

BRAIN: CHEMISTRY TO COGNITION October 4-6, 2023 With Pre-Conference Activities on October 03, 2023

Jiwaji University, Gwalior (A NAAC Accredited A⁺⁺ State University)

PROGRAMME

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dosing

University, Cuttack

Prof. Raghu Vemuganti, USA Prof. Ishan Patro, Convenor

10:30-15:30

11:30-12:00

12:00-13:30

Symposium-1

Chairpersons:

(Abstracts: S1.1-5)

Symposium-2

Chairpersons:

(Abstracts: S2.1-5)

Symposium- 3

Sunil Kaul, AIST, Japan

(Abstracts: S3.1-7)

Rajat Sandhir, PU, Chandigarh

Chairpersons:

16:30-16:45

16:45-18:15

Symposium-6

Chairpersons:

(Abstracts: S8.1-6)

18:15-19:00

09:00-09:30

9:30-10:15

10:15-10:45

10:45-11:15

11:15-11:30

11:30-12:00

12:00-13:30

Symposium-9

Chairpersons:

Raghu Vemuganti, Madison, USA S.P. Arun, IISc., Bengaluru

(Abstracts: S11.1-5)

13:30-14:00

13-30-14:30

14:30-15:00

15:00-17:15

17:15- 18:15

Symposium-12

(Abstracts: S12.1-4)

(Abstracts: S13.1-4)

Symposium-14

Chairpersons:

UK

20:00

Symposium-13

Chairpersons:

Timothy Bredy, Brisbane, Australia

Sourav Banerjee, NBRC, Manesar

T. C. Nag, AIIMS, New Delhi

A.B. Patel, CCMB, Hyderabad

Kamalesh Gulia, SCTIMST,

Anupratap Tomar, Univ. of Bristol,

Thiruvananthapuram

(Abstracts: S14.1-4)

18:15-19:00

19:00-20:00

09:00-10:30

10:30-11:00

11:00-11:15

11:15-12:00

12:00-13:30

Symposium-15

Suhail Rasool, USA (Abstracts: S15.1-6)

Vivek Swarup, Univ. of California,

Chairpersons:

Symposium16

Chairpersons:

(Abstracts: S16.1-5)

Symposium-17

(Abstracts: S17.1-6)

Chairpersons:

13:30- 14:00

14:00-14:15

14:15-15:00

15:00-16:30

Oral Session-1

(14:15-15:00)

Chairpersons:

Swananda Marathe, IISc, Bengaluru

Chairpersons: Sabita Mishra, MAMC,

Sant Prakash, Dayalbagh, Agra

Munjal Acharya, Irvine, USA

(Abstracts: OS1.1-6)

Invited Lectures- 2

(Abstracts: IL2.1-9)

(14:15-16:30)

New Delhi

16:30-16:45

16:45-18:15

Symposium-20

(Abstracts: S20.1-5)

Symposium-21

(Abstracts: S21.1-6)

Oral Session-2

Chairpersons:

18:30-19:30

19:30-20:45

Japan

Chairpersons:

Kolkata

Arvind Kumar, CCMB, Hyderabad

Phalguni Alladi, NIMHANS,

Anita Jagota, UH, Hyderabad Subhas Chandra Biswas: IICB,

A.K. Agrawal, IITR, Luckow

(Abstracts: OS2.1-10)

Mahesh Kaushik, Uni. of Tsukuba,

Chairpersons:

Bengaluru

Suman Jain, AIIMS, New Delhi ΓC Yasha, NIMHANS, Bengaluru

Chinmay Mukhopadhyay, JNU, New

Swananda Marathe, IISc., Bengaluru

USA

Chairpersons:

20:00

Pooja Ojha, AIIMS, Jodhpur

K.P. Mishra, DIPAS, New Delhi

S.T. Dheen, NUS, Singapore

Sharmistha Dey, AIIMS, New Delhi

Shobi Veleri, ICMR-NIN, Hyderabad

Subodh Jain, DHSG Univ., Sagar

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Dr. Nisha Patro Contact: Prof. Ishan Patro Organizing Secretary Mob: +91 9425110063 ian.gwalior2023@gmail.com [ian(dot)gwalior2023(at)gmail(dot)com] School of Studies in Neuroscience/Zoology, Jiwaji University, Gwalior 474011, India

3rd October 2023 Pre-conference Workshops and Meetings Workshop 1: Tools and techniques for cognitive behaviour studies, Stereotaxic surgery, and animal

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2) Stereotaxic Surgery in Rodents: Hands-on motorized stereotaxic with rat skull: Sandip Majumdar and Tamil Selvan 3) Novel methods for drug dosing in Laboratory animals: Hands-on handling of infusion pumps: Varnika Talwar and Kishan Kumar Workshop 2: Write it Right: Art and Science of Scientific Writing Convenors: Avijit Banik, GITAM University, Visakhapatnam and Urmishree Bedamatta, Ravenshaw

Venue: School of Studies in Neuroscience, Jiwaji University, Gwalior

Harry W.M. Steinbusch, University of Maastricht, The Netherlands

Steps in writing and publishing: Ishan Patro, Jiwaji University, Gwalior

Writing an excellent paper, looking to potential pitfalls: A view from Elsevier Publishers:

How to write an abstract- The art of concise storytelling: Ishwarya Venkatesh, CSIR-CCMB, Hyderabad Figure speaks- Significance in the world of academia: Avijit Banik, GITAM University, Visakhapatnam

Tea

Emerging role of microglia in synaptic plasticity: S.T. Dheen, National University of Singapore,

Synaptic architecture of remote memory recall: Jai Polepalli, National University of Singapore,

"Gut Microbiome: A Source of Diagnostics or Therapeutics for neuropsychiatric disorders:

The role of NMDA receptor subtypes and synaptic plasticity in the epileptic brain:

Narcolepsy- sleep stress and orexin: towards development of new therapies:

"Mitochondrial control of microglial function in Alzheimer's disease: Anna M. Barron, Lee Kong

5) Self-propagating neurotoxicity of APP-C31 drives key pathogenic pathways implicated in Alzheimer's

Mitochondrial disorders - Diagnostic approach using Clinical, Biochemical and Genetic aspects:

Genetic dissection of a novel molecular player in obesity?: Shobi Veleri, ICMR-NIN, Hyderabad

4) Fears to fierce- tracking the molecular path of post traumatic aggressive behaviour: Arpita Konar,

A *Drosophila* genetic model to Study the Molecular and Physiological Pathways of Epileptic Disorder:

Data Management in Neuroscience using AI techniques: Arun Anirudhan, Sree Chitra Tirunal Institute,

Deciphering neural functions in

health and diseases: emerging

Symposium- 3 PIKNIKH

session Stress, aging and

understanding through cell culture and mouse models

neurodegeneration-**Building basic and**

interventional

Symposium- 2

fronts

Venue: School of Studies in Neuroscience, Jiwaji University, Gwalior

analysis by Any Maze 30-day free license by all participants: Richard Mills

Convenors: Richard Mills, Stoelting Co., Brigham Young University, USA and Anita Talwar, Gentech

1) ANY-maze Software: More Than Just Another Video Tracking System Hands-on setting protocols and

From "Goddamn Particle" to "God Particle"- How far can AI take you in writing: Urmishree Bedamatta, Ravenshaw University, Cuttack Effective scientific presentations: Shubha Tole, TIFR, Mumbai Workshop 3: Assessment of Human Cognitive Function Objective assessment of cognitive function: Designing and implementation of cognitive function tasks in human subjects Convenors: Simran Kaur and Ratna Sharma, AIIMS, New Delhi Resource Persons: Dr Prashant Tayade Dr Suriya Prakash M Venue: School of Studies in Neuroscience, Jiwaji University, Gwalior 09:30-11:30 **School Children- Scientist Interaction Meet** 14:30-15:30 **IAN Executive Committee Meeting** Venue: School of Studies in Neuroscience, Jiwaji University, Gwalior IAN-IBRO Neuroscience Global Advocacy Programme Time to be announced (Evening) Inauguration Venue: Atal Bihari Vajpayee International Convention Centre Jiwaji University, **Gwalior** 4th October 2023 08:00-09:00 Registration 09:00-09:45 BK Bachhawat Memorial Lifetime Achievement Award Lecture: Epidemic of misdiagnosis vitamin B12 deficiency - time to act: U.K. Mishra, AMSSH, Lucknow Chairperson: T.R. Raju, Sankara Academy of Vision, Bangalore 9:45-10:20 KT Shetty Oration: Novel neuromodulatory approaches for functional spinal cord injury: Suman Jain, AIIMS, New Delhi Chairperson: Sunil Kaul, AIST, Japan **Keynote Address:** Brainstem and Epigenetic Dysfunctions in Neuropsychiatric 10:20-11:00 Disorders – AD/Depression: <u>Harry W.M. Steinbusch</u>, Emeritus Professor in Cellular and Translational Neuroscience at University of Maastricht, the Netherlands Chairperson: T.R. Raju, Bengaluru, Pankaj Seth, NBRC, Manesar 11:00-11:30 Plenary Lecture- 1: How to make a hippocampus: Shubha Tole, TIFR, Mumbai Chairperson: Neeraj Jain, IIT, Jodhpur

Symposium- 1 Recent advances in

Chian School of Medicine, Singapore

K. Gokulakrishnan, NIMHANS, Bengaluru

Pradeep Punnakkal, PGIMER Chandigarh

neurodegeneration: Durai Sundar, IIT, Delhi

neurodegenerative disorders

neuropsychiatric and

Singapore

Trivandrum

2)

Basic and interventional understanding of stress, aging and neurodifferentiation: learnings from cell culture studies: Renu Wadhwa, Nat. Inst. of Advanced Industrial Science & Technology (AIST), Japan Role of computational biology in basic and interventional understanding of stress, aging and

Mahesh Kaushik, Uni. of Tsukuba, Ibaraki 305-8575, Japan

disease: Gavin S. Dawe, National University of Singapore, Singapore

Shamprasad Varija Raghu, Yenepoya Research Centre, Mangalore

Christhunesa S Christudass, Christian Medical College, Vellore

Presidency University, Kolkata 5) Hypoxia stress and neurodifferentiation signaling: experimental and computational perspectives: Jaspreet Dhanjal, Indraprastha Institute of Information Technology, Delhi Response of iron induced experimental epilepsy to anti-peroxidant treatment: Shanuja Beri, Univ. of Delhi, Delhi Acute and chronic stress differentially affects hippocampal coding: Anupratap Tomar, University of Bristol, UK 13:30-14:00 Lunch 14:00-15:00 **Poster Session Group Discussion:** 15:00-16:30 Symposium- 5 Neurocognitive **Invited lectures-1** Symposium- 4 The social and emotional brain: A game changer for mechanisms underlying working education and learning memory Symposium-4 1) Introduction to Social and Emotional Learning – why might it be a game changer foe education?: Nandini Chatterjee, UNESCO-MGIEP, New Delhi Chairpersons: Decision-making: A Social & Emotional Brain's Perspective: K. M. Sharika, IIT, Kanpur Anantha Duraiappah, UNESCO 2) Social emotional learning and self - regulation: Efficacy of a video game based intervention for MGIEP, New Delhi 3) prosociality: Bhoomika Rastogi Kar, University of Allahabad, Prayagraj Nandini Singh Chatterjee, UNESCO-MGIP, New Delhi (Abstracts: S4.1-3) Symposium- 5 Neural substrates of working memory deficits in addictive disorders: Simran Kaur, AIIMS, Delhi 2) Distractors in working memory: Mechanisms and models: Sridharan Devarajan, IISc, Bengaluru Chairpersons: Simran Kaur, AIIMS, New Delhi 3) Visuospatial working memory: An endophenotypic marker in Schizophrenia: Ratna Sharma, AIIMS, S.K. Trigun, BHU, Varanasi Delhi

(Abstracts: S5.1-4) 4) Clinical assessment and therapeutic interventions for working memory deficits in addictive disorders and dual disorders: YPS Balhara, AIIMS, Delhi **Invited Lectures-1** Role of dopamine on iron homeostasis in astroglial cells: Chinmay Mukhopadhyay, JNU, New Delhi 2) Sedation with Midazolam in the NICU: A Double-Edged Sword: Gurudutt N Pendyala, Nebraska Chairpersons: Medical Center, USA Subashchandrabose Chinnathambi, 3) Tale of a Tailed Neuron: Insights from the TRPV1 Channel: <u>Luna Samanta</u>, Ravenshaw University, NIMHANS, Bengaluru Luna Samanta, RU, Cuttack Cuttack (Abstracts: IL1.1-8) 4) Altered Subcortical-Cortical Dynamic Network Reconfigurations in Focal-to- Bilateral Tonic-Clonic Seizures: Shilpi Modi: INMAS, New Delhi 5) Morphological changes in the mice central nervous system in a L-arginine induced model of chronic pancreatitis: T.G. Jacob, AIIMS, New Delhi 6) Mitochondrial Dysfunctions induced Reactive oxygen Species in Parkinson's disease Rodent model: Jitendra Narayan Singh, NIPER, SAS Nagar, Punjab 7) Traumatic brain injury alters the limbic system of both rats and humans leading to impaired memory function: Richa Trivedi, IMMAS, DRDO, New Delhi 8) Development of natural inspired novel therapeutic, and diagnostic agents for Alzheimer's disease:

Tea

Long-term sequel of neuro-

COVID: Ghosts of a bygone

Symposium- 8

Cellular and molecular

insights into CNS

disorders: Possible therapeutic approaches

Symposium- 7

pandemic

The role of pre-natal yoga protocol in managing pregnancy: mechanistic insights for memory

Neurotoxins therapeutics: Small Molecule Inhibitor a ray of hope: Nandita Saxena, DRDE, Gwalior Restoration of Nerve Demyelination by Methylcobalamin in an Excitotoxic Brain Disorder Model:

Neuro acoustic methodologies for diagnosis and treatment of various neuro psychiatric disorders at early

Discussion: How career planning is different for women: A session for all genders: Conducted by Shubha Tole, TIFR, Mumbai

Technical Lecture: Measuring Behaviour in Neuroscience: Video Tracking Software is the Objective Observer for Recording Behaviour in Rodents: Richard Mills Brigham Young University, USA Chairperson: Soumya Iyengar, NBRC, Manesar

Distinguished Lecture-1: RNA in Neuroscience: Timothy Bredy, Queensland Brain Institute, The University

of Queensland, Brisbane, QLD, 4072, Australia Chairperson: Pankaj Seth, NBRC, Manesar

SS Parmar Oration: Targeting Epigenetics and Epitranscriptomics in Stroke Therapy: Raghu Vemuganti Chairperson: A.K. Agrawal, IITR, Lucknow

PN Tandon Oration: Situational Awareness to create a platform for translational research for Neurosciences: Sarat Chandra P Chairpersons: T.R. Raju, Bengaluru

Tea

Plenary Lecture- 2: Studying the neural basis of real-world vision and cognition in freely moving monkeys: S. P. Arun, IISc., Bengaluru Chairperson: Raghu Vemuganti, University of Wisconsin, USA

Learning and memory in

Surgical strategies to tackle the networks in drug -resistant epilepsy: Sarat Chandra, AIIMS, New Delhi

invertebrate systems

Symposium-11

Novel mechanisms and

therapies to mitigate secondary brain damage

Symposium- 10

Localising the networks in drug resistant epilepsy: Manjari Tripathy, AIIMS, Delhi

Yoga: mental health and well-being: Krishan Kumar, PGIMER, Chandigarh

Spectrum of yogic relaxation techniques: Jyoti Dvivedi, HIMS, Dehradun

Gyan Prakash Modi, IIT Varanasi

Yogic interventions for tackling mental

enhancement: Akshay Anand, PGIMER, Chandigarh

health issues: A desideratum

Meenakshi Tiwari, AIIMS, Patna

stage: Shahzad Aasim, KASRC, Srinagar J&K

S.K. Trigun, BHU, Varanasi

for contemporary issues

Symposium- 6

(Abstracts: S6.1-6) Yogic interventions in occupational stress: Pramod Avti, PGIMER, Chandigarh 4) Physiological insight to Yogic interventions: Seema Singh, Era's Medical College, Lucknow 5) 6) Quantitative EEG application in assessing effects of Kriya yoga on brain: Pooja Ojha, AIIMS, Jodhpur Symposium-7 Epidemiological aspects of long-term neuro-COVID: Adil Asghar, AIIMS, Patna Chairpersons: Evidence favoring viral injury of brain cells as a pathogenetic mechanism of long-term neuropsychiatric illness in COVID-19: Ishani Bora, PGIMER, Chandigarh Renu Wadhwa, AIST, Japan Pathogenesis mechanisms for long-tern neuro-COVID: Sujeet Kumar, Amity Univ. Mumbai Ashutosh Kumar, AIIMS, Patna 4) Long-term risks of neurodegenerative diseases in recovered COVID-19 patients: A.K. Datusalia, NIPER (Abstracts: S7.1-5) Raebareli, Lucknow G6PD deficiency mediated dysregulation of redox equilibrium contributing to Covid-19 mediated neuroinflammation: Soumya Pati, Shiv Nadar Institution of Eminence, Delhi-NCR, India Symposium-8 1) Regulation of glioblastoma through mitochondrial quality control: <u>L.K. Sharma</u>, SGPGIMS, Lucknow Chairpersons: 2) Critical role of mitochondrial metabolism in drug resistance in Glioblastoma Multiforme: Jyotirmoy Banerjee, AIIMS, Delhi Ashutosh Shrivastava, KGMU, Lucknow Exploring the Role of Autophagy in Temozolomide-Induced Glioma Cancer Stem Cells Population: Rajni K. Mishra, BHU, Varanasi

5th October 2023

Network reorganization at cellular level in drug-resistant epilepsy: <u>Jyotirmoy Banerjee</u>: AIIMS, Delhi 3) Sarat Chandra, AIIMS, New Delhi Altered lipid profiles in brain tissues resected from patients with focal cortical dysplasia (FCD): with Anita Mahadevan, New Delhi potential role in defining the epileptogenic zone during surgery: Aparna Dixit, ACBR, Delhi (Abstracts: S9.1-4) Symposium-10 Learning from visceral maliase in Drosophila: Gaurav Das, NCCS, Pune 1) Chairpersons: Miles to go before I sleep: the neuroethology of nocturnal colour vision in bees: Hema Somanathan, 2) IISER Trivandrum Laxmi T Rao, NIMHANS, Bengaluru Kavita Babu, IISc, Bengaluru 3) Interplay of temporal patterning and oscillations in olfactory learning in honeybees: Joby Joseph, Univ. (Abstracts: S10.1-5) Hyderabad 4) Bidirectional long-distance transport of organelles during synapse formation, maintenance and plasticity: Sathya Puthanveettil, UF Scripps Biomedical Research, USA 5) Understanding memory formation using C. elegans; the old, the new and the strange: Kavita Babu: IISc, Bengaluru Symposium-11 Epitranscriptomic modulation as a novel therapy to mitigate secondary brain damage: Raghu Vemuganti, Chairpersons:

Symposium- 9

Poster Session

ymposium- 12

NBRC, Manesar

Pune

Manesar

Achira Roy, JNCASR, Bengaluru

Centre for Neurosciences, Kolkata

Symposium- 15 Unmasking the puzzle:

Vivek Swarup, Univ. of California, Irvine CA, USA

disease: Muddanna S. Rao, College of Medicine, Kuwait

Novel insights into neurodegenerative

disorders and therapeutic targets

Smitha Karunakaran, IISc, Bengaluru

IISc, Bengaluru

2)

3)

Bangalore

IISER Tirupati

Group Discussion

Symposium- 18

Sushmita Jha, IIT, Jodhpur

Initiate an initiative: Suhail Rasool

Neurochemical basis of neurotoxicity

IAN-FAONS Symposium:

RNA and Brain Disorder

2)

Drug-resistant Epilepsy: Mischievous

Networks- From Bench to Bedside

Vrinda M, Axxonet Brain Research Lab, Bengaluru Bindu M Kutty, NIMHANS, Bengaluru Sleep structure and brain morphology in elderly: Nasreen Akhtar, AIIMS, Delhi **IAN General Body Meeting**

Symposium-18 Chairpersons: Vinay Khanna, IITR, Lucknow Nalini Shrivastava, JU, Gwalior (Abstracts: S18.1-5)	1) Trolox aids Coenzyme Q10 in protection of neural retina in NMDA induced glutamate excitotoxic damage via upregulation of VEGF in rat model: Madhumita Ghosh, Amity, Noida 2) Nerve agent induced neurotoxicological and Neurodegenerative effects: RamaRao Golime, DRDE, Gwalior 3) Suppression of bisphenol-A induced oxidative stress and mitochondrial dysfunction by taurine promotes neuroprotection and restores aggressive behavior in adult zebrafish (Danio rerio): Lilesh K. Pradhan, Sambalpur Univ., Burla 4) Dietary Lactobacillus rhamnosus GG (LGG) attenuates the toxic effects of benzo[a]pyrene and ethanol on zebrafish (Danio rerio) via gut microbiota modulation: Manorama Patri, CU, Dharamasala 5) Neuroprotective properties of GC-MS-identified phytoconstituents in Persicaria hydropiper (L.) Delarbre methanolic leaf extract: An in silico and in vivo study: Meenakshi Bawari, Assam University, Silchar
Symposium-19	1) Criticality of gender in treatment of neurological disorders: Sumana Chakravarty, IICT, Hyderabad
Chairpersons: Sumana Chakravarty	2) Taupathies and neurodegeneration: T C Yasha, NIMHANS, Bengaluru
Bindu M Kutty, NIMHANS,	3) Fyn kinase-Tau protein interaction and its implication on N-methyl D-aspartate receptor function:
Bengaluru	Sivaraman Padavattan, NIMHANS, Bengaluru
(Abstracts: S19.1-5)	4) TNT mediated protein transmission in the brain: Implications for Huntington disease pathology:
	Srinivasa Subramaniam, Biomedical Research, University of Florida, USA
	5) Astroglia proliferate upon clearance of alpha-synuclein-induced toxicities through tunnelling nanotubes:

Academy, Udupi Vivek Tiwari, IISER, Berhampur Tea Symposium- 20 Parkinson's Disease-

University of Wisconsin, Madison, WI, USA 2) Brain Microvascular Energetics: Impact of Sex, Aging, and Stroke: Prasad Katakam, Tulane University School of Medicine, New Orleans, LA, USA Targeting neutrophil integrin a9 improves functional outcomes after stroke in mice with obesity-induced hyperglycemia; Anil Chauhan, University of Iowa, Iowa City, IA, USA 4) Sex-dependent mechanisms underlying cognitive deficits following repeated mild TBI in adolescent rats: Ramesh Raghupathi, Drexel University College of Medicine, Philadelphia, PA, USA Regulatory RNAs as therapeutic targets to mitigate brain damage: Ashutosh Dharap, Univ. of South Florida College of Medicine, Tampa, FL, USA Lunch IAN-IBRO Global Advocacy Program:

Tribute to Prof. P.K. Seth- The Captain of Neurotoxicology in India: Vinay Khanna, IITR, Lucknow P.K. Seth Memorial Lecture: Virokines hit hard to the Brain Microvascular Endothelial Cells: Sunit

ymposium- 13

Young Scientist Colloquium- 2: Chair Persons: Vinay Khanna, Nisha Patro

Plenary Lecture- 3: Phosphoregulation of intracellular transport in the axon and cilium: Krishnanu Ray, NBRC, Manesar Chairperson: Sumit Singh, New Delhi

Tea

Distinguished Lecture- 2: Contextual influences on visual processing: Thomas Albright, Director, Vision Centre Laboratory, Salk Institute for Biological Studies, USA Chairperson: Ishan Patro, JU, Gwalior

Genomic architecture of Alzheimer's disease: lessons from human and mouse models of the disease:

2) "Potential reversal of Alzheimer's disease pathology by antibody TB006 targeting Galectin-3, the root

cause of oligomerization of amyloid proteins: Suhail Rasool, TrueBinding, Inc 300 Lincoln Centre Dr, Foster

Neuroprotective strategies to prevent neuroinflammation, cognitive dysfunction in cranial radiationinduced brain injury: Munjal Acharya, University of California, Irvine School of Medicine, Irvine, USA Sex-specific locus coeruleus dysfunction expedites disease progression in APP/PS1 mice:

Sex specific differences in evolution of cognitive decline in Alzheimer's disease: Reddy P Kommaddi,

N-Acetylcysteine amide protects neurons from degeneration in In-vitro STZ- model of Alzheimer's

1) Application of low intensity electromagnetic fields in ameliorating cognitive dysfunction and synaptic pruning in streptozotocin induced sporadic Alzheimer's disease rat model: Suman Jain, AIIMS, Delhi

Probing functional brain networks using transcranial brain stimulation: Nivethida T, IIT, Mumbai

rats by electromagnetic field stimulation: Arpita Chakraborty, Institute of Neurosciences, Kolkata

The glee'a: Do glia make us happy? Swananda Marathe, IISc, Bengaluru

ALA augment Tau phagocytosis and endosomal degradation in

microglia: Subashchandrabose Chinnathambi, NIMHANS, Bengaluru

Utility of Neuromodulation in Mood and Movement Disorders: Kaviraja Udupa, NIMHANS, Bengaluru

Brain state specific regulation of neural activity in dementia: Chinnakkaruppa Adaikkan, IISc, Bengaluru 5) Modulation of motor neuron excitability and muscle contractile properties in complete spinal cord injured

Reactive astrocytes in aging, neuronal injury and neurodegenerative diseases: Narendra Ramanan, IISc,

To Grow or Not to Grow: Hyperglycaemia Induced Alterations in Neurite Outgrowth: Vasudharani,

Inflammation and Neuroprotection in Mouse Brain: Role of HMGB1: K.P. Mishra, DIPAS, Delhi

Lunch

Technical Lecture: TBA

Symposium- 19 Therapeutics and

Oral Session-1

neurodegeneration

Retro-Engineering Brain Tumours: Uncovering Inflammation, Immunity and Tumour Biology:

Symposium- 16 Neuromodulation

strategies in health and disease

Development of nervous system

Young Scientist Colloquium- 1: Chair Persons: Vinay Khanna, Nisha Patro

Synapse-enriched lncRNA: Implications in memory during early life stress: Sourav Banerjee, FMRP determines the epitranscriptome of ribosomes through which it may regulate the development: Ravi Muddashetty, CBR, IISc, Bangalore Towards understanding molecular mechanisms of memory: Amitabha Majumdar, NCCS, Nuclear FMRP: Implications in Fragile-X-Syndrome: Carole Gwizdek, CNRS, Paris, France Understanding critical molecular signals in oligodendrocyte development: from the perspective of treating neonatal degenerative disorders like cerebral palsy: Sudip Sen, AIIMS, Delhi Establishment of Neural Circuits in the Developing Human Auditory Cortex: Soumya Iyengar, NBRC, Modelling a spectrum of early-onset human neurodevelopmental disorders – timing and mechanisms: Regeneration of spinal cord connectivity by endogenous forces in zebrafish: Subhra P Hui, SN Pradhan Multivariate brain dynamics in EEG during sleep: Arun Sasidharan, NIMHANS, Bengaluru ERPs during wake and sleep to tap maladaptive emotions processing in patients with chronic pain: Circadian rhythm manipulations help to reverse sleep abnormalities in ventral subicular lesioned rats: **Cultural event** Dinner 6th October 2023

T.R. Raju, S.P. Arun, Kishnanu Ray, P. Seth, Vinay Khanna and Ishan Patro

Symposium-14

Understanding cognitive

tuning through lens of sleep process

Symposium- 17

Glia in Health and disease

Invited Lectures- 2

enakshi Bawari, Assam University, Silchar ders: Sumana Chakravarty, IICT, Hyderabad ANS, Bengaluru on N-methyl D-aspartate receptor function: cations for Huntington disease pathology: of Florida, USA n-induced toxicities through tunnelling nanotubes: Mechanistic insights and therapeutic implication of astrocyte secreted cytokines in Alzheimer's disease:

6) Contributions of glial gap junctions towards neuropathic pain in rats: S. Kaler Jhajhria, AIIMS, New Delhi 7) Neuronal and epigenetic underpinnings of social isolation stress in Drosophila: Pavan Agrawal, Manipal 8) Advanced Neuroimaging and Artificial Intelligence in Understanding Human Brain Health and Disease: 9) Glutamate receptor trafficking: Ins and Outs: Samarjit Bhattacharyya, IISER, Mohali Symposium- 21 Pathology of brain disorders

Neuronal determinants of autophagy flux: Ravi Manjithaya, JNCASR, Bengaluru

Parkinson's Disease in India: Unanswered puzzle: Prashanth L K, Manipal Hospital, Bengaluru

Organellar hierarchy in Parkinson's disease: Investigations using experimental models: Phalguni Alladi,

Novel insights into molecular events following virus induced neurodegeneration: Pankaj Seth, NBRC,

Curcumin protects age induced neurodegeneration: Desynchronisation of interplay between clock,

Temporal lobe Epilepsy - from biochemistry to biology: Anita Mahadevan, NIMHANS, Bengaluru

Exploring Brain Energy Metabolism in Amyotrophic Lateral Sclerosis: Anant Patel, CCMB, Hyderabad

6) Assessment of short-term memory loss in recovered COVID-19 patients: Indications from a two-year

2) Unlocking the Neural Symphony: A Study on Learning and Memory in Vedic Sanskrit Scholars:

3) Influence of Neuroactive steroids and Mozart effect on Neuronal oscillations and Cognition: An EEG

1) Vulnerability of Müller glial cells in aging human retina: impact on photoreceptor cell survival: T.C. Nag,

Sangeeta Nath, MAHE, Bengaluru Subhas Chandra Biswas: IICB, Kolkata 1) Complexity of a mendelian disease: Can variants in ATP7B and modifier loci regulate cognitive decline and other neurological phenotypes in Wilson disease? Arpan Saha, Univ. of Calcutta, Kolkata Unravelling hippocampal proteome dynamics in hepatic encephalopathy rat model through label-free LC-MS/MS profiling: Papia Acharjee, BHU, Varanasi 3) Age-related qualitative morphological changes in the human stria vascularis: Silka Agarwal, AIIMS, New Delhi 4) Network pharmacology: Integrating system biology with computer aided drug design dealing with neurological disorders: Prachi Srivastava, Amity University, Lucknow

study: Rajesh Singh Yadav, NFSU, Bhopal

follow-up study: R.K. Jha, AIIMS, Patna

Study: Afreen Begum H Itagi, AIIMS, Mangalgiri

Uttam Kumar, SGPGI, Lucknow

AIIMS, New Delhi

AIIMS, New Delhi

5)

4)

5)

6) Patna

Manesar

NIMHANS, Bengaluru

Shivani Bodas, IISER, Pune

Chandra Prakash, JNU, New Delhi

S.K. Maurya, Univ. Delhi, Delhi

immune and microglia resting genes: Anita Jagota

Perspectives from cells to clinic Epigenetics: A game changer in understanding the disease biology of neuropsychiatric disorders: Arvind Kumar, CCMB, Hyderabad 2) Pax6 regulated putative biomarkers in brain of MPTP-treated mouse model of Parkinson's disease: Rajnikant Mishra, BHU, Varanasi

5) Non-permitted food colorants induced neurotoxicity in rats: A behavioral, neurochemical and histological

Oral Session- 2

Can cell therapy bring mitochondrial resilience following ischemic stroke? Pallab Bhattacharya, NIPER, Somatostatin-releasing inhibitory interneurons of the olfactory bulb mediate perceptual learning deficits in an early life stress mouse model: Nixon M. Abraham, IISER, Pune Quality: Pasang T. Dukpa, Cooch Behar

stress and memory function in mice brain: Manju Lata, MSJ College, Bharatpur

model of anxiety disorder: Simantini Ghosh, Ashoka University, Rai

mouse strain and the sex: Avijit Banik, GITAM University, Visakhapatnam

Impact of quercetin on endothelial cells of retinal capillaries in diabetic rats: Pankaj Kumar, IGIMS,

Olfml3 could act as a central molecule in the regulation of microglia-mediated brain immunity:

9) Gasdermin D inhibition confers protection from neuroinflammation and anxiogenic behavior in a rodent

10) Outcome of EP2 antagonist treatment to a two-hit mouse model of Alzheimer's disease depends on the

Closing Ceremony, Prize Distribution and Valedictory Ceremony

Socialization/ Dinner

The neuroprotective effects of Withania sominifera on age related cognitive decline- A study of oxidative

Resolution Mass Spectrometry: Arup Acharjee, UA, Prayagraj

Expression of Pax3 in human neural tube defects: Swati Tiwari, MAMC, New Delhi Association Between the Minutes Spent on Smart Mobile Phone Before Falling Asleep and Sleep Mechanisms underlying the development of the axonal actin-spectrin membrane periodic skeleton (MPS): 4) Proteomic Profiling of the Aging Rat Hippocampus: Insights from Machine Learning and High-Disease-modifying effect of quercetin in iron-induced experimental model of post-traumatic epilepsy:

4) Understanding the pathophysiology and virulence determinants of Burkholderia pseudomallei strains causing Neuro-Melioidosis: Somasish G. Dastidar, Manipal Academy, Manipal 5) Longitudinal MR evaluation of yoga-induced changes in brain in post-stroke recovery: Dushyant Kumar,