research and development leading to the manufacture of vaccines and bio-therapeutics in Hyderabad, India. Bharat Biotech was established in the year 1996 by Dr. Krishna M. Ella and Mrs. Suchitra K. Ella. Bharat Biotech is a pioneering biotechnology company known for its world-class R&D and manufacturing capabilities. Our mission is to deliver affordable, safe and high-quality vaccines and bio-therapeutics that help people prevail over diseases. We seek to lead innovation in biotechnology in order to lead the fight against disease with a focus on emerging markets. Our significant R&D investments have yielded several breakthroughs including the world's first Recombinant Hepatitis-B vaccine (free of cesium chloride and Thiomersal). Rotavirus vaccine from a naturally attenuated strain, Typhoid Conjugate vaccine. Transparency and openness are central to our DNA. An uncompromising commitment to integrity differentiates us. Our clinical trials are known for their rigor and breadth. We also adopt the most comprehensive data integrity procedures to ensure that we capture, store and report data accurately. We are committed to provide affordable and innovative vaccines for healthier lives. Bharat Biotech launched India's first Recombinant Epidermal Growth Factor (REGEN-D®) to combat diabetic foot ulcers, burns. Typbar TCV® is proven conjugate Typhoid vaccine and received WHO-Prequalification in January 2018. ROTAVAC® was India's first and largest efficacy WHO-Prequalification in January 2018. Bharat Biotech Launches ROTAVAC 5D®- Lowest dose volume Rotavirus vaccine - ROTAVAC in the world launched in December 2019. COVAXIN, India's indigenous COVID-19 vaccine by Bharat Biotech.

Website

https://www.bharatbiotech.com



MSN Group is one of the fastest-growing, research-based and fully integrated pharmaceutical companies based out of Hyderabad, India. It was founded in the year 2003 with a mission to make high-quality medicines affordable and accessible to the world. The organization presently has 25 state-of-the-art manufacturing facilities (17 API and 8 Finished Dosage Facilities) established in India and USA. The group has an integrated R&D centre that facilitates the research of both API and Finished Dosages under one roof, enabling the organization to introduce new and affordable therapies in global markets swiftly. Backed by a dedicated and experienced team of over 15,000 qualified professionals, the organization has earned a global distinction for its innovation, quality and speed of delivery besides achieving the following: > About 900+ national and international patent applications filed > Product portfolio of 500 + APIs & 400+ Finished Dosages > Over 35 major therapeutic offerings covering Oncology, Cardiology, CNS, Diabetes, Nephrology, Urology, Gastroenterology, Orthopaedics etc. > World No. 1 in active US DMF Filings > Won the trust of more than 40 Million patients across 100+ countries The organizational environment at MSN Labs integrates multiple disciplines and functions by effective implementation of goals and objectives through technology coupled with Integrity, Imaginati marketing, robust IP strategy, innovative R&D expertise, dynamic SCM, Insight-driven IT, and world-class facilities remain at the heart of its continuing success. We own a track record of growing at an exponential pace since our inception. From 22 million USD in 2005 to achieving over 1 billion USD turnover in FY 2024-25 and counting, we continue to expand our growth and global footprint by creating innovative solutions for tomorrow's healthcare requirements.

https://www.msnlabs.com/



DR. REDDY'S INSTITUTE OF LIFE SCIENCES

Dr. Reddy's Institute of Life Sciences (DRILS) is an autonomous, non-profit research institute located in the University of Hyderabad campus in Gachibowli, Hyderabad. It operates on a public-private partnership (PPP) model involving the Government of Telangana, the University of Hyderabad, and Dr. Reddy's Laboratories Ltd.

Research & Focus Areas

DRILS focuses on bridging the gap between academic research and the pharmaceutical and biotechnology industries. Its research activities are organized into three centers:

- **Center for Innovation in Molecular and Pharmaceutical Sciences (CIMPS)**: Focuses on core research activities including advanced molecular biology, cell biology, pharmacology, and organic/nano-chemistry to discover novel therapeutics and materials.
- **Center for Process Research and Innovation (CPRI)**: Engaged in addressing the industry's chemical research and innovation needs, with a focus on process R&D and medicinal chemistry, aiming for cost-efficient and environmentally benign manufacturing processes.
- **Center for Advancement of Research Skills (CARS)**: Focuses on training and skill development programs in basic science and industry-relevant areas for students, teachers, and industry recruits.

Overall research areas include Medicinal Chemistry, Rare Diseases, Nanotechnology, Computational Biology, and Neurological Disorders

https://drils.org/



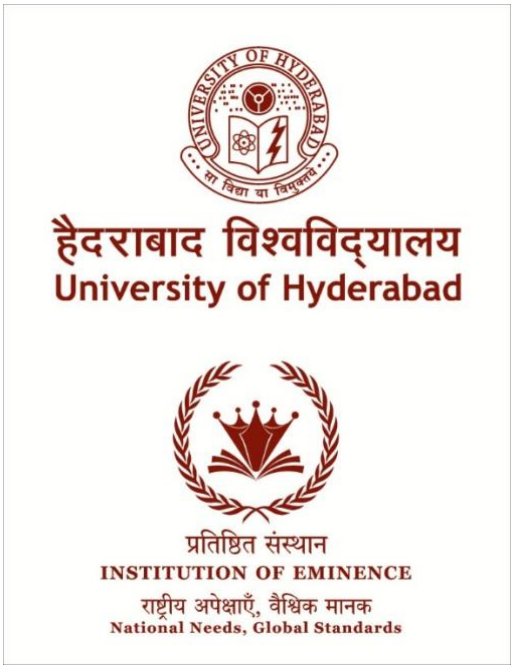


Anusandhan National Research Foundation (ANRF) - established through an Act of Parliament: ANRF Act, 2023, to provide high-level strategic directions for research, innovation, and entrepreneurship in the fields of natural sciences, including mathematical sciences, engineering and technology, environmental and earth sciences, health and agriculture, and scientific and technological interfaces of humanities and social sciences. Anusandhan National Research Foundation (ANRF) has been established to promote research and development and foster a culture of research and innovation throughout Institutions, and R&D laboratories. ANRF acts as an apex body to provide high-level strategic direction of scientific research in the country as per recommendations of the National Education Policy. ANRF forges collaborations among the industry, academia, research institutions and government departments.

The Anusandhan National Research Foundation (ANRF)'s **PAIR (Partnerships for Accelerated Innovation and Research)** program creates "hub-and-spoke" networks, pairing leading research institutions (Hubs) with emerging universities (Spokes) for mentorship, aiming to build research capacity, infrastructure, and innovation across India, aligning with the National Education Policy (NEP) 2020. University of Hyderabad is selected in the first phase supporting numerous Spokes to develop strong research ecosystems.

The University of Hyderabad (UoH) is a key **Hub** institution in the Anusandhan National Research Foundation (ANRF)'s PAIR (Partnerships for Accelerated Innovation and Research) program, leading a network of 'Spoke' universities to boost research in areas like metabolic diseases, cancers, and infectious diseases, focusing on interdisciplinary collaboration and innovation in health tech. UoH coordinates with institutions like Osmania University (TG), Central University of Karnataka (KA), Sri Venkateswara University (AP), Yogi Vemana University (AP), Mahatma Gandi University, Kerala and Kannur University, Kerala to build research capacity, with ongoing projects and recruitment for roles like Project Associate under this initiative.

The acronym **IoE UoH** refers to the **Institution of Eminence at the University of Hyderabad** (UoH or HCU), a prestigious public central research university in Telangana, India.



The University of Hyderabad was accorded the "Institution of Eminence" (IoE) status by the Government of India in September 2019, a recognition that positions the university to move into the league of the world's best institutions. The program's tagline is "national needs, global standards".

The IoE directorate oversees various initiatives designed to boost the university's global standing, research output, and infrastructure, including:

- **IoE Post-doctoral Fellowships (IoE-PDF):** Attracting motivated young researchers from around the world and providing them with infrastructure and financial support for high-quality research.
- **Infrastructure and Equipment:** Sprucing up campus infrastructure and securing high-end equipment for various departmental laboratories.
- **International Collaborations:** Inviting eminent individuals as IoE Chair Professors and International Fellows to mentor and advise on research and teaching programs, fostering global networking.
- **Innovative Programs:** Offering new and innovative courses, such as the OE-101 and OE-102 courses.
- **Student and Faculty Support:** Providing various schemes and application forms for student achievers awards, skill development guidelines, travel grants, and research proposals.

https://ioe.uohyd.ac.in/

Thermo Fisher Scientific is a global leader in serving science, providing analytical instruments, lab equipment, software, services, and consumables to make the world healthier, cleaner, and safer, through key brands like Thermo Scientific, Invitrogen, and Fisher Scientific, supporting research, diagnostics, and drug development in life sciences, healthcare, and pharma.

Thermo Fisher Scientific Inc. is a global American life science and clinical research company that provides scientific instruments, equipment, reagents, consumables, software, and services. Its mission is to enable customers to make the world healthier, cleaner, and safer. The company's extensive portfolio is segmented into four primary businesses: Life Sciences Solutions, Analytical Instruments, Specialty Diagnostics, and Laboratory Products and Biopharma Services.

Leica Biosystems is a global leader in workflow solutions and automation, integrating each step in the workflow from biopsy to diagnosis. It is a global leader in cancer diagnostics and anatomic pathology workflow solutions, offering products that span the entire process from biopsy to diagnosis. The company's mission is "Advancing Cancer Diagnostics, Improving Lives".

Leica Biosystems is a subsidiary of the Danaher Corporation and is headquartered in Nussloch, Germany. The company provides integrated solutions to enable pathologists to diagnose with confidence and offers a comprehensive portfolio of instruments and consumables.

The **National Institute of Animal Biotechnology (NIAB)** is an autonomous Indian research institute located in Gachibowli, Hyderabad, under the Department of Biotechnology, Government of India.

Overview

NIAB is a premier institute for basic and translational research in animal health and productivity, with a motto of "Animal Health for Human Welfare". The institute focuses on harnessing cutting-edge biotechnologies to develop sustainability and globally competitive livestock products, pharmaceuticals, and diagnostics.

Key Focus Areas

Research at NIAB spans various frontier areas of science

- Genomics and animal genetics
- Development of next-generation vaccines and diagnostics
- Nanotechnology and drug delivery platforms
- Reproductive biotechnology and stem cell therapeutics
- Transgenic technology for humanized mouse models and farm animal

https://www.niab.res.in/

The **Centre for DNA Fingerprinting and Diagnostics (CDFD)** in Hyderabad is a premier autonomous research institute funded by the Department of Biotechnology, Government of India. It specializes in research, services like DNA fingerprinting and genetic diagnostics, and academic programs. CDFD offers a variety of services to the public, research institutions, and law enforcement agencies:

- **DNA Fingerprinting:** Provides services for forensic and wildlife DNA analysis.
- **Diagnostics:** Offers comprehensive diagnosis for human genetic diseases, including prenatal diagnosis, through its collaboration with the Nizam's Institute of Medical Sciences (NIMS).
- **Research:** Conducts basic and applied research in frontier areas of modern biology, such as cell & molecular biology, computational biology, disease biology, genetics, and immunology.
- **Academics:** Recognized by the University of Hyderabad and Manipal University for its Ph.D. program in life sciences and also offers summer training programs.
- **National Genomics Core:** Provides next-generation sequencing and other sophisticated equipment facilities to external users from academia and industry

https://www.cdfd.org.in/


faba
FEDERATION OF ASIAN
BIOTECH ASSOCIATIONS


eppendorf


BIO-RAD


BiOxia


Bio Genomics Asia
LOCAL EXPERT, GLOBAL SOLUTIONS