

Schedule

Pre-conference workshops : 27-10-2025 to 28-10-2025

RGCB, Akkulam Campus

Time	Hall 1	Hall 2
09:00-18:00	Workshop 1 Advances in Confocal Microscopy	Workshop 2 Single-Cell Sequencing: Library Preparation and Data Analysis

Day 1 : 29-10-2025

Uday Samudra Beach Hotel, Kovalam

Time	Hall 1 (Vizhinjam)	Hall 2 (Light House)
09:00	Registration	
11:30-12:45	Inauguration and IAN Update: Welcoming New Fellows	
12:45-13:45	Lunch	
14:00-15:00	Keynote Talk Speaker: Stéphanie Baulac , Paris Brain Institute (ICM), Paris, France Title: Brain Mosaicism in Epilepsy and Cortical Malformations Chairperson: Shubha Tole, TIFR, Mumbai	
15:00-15:45	Prof. B. K. Bachhawat Memorial Lifetime Achievement Award Lecture Speaker: B N Gangadhar , NIMHANS, Bengaluru Title: Neurobiological evidence for yoga in depression Chairpersons: Vinay K Khanna, CSIR-IITR, Lucknow; Akshay Anand, PGIMER, Chandigarh	
15:45-16:15	Tea	
16:15-18:45	Symposium I <u>Circuits, Synapses and Plasticity- I</u> (supported by ISDN) Chairpersons: Deepak Nair, IISc, Bengaluru; Ratna Sircar, Albert Einstein College of Medicine, NY, USA	Symposium II <u>Mechanisms underlying neurodegenerative disorders - AD</u> Chairpersons: Pankaj Seth, BRIC-NBRC, Manesar; Mehdi Hayat, AMU, Aligarh
	16:15-16:45 Aurnab Ghose , IISER, Pune Title: Branching out: Novel cytoskeletal mechanisms regulating axon collateral branching	16:15-16:45 Arun Upadhyay , IIT, Bhilai Title: Mapping early interaction partners of Aβ42 using metabolic labelling
	16:45-17:00 Short talk : Gargi Mandal , IISc, Bengaluru Title: Studying the growth of hippocampal neurons on flexible micropillar scaffolds	16:45-17:15 Sachin Suresh Tiwari , IIT, Roorkee Title: Tau propagation is accelerated by reactive state of astrocytes in Alzheimer's Disease



IAN

XLIII Annual Meeting of Indian Academy of Neurosciences

An International Conference on
**Neurodevelopment
and Brain Disorders:**
Research Trends, Technology and Translation



October 29 to November 1

**Uday Samudra Leisure Beach Hotel,
Kovalam, Thiruvananthapuram**

	17:00-17:30 Sandhya Koushika, TIFR, Mumbai Title: Mitochondria driven actin dynamics in touch sensory neurons alone are sufficient for touch responsiveness but not touch habituation	17:15-17:30 <i>Short talk</i> : Muskan Mittal, BRIC-NII, New Delhi Title: Aging Brains on Fire: Cytokine Storms Disrupts Neurogenesis in Aging Alzheimer's Models
	17:30-18:00 Hiyaa Ghosh, NCBS-TIFR, Bengaluru Title: Dendritic organization flexibility in the adult brain	17:30-18:00 Urmi Bandyopadhyay, MIRM, Bengaluru Title: Mechanisms underlying neurodegenerative disorders
	18:00-18:15 <i>Short talk</i> : Greeshma S, IISER, Thiruvananthapuram Title: Elucidating the role of chromatin methylation writers, readers and erasers in neurodevelopment and epilepsy	18:00-18:15 <i>Short talk</i> : Amrish Rai, CSIR-CDRI, Lucknow Title: Lysine acetyltransferase KAT3A/3B-mediated acetylation is critical to alleviate depressive-like symptoms in mice
	18:15-18:45 Dhananjay Huilgol, BRIC-NBRC, Manesar Title: Role of progenitors in neuronal diversification and the assembly of cortical circuits	18:15-18:45 Mallika Chatterjee, AMITY University, Uttar Pradesh Title: Understanding Neurobehavior in the Context of Sulfation Alterations in Proteoglycans across Evolution
18:45-20:15	IAN Fellow-Elect Talk-I Chairpersons: Subhas C Biswas, CSIR-IICB, Kolkata; Laxmi T. Rao, NIMHANS, Bengaluru	IAN Fellow-Elect Talk-II Chairpersons : Suman Jain, AIIMS, New Delhi; Rajnikant Mishra, BHU, Varanasi
	18:45-19:15 Aamir Nazir, CSIR-CDRI, Lucknow Title: From Gut to Neurons: How Microbiota Derived Succinate Exacerbates Alpha Synuclein Aggregation and Neurodegeneration	18:45-19:15 Mousumi Mutsuddi, BHU, Varanasi Title: Convergent Role of RNA-Binding Proteins in modulating neurodegenerative disorders in Drosophila disease model
	19:15-19:45 Amul Sakharkar, SPPU, Pune Title: Reward processing by neuropeptidergic system in lateral hypothalamus	19:15-19:45 Prachi Srivastava, AIB, Lucknow Title: Screening of neurological biomarkers through Artificial Intelligence integrated multi-omics approach: A way towards precision medicine.
	19:45- 20:15 Jackson James, BRIC-RGCB, Thiruvananthapuram Title: Differential Hes1 activation defines neural stem cell lineage commitment and niche maintenance in embryonic and adult mouse cortex	19:45- 20:15 Sumana Chakravarty, CSIR-IICT, Hyderabad Title: femCSDS: Creating another benchmark model to uncover the neurobiological underpinnings of major depressive disorder in female
20:15	Dinner	

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Schedule

Day 2 : 30-10-2025

Uday Samudra Beach Hotel, Kovalam

Time	Hall 1 (Vizhinjam)	Hall 2 (Light House)
09:00-09:45	Prof. P. N. Tandon Oration Speaker: Suvarna Alladi , NIMHANS, Bengaluru Title: Language and culture: Implications for Cognitive Resilience and Dementia Chairpersons: Anirban Basu, BRIC-NBRC, Manesar; Shashi Bala Singh, DIPAS, New Delhi	
09:45-10:30	Prof. S. S. Parmar Oration Speaker : Ratna Sircar , Albert Einstein College of Medicine, NY, USA Title: Adolescence, alcohol and memory Chairpersons: A K Agrawal, CSIR-IITR, Lucknow; Rajat Sandhir, Panjab University, Chandigarh	
10:30-11:30	Plenary Talk 1 Speaker: David Belin , University of Cambridge, Cambridge, UK Title: On the multifaceted nature of compulsive drug-seeking habits in addiction: insights from preclinical research Chairperson: Suvarna Alladi, NIMHANS, Bengaluru	
11:30-13:00	Tea and Poster session (Hall 3 & 4 - Bay & Waves) (supported by ISDN)	
13:00-14:00	Lunch	
14:00-16:30	Symposium III <u>Circuits, Synapses and Plasticity- II</u> (supported by ISDN) Chairpersons: Suhita Nadkarni, IISER, Pune; Sandhya Koushika, TIFR, Mumbai	Symposium IV <u>Mechanisms underlying neurodegenerative disorders – ALS and PD</u> Chairpersons: Omkumar R V, BRIC-RGCB, Thiruvananthapuram; Poonam Thakur, IISER, Thiruvananthapuram
	14:00-14:30 Leena Ibrahim , King Abdullah University of Science and Technology, Thuwal, Saudi Arabia Title: Functional Maturation of Layer 1 Inhibitory Neurons in Sensory Cortices	14:00-14:30 Phalguni Anand Alladi , NIMHANS, Bengaluru Title: Modalities to Empanel Biomarkers and Examine Organellar Hierarchy: Translational and Basic Approaches to Understand Parkinson's disease pathogenesis
	14:30-14:45 Short talk : Aynal Hoque , IISc, Bengaluru Title: A quadrangle π - π and π -H interdomain interaction contributes to the voltage-dependent facilitation (VDF) of L-type voltage-gated calcium channels	14:30-15:00 Ajit Thakur , DPSRU, New Delhi Title: Neuropharmacological Studies of Capsaicin for the Management of Neurodegenerative Disorders



	14:45-15:15 Abhishek Bhattacharya, NCBS-TIFR, Bengaluru Title: Novel Heterochannel Electrical Synapses: From Configuration, Regulation to Plasticity	15:00-15:30 Sandhya Kortagere, Drexel University College of Medicine, Philadelphia, USA Title: G-protein Biased Dopamine D3R agonist normalizes D1R-D3R function to attenuate Levodopa induced Dyskinesia
	15:15-15:30 Short talk : Mrinalini Ranjan, Max Planck Göttingen, Germany Title: Diacylglycerol sensing by Munc13-1 primes synaptic vesicles to control short-term plasticity and post-tetanic potentiation	15:30-16:00 Vijayalakshmi K, NIMHANS, Bengaluru Title: CHIT-CHAT of Microglia and Oligodendroglia with Motor Neurons in Sporadic Amyotrophic Lateral Sclerosis: Insights from In-vitro and In-vivo Studies
	15:30-16:00 Arnab Barik, IISc, Bengaluru Title: Pain & Itch: The good, the bad, & the ugly	16:00-16:15 Short talk : Srishti Sharma, CSIR-IGIB, New Delhi Title: Dissecting Neuronal Mechanisms in Wilson Disease Using Patient-Derived Midbrain Neurons
	16:00-16:30 Nixon Abraham, IISER, Pune Title: Multimodal olfaction: Neural mechanisms of dual-modality sensing through the rodent nose	16:15-16:30 Short talk : Aswathy B J, IISER, Thiruvananthapuram Title: Micro-managing the mind: Decoding the role of miR-996 in the fly brain
16:30-17:00	Tea	
17:00-19:30	Symposium V <u>Neural Repair, Regeneration and Stroke</u> Chairpersons: B S Shankaranarayana Rao, NIMHANS, Bengaluru; K P Mohanakumar, IUCBR & SSH, Kottayam	Symposium VI <u>Memory Systems and Mechanisms</u> Chairpersons: Sourav Banerjee, BRIC-NBRC, Manesar; Akshay Anand, PGIMER, Chandigarh
	17:00-17:30 Anindya Ghosh Roy, BRIC-NBRC, Manesar Title: Regenerating and reconnecting neural circuits	17:00-17:30 Lee Yong-Seok, Seoul National University, Seoul, South Korea Title: Circuit mechanisms of social memory consolidation and generalization in mice
	17:30-17:45 Short talk : Katha Sanyal, CSIR-CCMB, Hyderabad Title: Activation of RARβ by Synthetic Agonists Promotes Neurite Outgrowth and Neural Adhesion	17:30-18:00 Balaji Jayaprakash, IISc, Bengaluru Title: Uncertainty during retrieval induces false memory
	17:45-18:00 Short talk : Saranya S S, SCTIMST, Thiruvananthapuram Title: Designing cell derived extracellular matrix coated neurocompatible substrates for peripheral nerve repair	18:00-18:30 Abhilasha Joshi, NCBS-TIFR, Bengaluru Title: Unraveling the links between memory, hippocampal dynamics, and mobility



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	18:00-18:30 Pallab Bhattacharya, NIPER, Ahmedabad Title: Stroke in Pregnancy brings epigenetic changes in animal model	18:30-19:00 Kavita Babu, IISc, Bengaluru Title: Eavesdropping on C. elegans conversations: how memory moves from one worm to another
	18:30-19:00 Raghu Vemuganti, University of Wisconsin, Wisconsin, USA Title: Targeting Epitranscriptomics for Stroke Therapy	19:00-19:15 <i>Short talk</i> : Amrita Singh, TIFR, Mumbai Title: Tracing cell fates in the mouse hippocampus as a function of space and time
	19:00-19:30 Yogananda S Markandeya, NIMHANS, Bengaluru Title: Sodium channel and epilepsy: Insights through personalized medicine	19:15-19:30 <i>Short talk</i> : Padmaja S, inStem, Bengaluru Title: Putative risk variants in chromatin genes implicated in bipolar disorder
19:30-20:30	Panel Discussion : Career trajectory discussion Chairperson: Bhavana Muralidharan Panelists: David Belin, Tomomi Shimogori, Ila Fiete, Jee Hyun Kim	
20:30	Cultural Program & Dinner	

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Schedule

Day 3 : 31-10-2025

Uday Samudra Beach Hotel, Kovalam

Time	Hall 1 (Vizhinjam)	Hall 2 (Light House)
09:00-10:00	Plenary Talk 2 Speaker: Jee Hyun Kim , Deakin University, Victoria, Australia Title: A platform for novel therapy development: The discovery of trimetazidine to treat bipolar depression Chairperson: Pankaj Seth, BRIC-NBRC, Manesar	
10:00-11:00	Plenary Talk 3 Speaker: Ila Fiete , Massachusetts Institute of Technology, Massachusetts, USA Title: Associative and episodic memory from pre-structured spatial scaffolds in the hippocampus Chairperson: Jonaki Sen, IIT, Kanpur	
11:00-11:45	Indian Academy of Neurosciences : General Body Meeting (GBM)	
11:45-13:15	Tea and Poster Session (Hall 3 & 4 - Bay & Waves) (supported by ISDN)	
13:15-14:00	Lunch	
14:00-16:30	Symposium VII Advances in Neuroimaging Chairperson: Deepak Nair, IISc, Bengaluru; Easwer H V, SCTIMST, Thiruvananthapuram	Symposium VIII (supported by ISDN) Glia in brain development and disorders Chairpersons: Shubha Tole, TIFR, Mumbai; Soumya Iyengar, BRIC-NBRC, Manesar
	14:00-14:30 Vini Gautam , IISc, Bengaluru Title: Investigating neurite growth on scaffolds with microscale topographies	14:00-14:30 Karine Loulier , Institute for Neurosciences of Montpellier, Montpellier, France Title: The diversity of neocortical astrocytes in the light of the complexity of their developmental origin
	14:30-15:00 Aneesh Tazhe Veetil , TIFR-Hyderabad Title: Targeted imaging and manipulation of microglia in living brains	14:30-15:00 Indrani Datta , NIMHANS, Bengaluru Title: Astrocytes as Dynamic Mediators in α -Synuclein Pathology Propagation
	15:00-15:15 Short talk : Neha Karlupia , Harvard University, Cambridge, USA Title: A connectomics approach to understanding the physical basis of profound Autism	15:00-15:15 Short talk : Debalina Chatterjee , DU, New Delhi Title: Support Cells at the Helm: Glial Subtypes Unequally Influence and Actively Co-Navigate Huntington's Disease Progression Alongside Neurons
	15:15-15:45 Rohit Joshi , CDFD, Hyderabad Title: Regulation of neural stem cell proliferation and apoptosis in developing CNS of Drosophila	15:15-15:45 Ramesh Raghupathi , Drexel University, Philadelphia, USA Title: The role of microglia in structural and functional deficits in developmental brain injury



	15:45-16:15 Jonaki Sen, IIT, Kanpur Title: Mechanistic insights gained on cerebral hemisphere formation through advanced imaging tools	15:45-16:15 Achira Roy, JNCASR, Bengaluru Title: Loss of NF1 impairs ependymal development, causing hydrocephalus in mice
	16:15-16:30 <i>Short talk</i> : Anjana Pithakumar, IIT, Chennai Title: An Integrated Pipeline for Whole-Brain Immunohistochemistry and Deep Learning-Based Analysis of Human Neuropathology	16:15-16:30 <i>Short talk</i> : Arunima Sen, NCBS-TIFR, Bengaluru Title: Deciphering the Molecular Complexities and Roles of Glial Gap Junctions
16:30-17:00	Tea	
17:00-18:00	Plenary Talk 4 Speaker: Sheffali Gulati, AIIMS, New Delhi Title: The Science of Autism: Exploring Research on Neurodevelopment and Pathophysiological Insights Chairperson: Sourav Banerjee, BRIC-NBRC, Manesar	
18:00-19:15	Young Scientist Colloquium-I : Tulsabai Somani Educational Trust Award Chairpersons: Anoop Kumar T, SCTIMST, Thiruvananthapuram; Phalguni Anand Alladi, NIMHANS, Bengaluru Speakers: Kruttika Phalnikar, BRIC-inStem, Bengaluru Niraj Kumar Gupta, IISER, Berhampur Nitin Agnihotri, IIT, Kanpur Dr Nitin Yadav, ACBR, New Delhi Roana Liz George, IUCBR & SSH, Kottayam Unnati Agrawal, IISER, Thiruvananthapuram	
19:15-20:00	Panel Discussion : Planning (Postdocs/ non-academic careers) Chairperson: Shubha Tole Panelists: Leena Ibrahim, Jee Hyun Kim, Karine Loulier, Sandhya Koushika	Special Talks
20:15	Dinner	



Schedule

Day 4 : 01-11-2025

Uday Samudra Beach Hotel, Kovalam

Time	Hall 1 (Vizhinjam)	Hall 2 (Light House)
09:00-09:45	K. T. Shetty Memorial Oration Speaker : K P Mishra , DIPAS, New Delhi Title: High altitude induced alterations in Gut-Immune-Brain axis Chairpersons: B S Shankaranarayana Rao, NIMHANS, Bengaluru; K K Soni, PGIMER, Chandigarh	
09:45-10:45	Plenary Talk 5 (supported by ISDN) Speaker: Tomomi Shimogori , RIKEN Center for Brain Science, Tokyo, Japan Title: Cell type census in cerebral cortex reveals species-specific brain function and connectivity Chairperson: Jackson James, BRIC-RGCB, Thiruvananthapuram	
10:45-11:45	Plenary Talk 6 Speaker: Mohanasankar Sivaprakasam , IIT, Chennai Title: Cell-resolution mapping of whole human brains Chairperson: Bhavana Muralidharan, BRIC-inStem, Bengaluru	
11:45-12:15	Tea	
12:15-13:30	Young Scientist Colloquium-II : Dr. D. M. Kar Prize Chairpersons: Vinay K Khanna, CSIR-IITR, Lucknow; Sourav Banerjee, BRIC-NBRC, Manesar Speakers: Dipak K. Sahare , RTMNU, Nagpur Merlin Jeejo , IUCBR and SSH, Kottayam Neha Yadav , IISER, Berhampur Santhosh Kumar S , IISER, Thiruvananthapuram Sonam Mehak , MAHE, Manipal Surya Suresh , BRIC-RGCB, Thiruvananthapuram Vishal Lolam , JNCASR, Bengaluru	
13:30-14:15	Lunch	



14:15-16:45	Symposium IX <u>Motor Control and Coordination</u> Chairpersons: Bhupesh Mehta, NIMHANS, Bengaluru; Kamalesh K Gulia, SCTIMST, Thiruvananthapuram.	Symposium X <u>Precision Medicine in Brain Disorders</u> Chairpersons: Binukumar B K, CSIR-IGIB, New Delhi; Pallab Bhattacharya, NIPER, Ahmedabad
14:15-14:45	Mahesh Gadhvi , AIIMS, Jodhpur Title: Selective Dorsal Rhizotomy in Post-Traumatic Spasticity: Neuroscientific Basis, and Clinical Use of an Underutilized Neuromonitoring Technique	14:15-14:45 Kaviraja Udupa , NIMHANS, Bengaluru Title: Precision Medicine in Brain Disorders: Recent advances in Personalized Neuromodulation in Neuropsychiatric disorders
14:45-15:15	Aaron Sathyanesan , University of Dayton, Ohio, USA Title: Neural basis of locomotor dysfunction in Down Syndrome	14:45-15:15 Ipsita Roy , NIPER, Mohali Title: Regulation of heat shock response as a possible therapy for Huntington's disease
15:15-15:45	Laxmi T Rao , NIMHANS, Bengaluru Title: A combinational therapy after middle cerebral artery occlusion in facilitating ischemic stroke recovery	15:15-15:45 Vibhuti Joshi , BU (The Times Group), Greater Noida Title: Flavonoid-encapsulated chitosan nanoparticles as therapeutic targets for immunomodulation of glioblastoma
15:45-16:15	Vibha Taneja , SGRH, Delhi Title: Clinical, Genetic determinants, Disease Mechanism and Therapeutics in Amyotrophic Lateral Sclerosis	15:45-16:15 Lalitha Soundararajan , Eyestem Research, Bengaluru Title: Off the shelf allogeneic RPE cell therapy: preclinical validation of safety, functionality, and post-thaw integrity
16:15-16:30	Short talk : Yogesh Sahu , CSIR-CCMB, Hyderabad Title: Nuclear Receptor Transcription Factors promote axon regeneration in the Adult Corticospinal Tract	16:15-16:30 Short talk : Anjali Sharma , AIIMS, New Delhi Title: Deciphering Platelet-Neuron Crosstalk: The Role of Platelet-Derived molecules in Drug-Resistant Epilepsy
16:30-16:45	Short talk : Rahul Jose , BRIC-RGCB, Thiruvananthapuram Title: Mouse embryonic cortical niche harbors heterogeneous Hes1 expressing neural stem cells varying in potency and lineage commitment	16:30-16:45 Short talk : Utkarsh Patil , Nagpur University, Nagpur Title: Neuropeptide S alleviates neuropathic pain-like symptoms by activating lateral hypothalamic orexinergic system
16:45-17:15	Tea	
17:15-18:00	Awards and Closing Remarks	
18:00 onwards	Departure	

