



XXXV Annual Conference of Indian Academy of Neurosciences and International Conference on Translational Neuroscience and its Application in Mental Health

October 29 - 31, 2017



Convention Centre, Ravenshaw University, Cuttack, Odisha - 753 003, India

Day 1, Sunday, October 29, 2017

Convention Centre 08.00 Onwards	Registration			
Convention Centre (Annex I)				
09.00 - 09.10	Welcome Address: Lipika Patnaik, Head, Department of Zoology, Ravenshaw University, Cuttack			
09.10 - 09.15	Remarks: Shashi B Singh, Dean, Indian Academy of Neurosciences and Director General, Life Sciences, DRDO, New Delhi			
09.15 - 10.00	Special Lecture: Dedicated in the memory of Late Professor MS Kanungo			
	Chairpersons: Shashi B Singh, DRDO, New Delhi GBN Chainy, Bhubaneswar			
	MK Thakur, BHU, Varanasi Epigenetic regulation of memory during aging			
Annex - I	Chairpersons: Shashi B Singh, DRDO, New Delhi BS Das, Cuttack			
10.00 - 10.30	Plenary Lecture – 1 T Isa, Kyoto University, Kyoto Large-scaled network plasticity for recovery from spinal cord injury			
10.30 - 11.00	Plenary Lecture – 2 GN Pandey, University of Illinois, Chicago Adaptive and innate immunity in depression and suicide: Role of cytokines and Toll-like receptors			
Annex - II	Chairpersons:			
	MK Thakur, BHU, Varanasi S Chakraborti, ICARE - IMSR, Haldia			
10.00 - 10.30	Plenary Lecture - 3 A Chattopadhyay, CCMB, Hyderabad Interaction of Membrane Cholesterol with G Protein-Coupled Receptors: Novel Insights in Health and Disease			
10.30 - 11.00	Plenary Lecture - 4 KP Mohanakumar, IUCBR, Kottayam Mitochondrial Neuronal Cell Lines: Creation, Characterization and Validation as Cellular Models of Neurological Diseases			
11.00 - 11.15	Tea / Coffee			
Annex - I 11.15 - 13.15	Symposium - 1 Regulatory mechanisms of functional synapse development, remodelling and repair			

Chairpersons:

KP Mohanakumar, ICUBR, Kottayam S Banerjee, NBRC, Manesar

1. K Babu, IISER, Mohali

An isoform dependent role for a C. elegans cadherin in GABA release

2. S Banerjee, NBRC, Manesar

Regulatory mechanism of synapse formation by non-canonical function of ubiquitination

3. A Ghosh Roy, NBRC, Manesar

Regulation of functional restoration after neuronal injury by miRNA pathway

4. V Kumar, IISER, Bhopal

Regulation of NMJ morphogenesis by non-canonical BMP signaling

5. C Goswami, NISER, Bhubaneswar

Preferential selection of specific amino acids at the lipid bilayer of TRPV1, TRPV2, TRPV3 and TRPV4 channels correlates with cholesterol interaction and vertebrate Evolution

Annex - II 11.15 - 13.15

Symposium - 2

Current Status on Alcohol Research

Chairpersons:

DK Sarkar, RUTGERS University, New Jersey TS Roy, AIIMS, New Delhi

1. DK Sarkar, RUTGERS University, New Jersey

Alcohol induced epigenetic modifications of stress regulatory genes transmit via germline

2. SC Pandey, University of Illinois, Chicago

Epigenetically regulated brain gene network pathways and pathophysiology of alcoholism

3. D Lamblin, FASD Resource Center

The SAFTHON: solidarity movement for the prevention of Fetal Alcohol Spectrum Disorders

4. J Balanche, Université de Médecine Timone Marseille, France

Solidarity Movement for the prevention of Fetal Alcohol Spectrum Disorders

5. P Murthy, NIMHANS, Bengaluru

Fetal Alcohol Spectrum Disorders: preliminary research from India

6. P Chandrasekaran, Project Manager, EU India-livelihood project, Pondicherry

Status of fetal alcohol syndrome in Tamilnadu

Annex - III 11.15 - 13.15

Symposium - 3

New Insights on the Role of Glia in Neuronal Signaling

	Chairpersons:
	AK Panda, Bhubaneswar
	IK Patro, Jiwaji University, Gwalior
	1. SC Bose Chinnathambi, NCL, Pune
	Microglial Internalization and Post-Translational Modifications of Tau
	2. IK Patro, Jiwaji University, Gwalior
	Early life Neuroinflammation - a challenge for old age
	3. SK Goswami, JNU, New Delhi
	SG2NA, a scaffold for many diseases
	4. N Patro, Jiwaji University, Gwalior
	Maternal protein malnutrition: Its impact on gliogenesis
	5. P Seth, NBRC, Manesar
	Cellular and Molecular Mechanisms of HIV-1 Neuropathogenesis
	6. A Kumar, UMKC School of Pharmacy, Kansas City, USA
	HIV-1 gp120 induces type-1 programmed cell death through ER-stress employing IRE-1α, JNK and AP-1 pathway
13.15 - 14.15	Lunch

	IRE-1α, JNK and AP-1 pathway				
13.15 - 14.15	Lunch				
Annex - I					
14.15 - 16.15	Oral Session - 1				
14.13 - 10.13	Neurodegenerative Diseases - Complexities and Challenges				
	licar ouegenerative 2 isouses — comprendes and chancinges				
	Chairpersons:				
	AK Parida, ILS, Bhubaneswar				
	PK Seth, Lucknow				
	1. NR Jana, NBRC, Manesar				
	Rescue of altered protein homeostasis in a mouse model of Huntington's				
	disease				
	2. SK Trigun, BHU, Varanasi				
	Sirtuins and epigenetic pathogenesis of excitotoxic brain disorders				
	3. J Ray, University of Calcutta, Kolkata				
	Movement Disorders Genetics In India: Challenges And Achievements				
	4. S Subramanian, NIMHANS, Bengaluru				
	N-terminal tau in Alzheimer disease and related tauopathies				
	5. R Shukla, CSIR-CDRI, Lucknow				
	Intranasal Insulin: A Promising Treatment for Alzheimer Disease				
	6. S Mittal, AIIMS, Rishikesh				
	Memory and its opponent Alzheimer's Disease				
Annex - II					
14.15 - 16.15	Oral Session – 2				
	Understanding the Biological Basis of Cognition				
	Chairpersons:				
	Chan persons.				

T Isa, Kyoto University, Kyoto TR Raju, SVYASA Yoga University, Bengaluru

1. V Kumar, DU, New Delhi

No-night light environment affects cognitive performance and associated brain areas in diurnal Indian house crows

1. RV Omkumar, RGCB, Thiruvanathapuram

Role of CaM Kinsae II in Learning and Memory

2. S Iyengar, NBRC, Manesar

Opioid Modulation of Song Learning in Male Zebra Finches

3. SK Jha, JNU, New Delhi

The why and when of sleep-dependent memory consolidation

4. N Chakrabarti, University of Calcutta, Kolkata

Translational Brain-Behaviour Research on Mammalian Neuro-diversity and Cognitive Variability

5. BSS Rao, NIMHANS, Bengaluru

Novel therapeutic strategies to treat epilepsy-induced cognitive deficits

Annex - III 14.15 - 16.15

Oral Session - 3

Progressive Brain Disorders and Understanding Mechanisms for Possibilities of Intervention

Chairpersons:

A Jagota, UoH, Hyderabad SK Jha, JNU, New Delhi

1. S Chakrabarti, ICARE Institute of Medical Sciences and Research, Haldia Involvement of α-synuclein in iron toxicity in SHSY5Y cells: Implications in Parkinson's disease

2. BR Patnaik, University of Wisconsin-Madison

Precision medicine in neurodegenerative diseases

3. S Jain, AIIMS, New Delhi

Effect of low intensity electromagnetic field stimulation on spinal cord injured rats: A functional and morphological study

4. P Alladi, NIMHANS, Bengaluru

Susceptibility to Parkinson's disease may arise during development: Evidence from mice models

5. S Prasad, BHU, Varanasi

Molecular mechanisms of hypoxia-induced cognitive alterations and neuroprotective role of a specialized extract of Bacopa monnieri

6. A Mantha, CUP, Bathinda

Neuroprotective role of Curcumin against Amyloid Beta (25-35)-Induced and Organophosphate Pesticides Pestered Neurotoxicity in SH-SY5Y and IMR-32 Cells via Activation of APE1 and Nrf2-mediated Pathways

Convention Center 16.15 - 17.15	Poster Session I		
10.15 - 17.15			
	Papers for SS Parmar Research Foundation Award; Brain response towards mood and cognition; Neurodegenerative diseases and their pathophysiology Tea / Coffee		
Heritage Hall			
(18.00 - 19.00)	Inaugural Function and Tribute to Prof BN Dhawan		
19.00 - 19.45	BK Bachhawat Memorial Life Time Achievement Award (2017-18)		
	Chairpersons:		
	S Sinha, NBRC, Manesar Shashi B Singh, DRDO, New Delhi		
	TR Raju, SVYASA Yoga University, Bengaluru Nexus with Neuroscience: A journey of four decades		
20.00.0			
20.00 Onwards Day 2, Monday, O	Ctober 30, 2017		
Day 2, Monday, O	Ctober 30, 2017		
Annex - I 08.30 - 09.15	BK Bachhawat Memorial Life Time Achievement Award (2016-17)		
	Chairpersons:		
	S Sinha, NBRC, Manesar PK Seth, Lucknow		
	M Gourie-Devi, New Delhi Building dynamic connection between Clinical, Overlap syndromes and Genetic profiles of Amyotrophic Lateral Sclerosis, critical for unraveling the complexity of the disorder		
09.15 - 09.45	KT Shetty Memorial Oration		
	AB Pant, CSIR-IITR, Lucknow In vitro models of developmental neurotoxicity: A journey with human cord blood stem cells		
Annex - I			
09.45 - 10.15	Plenary Lecture – 5 AK Mahapatra, AIIMS, New Delhi Split Cord Malformation and G.K. Therapy in Vestibular Schwannoma		
Annex - II			
09.45 - 10.15	Plenary Lecture - 6 S Picaud, Institut de la Vision, Paris		
	Visual restoration by retinal prostheses and optogenetic therapy: validation in non-human primates		
10.15 - 10.30	Tea / Coffee		
Annex - I 10.30 - 12.00	Symposium – 4 Brain Response to Low Oxygen		

	Chairpersons:				
	SC Mahapatra, AIIMS, Bhubaneswar				
	S Mishra, SCB Medical College and Hospital, Cuttack				
	1. N Khan, DIPAS, New Delhi				
	Role of small conductance calcium activated potassium (SK) channels in				
	hypobaric hypoxia				
	2 CVII-4- DIHAD I -b I -lb -b				
	2. SK Hota, DIHAR, Leh-Ladhak				
	Improving neurovascular coupling to ameliorate hypobaric hypoxia induced				
	cognitive impairment: A system biology approach				
	3. KK Barhwal, AIIMS, Bhubaneswar				
	Salidroside as a potential pharmacological molecule for treatment of hy				
	induced neurodegeneration				
	maacoa noar oacgoner actori				
	4. TS Roy, AIIMS, New Delhi				
	Age-related changes in the expression of glutamic acid decarboxylase (GAD67)				
	and NMDA receptor (NMDAR1) in the human inferior colliculus				
	5. R Sandhir, Panjab University, Chandigarh				
	Anti-inflammatory effects of H2S in hyperhomocysteinemia-induced				
	neurodegeneration				
Annex - II					
10.30 - 12.00	Symposium – 5				
	Adaptive Brain: Gender-based Differences in Affective and Cognitive				
	Neuroscience				
	Chairmarcana				
	Chairpersons: A Chattopadhyay, CCMB, Hyderabad				
	Sachidananda Das, Bhubaneswar				
	Sacinuananua Das, Diiubaneswai				
	1. MK Asthana, Medak, Telangana				
	Physiological Differences Between Gender: Implications for Affective Stimuli				
	Physiological Differences Between Gender: Implications for Affective Stimuli Processing				
	Physiological Differences Between Gender: Implications for Affective Stimuli Processing 2. B Bhushan, IIT Kanpur, Kanpur				
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Annex - III	Physiological Differences Between Gender: Implications for Affective Stimuli Processing 2. B Bhushan, IIT Kanpur, Kanpur Significance of Self-reported Biological Sex in Psychophysiological Research 3. K Vemuri, IIIT Hyderabad, Hyderabad Relook at gender stereotypes? - Presenting experimental evidence from two distinct studies - narrative empathy and risk-taking in gambling game 4. P Srivastava, IIIT Hyderabad, Hyderabad Do Male and Female differ in Making Sense of Desktop 360-degree Virtual Space? 5. TC Nag, AIIMS, New Delhi Experimental iron overload with aging in rat retina: histopathological analysis and expressions of iron transporters and storage proteins				
Annex – III 10.30 – 12.00	Physiological Differences Between Gender: Implications for Affective Stimuli Processing 2. B Bhushan, IIT Kanpur, Kanpur Significance of Self-reported Biological Sex in Psychophysiological Research 3. K Vemuri, IIIT Hyderabad, Hyderabad Relook at gender stereotypes? - Presenting experimental evidence from two distinct studies - narrative empathy and risk-taking in gambling game 4. P Srivastava, IIIT Hyderabad, Hyderabad Do Male and Female differ in Making Sense of Desktop 360-degree Virtual Space? 5. TC Nag, AIIMS, New Delhi Experimental iron overload with aging in rat retina: histopathological analysis and expressions of iron transporters and storage proteins Oral Session - 4				
	Physiological Differences Between Gender: Implications for Affective Stimuli Processing 2. B Bhushan, IIT Kanpur, Kanpur Significance of Self-reported Biological Sex in Psychophysiological Research 3. K Vemuri, IIIT Hyderabad, Hyderabad Relook at gender stereotypes? - Presenting experimental evidence from two distinct studies - narrative empathy and risk-taking in gambling game 4. P Srivastava, IIIT Hyderabad, Hyderabad Do Male and Female differ in Making Sense of Desktop 360-degree Virtual Space? 5. TC Nag, AIIMS, New Delhi Experimental iron overload with aging in rat retina: histopathological analysis and expressions of iron transporters and storage proteins Oral Session - 4 Neuroscience Education and Research-Initiatives, Innovations and				
	Physiological Differences Between Gender: Implications for Affective Stimuli Processing 2. B Bhushan, IIT Kanpur, Kanpur Significance of Self-reported Biological Sex in Psychophysiological Research 3. K Vemuri, IIIT Hyderabad, Hyderabad Relook at gender stereotypes? - Presenting experimental evidence from two distinct studies - narrative empathy and risk-taking in gambling game 4. P Srivastava, IIIT Hyderabad, Hyderabad Do Male and Female differ in Making Sense of Desktop 360-degree Virtual Space? 5. TC Nag, AIIMS, New Delhi Experimental iron overload with aging in rat retina: histopathological analysis and expressions of iron transporters and storage proteins Oral Session - 4				

Chairpersons: D Lamblin, Fondation Père Favron, St Louis N Patro, Jiwaji University, Gwalior 1. PK Roy, BHU, Varanasi National-level Brain Initiative Programs across countries: Building the *Synergism* 2. MC Arunan, Homi Bhabha Center for Science Education, Mumbai Simple Model Systems and Social Cognition Process in Meaning-making: A new Paradigm for Neurosciences Education and Research in Developing Countries 3. C Sachidanandan, CSIR-IGIB, New Delhi CHARGE syndrome: Models, Mechanisms & Medicines 4. P Aich, NISER, Bhubaneswar Integrative approaches to correlate stress and disease 5. P Pal, JIPMER, Puducherry *Autonomic imbalance in the pathophysiology of prediabetes and diabetes* Annex - I 12.00 - 13.30 Symposium - 6 IAN-FAONS Symposium on Neuroprotection and Neurorepair – Strategies and Approaches **Chairpersons:** SK Goswami, JNU, New Delhi S Jain, AIIMS, New Delhi 1. R Vemuganti, University of Wisconsin-Madison 5 Hydroxymethylation of Cytosine (5hmC) in DNA protects brain after ischemia 2. AK Chauhan, University of Iowa, Iowa City A novel therapeutic target for acute ischemic stroke 3. M Mahadevappa, IIT, Kharagpur Therapeutic effects of functional electrical stimulation on gait, motor recovery, and motor cortex in stroke and children with spastic Cerebral Palsy 4. G Kaur, GNDU, Amritsar Polysialic acid mimetic 5-nonyloxytryptamine, a potential therapeutic candidate for spinal cord injury: An in vitro and in vivo perspective 5. VK Khanna, CSIR-IITR, Lucknow Molecular Targets in Cadmium Induced Brain Dopaminergic *Dysfunctions: Protective Role of Quercetin* Annex - II 12.00 - 13.30 Symposium – 7 **Application of Stem Cells in Understanding the Pathology of Disease Chairpersons:** AB Pant, CSIR-IITR, Lucknow LT Rao, NIMHANS, Bengaluru

1. K Chosdol, AIIMS, New Delhi Novel molecules in glioma biology 2. N Shirsat, Tata Memorial Centre, Kharghar Distinctive MicroRNA Profiles of Molecular Subgroups of Medulloblastomas, a common malignant brain tumor in children: Role in Tumor Biology and Clinical Characteristics 3. M Hayat Shahi, AMU, Aligarh Sonic Hedgehog cell signalling pathway: A novel target for the brain tumour stem cells-mediated tumoriogensis 4. T Srivastava, University of Delhi, New Delhi Epigenetic regulation of glioma stem cell biology in the hypoxic microenvironment 5. R Pal, Eyestem, CCAMP, NCBS-TIFR, Bengaluru Human induced pluripotent stem cells (iPSC) for disease modeling and treatment of age-related macular degeneration (AMD) Annex - III 12.00 - 13.30 Symposium - 8 **Emergence of brain functional dynamics from structural constraints Chairpersons:** A Anand, PGIMER, Chandigarh D Roy, NBRC, Manesar 1. V Aluri, IIIT, Hyderabad Music Processing During Naturalistic Listening and the Effect of Musical Expertise 2. A Banerjee, NBRC, Manesar The representational space of multisensory integration: Insights from largescale neural models 3. D Roy, NBRC, Manesar Integration and segregation in Autism Spectrum Disorders modulated by age, disease and interaction 4. CN Gupta, IIT, Guawhati Early Biomarker detection in Psychiatry using Imaging Genetics 5. M Ingalhalikar, SIT, Pune Structural connectomics: Understanding the road maps of the brain, linking connectivity and pathology 13.30 - 14.30 Lunch Annex - I 14.30 - 16.30 Oral Session - 5 **Modeling Brain Damage and Repair Chairpersons:**

S Picaud, Institut de la Vision, Paris BM Kutty, NIMHANS, Bengaluru

1. JD Sarma, IISER, Kolkata

A novel role of gap junction intracellular communication in gliosis: In a model of viral-induced neuro-inflammatory demyelination

2. LT Rao, NIMHANS, Bengaluru

Constraint Induced Movement Therapy to impaired forelimb movements after ischemic stroke

3. G Paul, University of Kalyani, Kolkata

Metanil yellow inhibits uterine contraction ex vivo of rat through α -adrenergic and nitric oxide mediated soluble guanylyl cyclase signaling pathways

4. A Bhunia, Bose Institute, Kolkata

Structural analysis of protein aggregation: Implications for neurodegenerative disorders

5. M Debnath, NIMHANS, Bengaluru

Fetal programming of Schizophrenia: immunogenetic insights

6. P Srivastava, Amity University, Lucknow

Establishing preventive herbal approaches against pesticide expose neurodevelopmental disorders through computational system biology, molecular simulations and dynamics studies

Annex - II 14.30 - 16.30

Oral Session - 6

Neuroprotection and Brain Plasticity

Chairpersons:

G Paul, University of Kalyani, Kolkata Sarala Das, Cuttack

1. A Anand, PGIMER, Chandigarh

Low dose lead exposure in postnatal mice enhances retinal degeneration induced by late life retinal ischemia

2. UB Pandey, University of Pittsburgh, Pittsburgh

Perturbed stress granule dynamics in motor neuron disease

3. O. Chakrabarti, Saha Institute of Nuclear Physics, Kolkata

ESCRT machinery accessory proteins regulate balance between cell survival and apoptosis

4. S Ghosh, CSIR-IICB, Jadavpur

Microtubule targeted neuroprotective peptide

5. R Muddashetty, In Stem, NCBS, Bengaluru

Synaptic protein synthesis: "power" behind the plasticity

6. R Mishra, BHU, Varanasi

Compartmentalization and interactions of Pax6 in brain of mice

Annex - III 14.30 - 16.30

Oral Session - 7

Oxidative Stress and Brain

Chairpersons

S Mishra, Cuttack

	NR Jana, NBRC, Manesar		
	1. TK Ghosh, University of Calcutta, Kolkata Nitric oxide synthase is involved in the neurodegeneration in intracerebroventricular colchicine injected rats		
	2. P Dhar, AIIMS, New Delhi Role of Antioxidant (AOX) supplementation on expression pattern of Calbindin (CB) in cerebellar cortex of rat pups following postnatal exposure to sodium arsenite		
	3. S Singh, Guru Ghasidas Vishwavidyalaya, Bilaspur Profiles of oxidative and nitrosative factors in the brain of minimal hepatic encephalopathy rats		
	4. P Singru, NISER, Bhubaneswar Organization and importance of transient receptor potential vanilloid (TRPV) ion channels in the brain		
	5. J Joseph, University of Hyderabad, Hyderabad A network motif that does fine tuning of a negative feedback in a memory center		
	6. S Srivastava, KN Govt Post Graduate College, Gyanpur Neurobiology of vocal learning and language: Insight from non human animals into the evolution of language		
	7. S. Mahapatra, Ravenshaw University, Cuttack Planning Behaviour as a Function of Ageing		
Convention Center (16.30 - 17.30)	Poster Session II		
	Neuronal and glial pathology; Prophylactic and therapeutic strategies towards neuropathy; Understanding brain behavior during stress response		
	Tea / Coffee		
Annex I 16.00 - 17.30	NASI Sponsored Children Interaction Meet		
	'Meet the Scientists' Venue: Seven Pillars of Wisdom		
Annex II 18.00 - 19.00	General Body Meeting		
19.00 - 20.00	Cultural Program		
20.00 onwards	Dinner		

Day 3, Tuesday, October 31, 2017

Ann	ex I
09.00 -	- 10.20

Paper Presentation for Awards:

DM Kar Prize

Chairpersons:

VK Khanna, CSIR-IITR, Lucknow SK Trigun, BHU, Varanasi

1. D Sadhukhan, University of Calcutta, Kolkata

PARKIN and FGF-20 mediated PD pathogenesis among Indians

2. R Kumar, AIIMS, New Delhi

Somatostatin-induced antinociceptive effect after intrawound administration and its comparison to bupivacaine and morphine, in a rat model of acute post-operative pain

3. S Khuntia, Ravenshaw University, Cuttack

Efficacy of cognitive remediation programs for improving reading skills in children with dyslexia

4. T Pyne, University of Calcutta, Kolkata

Teasing out the variation in happiness and subjective well-being among individuals from Kolkata, India

5. R Bhagat, NBRC, Manesar, Gurgaon

Zika Viral proteins alter proliferation and differentiation of human neural stem cells

6. Sudeshna Das, DIPAS, New Delhi

Suppression of MAC-1 scavenger receptor upregulate M2 microglial phenotype leading to reversal of hypoxia induced working memory impairment

7. M Kwatra, NIPER, Guwahati, Assam

Alcohol exacerbated stress-induced cognitive impairment and hippocampal neurotoxicity: Protective mechanism of Melatonin

8. S Biswal, DIHAR, Leh-Ladhak

Salidroside inhibits mitochondrial autophagy in hypoxia

Annex I 10.20 - 11.40

Paper Presentation for Awards:

Tulsabai Somani Educational Trust Award

Chairpersons:

P Seth, NBRC, Manesar G Kaur, GNDU, Amritsar

1. A Bose, IISER, Kolkata

Mouse hepatitis virus modulates gap junction proteinCx43 mediated cell to cell communication in meningeal fibroblast

2. A Pandey, CSIR-IITR, Lucknow

Induced autophagy protects neural stem cell derived lineage against toxic insult by ameliorating apoptosis and mitochondrial dysfunctions

3. S Bhattacharyya, AIIMS, New Delhi

Axonal regeneration and functional connectivity repetitive magnetic stimulation in spinal cord injured rats

4. AA Naik Jiwaji University, Gwalior

Impulsive and hyperactive behaviour in rats following maternal protein malnutrition is associated with impaired astrogenesis

5. R Gupta, AIIMS, New Delhi

Comparison of the socio-demographic, clinical and GRIN2A SNP profiles in Alcohol and Opioid dependent subjects

6. SJ Tripathi, NIMHANS, Bangalore

Transient Inactivation of Basolateral Amygdala Prevents Stress-induced Maladaptive Changes in the Prefrontal Cortex

7. SS Mohapatra, Ravenshaw University, Cuttack

Effectiveness of CBT in the Management of OCD: A Case Study

8. Meetu Wadhwa, Department of Neurophysiology, DIPAS, New Delhi Inhibiting the microglia activation improves spatial memory by modulation of inflammatory cytokines and neurogenesis in rat hippocampus during 48 h of total sleep deprivation

11.40 - 11.50 Annex - I 11.50 - 13.30

Tea / Coffee

Oral Session-8

Cellular and Molecular basis for Neurodevelopmental Disorders

Chairpersons:

V Kumar, DU, New Delhi

B Patnaik, University of Wisconsin-Madison

1. SP Singh, BHU, Varanasi

Environmental factors responsible for neurodegeneration and the potential rule of Ayurveda in its recovery

2. JPC Chelliah, JNCASR, Bengaluru

Elucidating the expression profile of synaptic protein synthesis regulators, cytoskeleton proteins, and their crosstalk with SYNGAP1 in Syngap1 Heterozygous mutation during development

3. SB Ray, AIIMS, New Delhi

Postoperative nociception in rats: further characterization and alleviation

4. M Mishra, NIT, Rourkela

Nanoparticles used for filling of teeth causes developmental and mechanosensory defect in Drosophila melanogaster

5. S Mishra, MA Medical College, New Delhi

Morphological maturation of taste receptors along with con-commitant development of rostral nucleus of tractus solitarius (rNST) in developing human foetus

6. N Lenka, NCCS, Pune

Wnt rescues Stat3 deficiency during early neurogenesis

Annex - II

11.50 - 13.30	Oral Session - 9			
	Molecular Mechanisms of Neurodegenerative Disorders			
	Chairpersons:			
	R Shukla, CSIR-CDRI, Lucknow			
	P Srivastava, Amity University, Lucknow			
	4 DWW II NUMBER D			
	1. BM Kutty, NIMHANS, Bengaluru Meditation Practices and its influence on Brain and Mind: Neurophysiological			
	Approaches			
	2. A Jagota, UoH, Hyderabad Biological Clock Dysfunction in Aging and Parkinson's Disease			
	Biological Clock Dysjunction in Aging and Farkinson's Disease			
	3. RR Moganty, AIIMS, New Delhi			
	Identification and their pathological association of cell-free miRNAs and in			
	Friedreich's ataxia			
	4. P Kumar, Daulatpur, New Delhi			
	Potential therapeutic approach against hypoxia, oxidative stress and			
	environment toxin induced neurodegeneration			
	5. M Pal, Bose Institute, Kolkata			
	Study azadiradione as an activator of cellular heat shock response in human			
	cells			
	6. J Dandapat, Utkal University, Bhubaneswar Ovidative Stress Induced in Rat Brain Ry Altered Thyroid Hormone Titer is			
	Oxidative Stress Induced in Rat Brain By Altered Thyroid Hormone Titer is			
	Rescued by Curcumin			
13.30 - 14.30	Rescued by Curcumin Lunch			
Convention Centre				
	Lunch			
Convention Centre (Annex I)	Plenary Lecture			
Convention Centre (Annex I)	Plenary Lecture Chairpersons:			
Convention Centre (Annex I)	Lunch Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France			
Convention Centre (Annex I)	Plenary Lecture Chairpersons:			
Convention Centre (Annex I)	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai			
Convention Centre (Annex I)	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru			
Convention Centre (Annex I)	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai			
Convention Centre (Annex I) 14.30 - 15.00	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons:			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons:			
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Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack S Rath, Ravenshaw University 1. A Tripathi, Ranchi College, Ranchi Impact of Devices and Artificial Intelligence on Cognition and Behavioral			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack S Rath, Ravenshaw University 1. A Tripathi, Ranchi College, Ranchi			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack S Rath, Ravenshaw University 1. A Tripathi, Ranchi College, Ranchi Impact of Devices and Artificial Intelligence on Cognition and Behavioral Pattern: Problems and Remedies 2. A Ghosh, Netaji Nagar College for Women, Kolkata			
Convention Centre (Annex I) 14.30 - 15.00 Annex-I	Plenary Lecture Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack S Rath, Ravenshaw University 1. A Tripathi, Ranchi College, Ranchi Impact of Devices and Artificial Intelligence on Cognition and Behavioral Pattern: Problems and Remedies			
Convention Centre (Annex I) 14.30 - 15.00	Chairpersons: D LAMBLIN, University of Reunion Island, France BSS Rao, NIMHANS, Bengaluru S Tole, TIFR, Mumbai Uncovering spatiotemporal windows in cortical development Young Scientist Colloquium I Chairpersons: G Mohanty, Cuttack S Rath, Ravenshaw University 1. A Tripathi, Ranchi College, Ranchi Impact of Devices and Artificial Intelligence on Cognition and Behavioral Pattern: Problems and Remedies 2. A Ghosh, Netaji Nagar College for Women, Kolkata			

	aggregation: Biological insights into criminal behavior			
	 4. I Baitharu, Sambalpur University, Sambalpur Amelioration of hypobaric hypoxia induced memory impairment by Withands somnifera root extract: Involvement of NO and corticosterone signalling 5. R Aikat, Indian Spinal Injuries Centre, New Delhi Does visual feedback enhance benefits of mental imagery in Spinal Cord 			
	Injured patients?			
	6. BP Barik, Khallikote University, Berhampur Neuroinformatics Database and Tools			
Annex-II 15.00 - 16.30	Young Scientist Colloquium II			
	Chairpersons: SP Swain, SCB Medical College and Hospital, Cuttack A Mishra, Dispensary, Ravenshaw University, Cuttack			
	1. KP Haridas, AIIMS, Jodhpur Correlation between peak cardiac autonomic response latency and geriatric cognition			
	2. M Shambhovi, Indian Spinal Injuries Centre, New Delhi Which component of Autonomic Nervous System Reflects Depression in Spinal cord injury?			
	3. P Tayade, AIIMS New Delhi Mapping of EEG microstate in young adults in eye closed resting conditions			
	4. RS Yadav, Dr. Harisingh Gour Vishwavidyalaya, Sagar Pesticide Induced Neurobehavioral Abnormalities in Agriculture Workers			
	5. N Bhuyan, SCB Medical College and Hospital, Cuttack Cognitive Deficits in Autism			
	6. V Paramanik, Indira Gandhi National Tribal University, Amarkantak Identification and physiochemical analysis of ERK1/2 interacting proteins in the brain			
Convention Centre (Annex I) 16.30 - 17.30	Valedictory Function and Prize Distribution			
	Director, ICMR-RMRC, Bhubaneswar to be the Chief Guest at 35 th Valedictory Function of Indian Academy of Neuroscience (IAN 2017)			
	Convenor:			
	L Samanta, Ravenshaw University, Cuttack PK Mohapatra, Ravenshaw, University, Cuttack			
	Co-ordinator:			
	PK Jena, Ravenshaw, University, Cuttack L Patnaik, Ravenshaw University, Cuttack			
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Poster Session I (Sunday; 29th October 2017)

[A] Abstracts for Prof. SS Parmar Research Foundation Award

[P1] <u>Suwarna Chakraborty</u>, Sunil Jamuna Tripathi, BN Srikumar, TR Raju & BS Shankaranarayana Rao*

Department of Neurophysiology, National Institute of Mental Health and Neuro-Sciences

(NIMHANS), Bengaluru, India; *Email ID: suwarnachakraborty@gmail.com*

Topic: Brain Stimulation Rewarding Experience Ameliorates Endogenous Depression-induced Cognitive Deficits.

- [P2] <u>Soumya Kundu</u>¹, Rahul Kumar¹, Vineeth A. Raveendran¹, Debnath Pal² and Jayasri Das Sarma^{1*}

 ¹Department of Biological Sciences, Indian Institute of Science Education and Research (IISER), Kolkata, India; ²Indian Institute of Science, Bengaluru; *Email ID: sk14rs081@iiserkol.ac.in*Topic: DJ-1 regulation in viral induced oxidative stress in neural cells.
- [P3] Arpita Chakraborty¹, Supti Bhattacharyya¹, Dr. M.C Sharma² and Suman Jain¹

¹Department of Physiology, All India Institute of Medical Sciences (AIIMS), New Delhi, India; ²Department of Pathology, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: arpita259@gmail.com*

Topic: Effect of electromagnetic field stimulation on muscle morphology and contractility of spinal cord injured rats.

[P4] Arunima Bhaduri¹, Shyamal Kumar Das², Kunal Ray³ and Jharna Ray^{1*}

¹S. N. Pradhan Centre for Neurosciences, University of Calcutta, Kolkata, India; ²Bangur Institute of Neurosciences, Kolkata, India; ³Academy of Scientific & Innovative Research (AcSIR), New Delhi, India; *Email ID: jhilli.2006@gmail.com*

Topic: Role of Divalent Metal Transporter 1 (DMT1) in Parkinson's disease – A Case-control Study from Eastern India.

[P5] <u>Debashree Das</u>, Suryanarayan Biswal and Sunil Kumar Hota*

Defence Institute of High Altitude Research (DIHAR), DRDO, Leh-Ladakh, India; Email ID: das08.debashree@gmail.com

Topic: Retrograde Plasticity: Promotes Neuronal Survival Hypoxia Induced Glutamate Excitotoxicity.

- **[P6]** Shubhrajit Roy¹, Prosenjit Pal¹, Arunibha Ghosh¹, Sampurna Ghosh², Shyamal K Das³, Prasanta K Gangopadhyay⁴, Ashish Bavdekar⁵, Kunal Ray⁶, Mainak Sengupta² and Jharna Ray^{1*}
 - ¹S. N. Pradhan Centre for Neurosciences, University of Calcutta, India; ²Department of Genetics, University of Calcutta, Kolkata, India; ³Bangur Institute of Neurosciences, Kolkata, India; ⁴Calcutta National Medical College, Kolkata, India; ⁵KEM Hospital, Pune, India; ⁶Academy of Scientific and Innovative Research (AcSIR), New Delhi, India; *Email ID: shubhrajitroy123@gmail.com*

Topic: Role of *DBH* and *BDNF* polymorphism modifying the clinical course of Wilson's disease.

[P7] <u>Deepti Sharma</u>, Suryanarayan Biswal, Kushal Kumar, Ashish Kumar, Kalpana Kumari Barhwal and Sunil Kumar Hota*

Defence Institute of High Altitude Research (DIHAR), DRDO, Leh-Ladakh, India; *Email ID:* deepti1361@gmail.com

Topic: Cicer microphyllum seed extract promotes neuronal survival in global hypoxia through estrogen receptor β mediated mechanisms.

[P8] Anjana Ashok Kumar, Bhavna Daswani and Sree S Kumar*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID: anjanaashok24@gmail.com* **Topic:** Effect of Caffeine on Stalk Length of Dictyostelium discoideum.

[P9] Sheryl Alphonso and Anuttama Kulkarni*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID: alphonsosheryl@gmail.com* **Topic:** Effect of Valproic acid on the Nervous system of *Hydra*.

[P10] Shrestha Sinha^{1,2}, Nisha Patro² and Ishan Patro^{1,2*}

School of Studies in Zoology¹ and Neuroscience², Jiwaji University, Gwalior, India; *Email ID:* shrsthasinha@gmail.com

Topic: Spirulina supplementation to protein malnourished pregnant mothers improves cognitive and behavioral ability of F1 progeny.

[P11] Dhanashree Alshi, Bhavna Daswani and Sree S Kumar*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID: dhanno999@gmail.com* **Topic:** Effect of Metformin on the stalk length in *Dictyostelium discoideum*.

[P12] Neha K Chawda, Nabila Sorathia and Medha Rajyadhyaksha*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID: nehachawda83@gmail.com* **Topic:** Effect of hypoxia on gustatory plasticity in *Caenorhabditis elegans*.

[P13] Priyanka Sigar, Sonali Dhaval and Yasmin Khan*

Department of Life Sciences, Sophia College, Mumbai, India; Email ID: priyasigar27@gmail.com **Topic:** Zebrafish Xenotransplantation Model for Study Of C6 Glioma Cell Migration.

[P14] Purvanshi Vakil* and Hemlatha Ramchandran

Department of Life sciences, Sophia College, Mumbai, India; Email ID: purvanshiv95@gmail.com **Topic:** A pilot study: To study association of occupation and sex with cognitive decline in Elderly.

[P15] Shweta Menon, Nirali Shah, Varsha Singh and Hema Subramaniam*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID:* shweta.menon12@yahoo.com

Topic: Early presentation of Locomotor Defect in the GMR Aß₄₂ *Drosophila melanogaster* model of Alzheimer's Disease.

[P16] Saroj Kumar Das, Sai Aparna and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; *Email ID:* sarojkumardas@hotmail.com

Topic: Chronic waterborne exposure to benzo[a]pyrene induces neurobehavioral alteration and early onset of Parkinsonism like phenotypes in zebrafish.

[P17] Zeenia Avari and Hemalatha Ramachandran*

Department of Life Sciences, Sophia College, Mumbai, India; *Email ID: zeeniaavari95@yahoo.co.in* **Topic:** To study the effects of Risperidone on the retina and brain of chick embryo.

[P18] Taranjeet Kaur¹, Bhupinder Singh², Sunil Kumar Gupta³ and Gurcharan Kaur^{1*}

¹Department of Biotechnology, GNDU, Amritsar, India; ²Department of Medicine, Government Medical College, Amritsar, India; ³Chief Medical Officer, Health Centre, GNDU, Amritsar, India; *Email ID: taran3588@yahoo.co.in*

Topic: Association of Inflammatory and Metabolic Biomarker Profile with BMI in Perimenopausal Women.

[B] Brain responses towards mood and cognition

[P19] Maltesh Kambali¹, Ravi M Muddashetty² and Laxmi T Rao^{1*}

¹Department of Neurophysiology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; ²The Institute for Stem Cell Biology and Regenerative Medicine (inStem-NCBS), Bengaluru, India; *Email ID: umaltase23@gmail.com*

Topic: Early maternal separation and isolation stress enhanced attentional ability, modulating emotional and cognitive learning and memory with an impact on compulsive behavior.

[P20] Mehar Naseem and Suhel Parvez*

Department of Medical Elementology and Toxicology, Jamia Hamdard (Hamdard University), New Delhi, India; *Email ID: meharnaseem999@gmail.com*

Topic: Role of PRPs expression in long term memory formation.

[P21] <u>Gunjan Didwal</u>^{1,2}, Rahul Tyagi¹, Harshita Rachel^{1,3}, Manju Mohanty³, R Nagarathna⁴, Savita Verma Attri² and Akshay Anand^{1*}

¹Neuroscience Research Lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Pediatrics, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ³Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ⁴Swami Vivekananda Yoga Anusandhana Samsthana, Bengaluru, India; *Email ID: gunjan276@gmail.com*

Topic: The proposed role of Chair Yoga intervention in DMD patients with Dystrophin induced cognitive impairment.

[P22] Suvojit Hazra^{1, 2}, Basant K Tiwary² and Nilkanta Chakrabarti¹

¹Department of Physiology, University of Calcutta, Kolkata, India; ²Centre for Bioinformatics, School of Life sciences, Pondicherry University, Pondicherry, India; *Email ID: hazra.suvojit.golden@gmail.com*

Topic: Molecular modeling study of interaction between Sevoflurane and Synaptotagmin-1 C2B domain to explore the effect of anesthetic on cognition.

[P23] Saptarsi Mitra^{1,2}, Omprakash Singh^{1,2} and Praful S Singru^{1,2*}

¹School of Biological Sciences, National Institute of Science Education and Research (NISER), Bhubaneswar, India; ²Homi Bhabha National Institute, Training School Complex, Mumbai, India; *Email ID: saptarsime@gmail.com*

Topic: Organization of transient receptor potential canonical 6 (TRPC6)-equipped elements in the mouse brain.

[P24] Sai Aparna and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, School of Life Sciences, Ravenshaw University, Cuttack, India; *Email ID: saiaprna@gmail.com*

Topic: Synergistic impact of overcrowding stress and benzo[a]pyrene exposure on neurobehavioral responses of Zebrafish.

[P25] Khushboo Srivastava, Ratnakar Tripathi and Rajnikant Mishra*

Department of Zoology, Institute of Science, Banaras Hindu University (BHU), Varanasi, India; Email ID: ksrivastava66@gmail.com

Topic: Changing Pax6 and Ras-GAPexpression in brain of aging mice.

[P26] Manisha Kadam, Neetu Kushwah, Dipti Prasad and Nilofar Khan*

Neurobiology Division, Defence Institute of Physiology and Allied Sciences (DIPAS), New Delhi, India; *Email ID: manishakdm@gmail.com*

Topic: Modulation of Small Conductance Ca²⁺ activated K⁺ channels by Hypoxia/Reoxygenation.

[P27] Mrinmay Dhauria, Tushar Pyne, Mainak Sengupta and Krishnadas Nandagopal*

Department of Genetics, University of Calcutta, Kolkata, India; *Email ID:* mrinmay.dhauria@gmail.com

Topic: Using the COMPAS-W rating scale to measure happiness and well-being among young adults in Kolkata.

[P28] <u>Navneet Kaur</u>^{1,2}, Deepak Kumar Pal¹, Neeru Malik³, R Nagarathna⁴, HR Nagendra⁴ and Akshay Anand^{1*}

¹Neuroscience Research Lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Physical Education, Panjab University, Chandigarh, India; ³Dev Samaj College of education for women, Chandigarh, India; ⁴Swami Vivekananda Yoga Anusandhan Samsthana, Bangalore, India; *Email ID: navneetk957@gmail.com*

Topic: The neuro-cognitive profile of pre-diabetic women practising Diabetic Yoga protocol.

[P29] Sasibhushana Reddy, A Ahire, BS Shankaranarayana Rao and BN Srikumar*

Department of Neurophysiology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; *Email ID: sasib4@gmail.com*

Topic: Chronic 5-alpha Reductase Inhibition by Finasteride Induces Depression-like Behavior in Adult Rats.

[P30] <u>Binita Ghosh</u>¹, GC Baskey¹, Sajalendu Ghosh¹, Jaikishan Advani³, Ravindra Kumar Prasad¹, Dharmendra Kumar¹, Rashmi Kujur¹, Vaishnavi Kumari Mirdha¹, Veena Marandi¹, Manisha Kumari¹, Sushant Laxmikant Pople ⁴, Devyani Nruka⁵, Mahima Bhardwaj⁵, Anjali Chauhan⁶, Shreyas Khanore², Nayana Guddeti², Akash Tiwari², Jai Malvi², Ruchi Modgekar², Harshita Bhanushali², Manaswi Dekate², Hrushikesh Bendale² and Mayur Gaikwad^{2*}

¹Ranchi College, Ranchi, India; ²Elphistone College, Mumbai, India; ³Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, India; ⁴Karmaveer Bhaurao Patil College, Mumbai, India; ⁵Internationa College for Girls, Jaipur, India; ⁶Madras University, Chennai, India; *Email ID: binitasumi@gmail.com*

Topic: Comparisons of Olfactory Reception in Lab breed versus Wild drosophila.

[P31] Sayantani Behura¹ and Sangeeta Rath^{2*}

¹Department of Psychology, Utkal University, Bhubaneswar, India; ²Department of Psychology, Ravenshaw University, Cuttack, India; *Email ID: sayantani.behura@gmail.com*

Topic: Adolescent Obesity, Depression and Cognitive Behaviour Therapy.

[P32] Subhadeep Dutta Gupta, BN Srikumar, BS Shankaranarayana Rao and Bindu M Kutty*

Department of Neurophysiology, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bengaluru, India; *Email ID: subhadeep.duttagupta224@gmail.com*

Topic: Impact of short photoperiod regime on ventral subicular lesion-induced affective behaviors in Wistar rats.

[P33] Tiyasha Sarkar, Nisha Patro and Ishan K Patro*

School of Studies in Neuroscience, Jiwaji University, Gwalior, India; *Email ID:* tiyasha.sarkar8@gmail.com

Topic: Perinatal sequential multiple hit leads to cognitive and behavior impairment in rats.

[P34] Brijendra Singh, Nisha Patro and Ishan K Patro*

School of Studies in Neuroscience, Jiwaji University, Gwalior, India; *Email ID:* brij.biotech2010@gmail.com

Topic: Poly I:C impair cognitive and behaviour ability in later life through induced neuroinflammation in developing rat brain

[P35] Kamble Prathamesh Haridas*, Sharma Rajesh K, Dixit Ahinav and Singhal Anish

Department of Physiology, All India Institute of Medical Sciences (AIIMS), Jodhpur, India; *Email ID:* kambleph@aiimsjodhpur.edu.in

Topic: Correlation between peak cardiac autonomic response latency and geriatric cognition

[P36] Safeya Makhmur and Sangeeta Rath*

Department of Psychology, Ravenshaw University, Cuttack, India; *Email ID:* safeyagul94@gmail.com

Topic: Mental Health of Diabetics: A Quantitative Analysis.

[C] Neurodegenerative diseases and their pathophysiology

[P37] <u>Arpita Chakraborty</u>¹, Supti Bhattacharyya¹, MC Sharma² and Suman Jain¹

¹Department of Physiology, All India Institute of Medical Sciences (AIIMS), New Delhi, India; ²Department of Pathology, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: arpita259@gmail.com*

Topic: Effect of electromagnetic field stimulation on muscle morphology and contractility of spinal cord injured rats.

[P38] <u>Shashi Shekhar Kumar</u>, Naman Vatsa, Vipendra Kumar, Brijesh Kumar Singh, Imran Jamal, Ankit Sharma and Nihar Ranjan Jana*

Cellular and Molecular Neuroscience Laboratory, National Brain Research Centre (NBRC), Manesar, India; *Email ID: shashi@nbrc.ac.in*

Topic: Topotecan, a topoisomerase-1 inhibitor retards the disease pathogenesis in a mouse model of Huntington's disease.

[P39] Abhik Paul¹, Bharti Nawalpuri², Shruthi Sateesh1, Ravi S Muddashetty² and James P Clement^{1*}

¹Neuroscience Unit, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, India; ²Institute for Stem Cell Biology and Regenerative Medicine (in Stem), Bengaluru, India; *Email ID: abhikpaul.microbio@gmail.com*

Topic: Elucidating the Expression profile of FMRP, and its crosstalk with SYNGAP1 in *Syngap1* Heterozygous mutation during development.

[P40] Anamika and Surendra K Trigun*

Department of Zoology, Institute of Science, Banaras Hindu University (BHU), Varanasi, India; Email ID: anamika403@gmail.com

Topic: Profile of Mitochondrial SIRT3 and Oxidative factors in the brain of Hepatic Encephalopathy rats.

[P41] Archita Khanna and Surendra K Trigun*

Biochemistry Section, Department of Zoology, Banaras Hindu University (BHU), Varanasi, India; Email ID: architakhannabhu@gmail.com

Topic: Modulation of Sirt-1 and NAD+ regenerating factors in the brain of hepatic encephalopathy

[P42] <u>Brijesh Kumar Singh</u>, Naman Vatsa, Vipendra Kumar, Shashi Shekhar, Ankit sharma and Nihar Ranjan Jana*

Cellular and molecular Neuroscience Division, National Brain Research Centre (NBRC), Manesar, India; *Email ID: brijesh@nbrc.ac.in*

Topic: Ube3a deficiency promotes ADAM10 mediated non amyloidogenic processing of amyloid precursor protein in APPswe/PS1δE9 mouse model of Alzheimer's disease.

[P43] Tushar Dubev^{1,2}, and Subashchandrabose Chinnathambi^{1,2*}

¹Neurobiology Group, Division of Biochemical Sciences, CSIR-National Chemical Laboratory, Dr. Homi Bhabha Road, Pune, India; ²Indian Academy of Scientific and Innovative Research, Anusandhan Bhawan, Rafi Marg, New Delhi, India; *Email ID: ta.dubey@ncl.res.in*

Topic: Understanding the Novel Role of Tau and Ran GTPase in Nuclear Transport.

[P44] Priyanka Singh¹, Pankaj Seth^{1*} and Renu Wadhwa²

¹National Brain Research Centre (NBRC), Manesar, India; ²Advanced Industrial Science and Technology, India; *Email ID: Priyanka1114@nbrc.ac.in*

Topic: Modulation of heat shock protein Modulates Neurodegeneration disease.

[P45] <u>Simran Sudhir Sahare</u>¹, Shreyas Khanore¹, Abhijeet Singh², Arjun Jeswani³, Shivani Gidla⁴ and Jaikishan Advani^{5*}

¹Elphinstone College, Mumbai, India; ²Adarsha Vidyalaya, Mumbai, India; ³Bombay College of Pharmacy, Mumbai, India; ⁴CHM College, Ulhasnagar, India; ⁵CUBE lab, HBCSE, Mumbai, India; *Email ID: saharesimran@gmail.com*

Topic: Developing Earthworm as a Model System for Spinal Cord injury in Human.

[P46] Anamika Misra, Sankha Shubhra Chakrabarti and Indrajeet Singh Gambhir*

Department of Medicine, Institute of Medical sciences (IMS), Banaras Hindu University (BHU), Varanasi, India; Email ID: anamikamsr14@gmail.com

Topic: The new genetic players in Late Onset Alzheimer's Disease- findings of genome wide association studies.

[P47] Naman Vatsa and Nihar Ranjan Jana*

Cellular and Molecular Neuroscience Laboratory, National Brain Research Centre (NBRC), Manesar, India; Email ID: naman@nbrc.ac.in

Topic: Understanding the role of microRNA in Angelman Syndrome pathogenesis using mouse model.

[P48] Abhilash PL¹, BK Chandrasekhar Sagar², Mariamma Philip³, Bindu M Kutty¹, TR Raju¹ and Phalguni Anand Alladi¹*

¹Department of Neurophysiology, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, India; ²Department of Neuropathology, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, India; ³Department of Biostatistics, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, India; *Email ID: abhilashparli@gmail.com*

Topic: Aging selectively modulates the inflammatory profile in mice strains with differential susceptibility to MPTP.

[P49] Aditya K. Padhi, Priyam Narain, <u>Upma Dave</u>, Rohit Satija, Anirudh Patir and James Gomes*

Kusuma School of Biological Sciences, Indian Institute of Technology (IIT) Delhi, New Delhi, India; Email ID: blz168129@bioschool.iitd.ac.in

Topic: Functional characterization of Ribonuclease 4 polymorphisms in Amyotrophic Lateral Sclerosis.

[P50] <u>Debanjana Chakravarty^{1#}, Fareeha Saadi¹</u>[#], Soumya Kundu¹, Abhishek Bose¹, Reas Khan², Kimberley Dine², Lawrence C Kenyon³, Kenneth S Shindler² and Jayasri Das Sarma^{1*}

¹Department of Biological Sciences, Indian Institute of Science Education and Research (IISER), Kolkata, India; ²Departments of Ophthalmology and Neurology, University of Pennsylvania, Scheie Eye Institute, Philadelphia, USA; ³Department of Pathology, Anatomy and Cell Biology, Thomas Jefferson University, Philadelphia, USA; *Email ID: dc14ip035@iiserkol.ac.in & fs14ip005@iiserkol.ac.in*

Topic: Protective function of CD40 in mouse hepatitis virus (MHV)-induced demyelination.

[P51] <u>Arindam Biswas</u>¹, Dipanwita Sadhukhan¹, Atanu Biswas², Shyamal K Das², Tapas Kumar Banerjee³, Sandip Pal⁴, Kunal Ray⁵ and Jharna Ray^{1*}

¹S. N. Pradhan Centre for Neurosciences, University of Calcutta, Kolkata, India; ²Bangur Institute of Neurosciences, Kolkata, India; ³National Neuroscience Centre, Kolkata, India; ⁴Medical College and Hospital, Kolkata, India; ⁵Academy of Scientific & Innovative Research (AcSIR), New Delhi, India; *Email ID: thisisarindam@gmail.com*

Topic: Genetic analysis of cognitive impairment in Parkinson's disease.

[P52] <u>Iit Poddar</u>, Munmun Pradhan and Sasanka Chakrabarti*

ICARE Institute of Medical Sciences and Research, Haldia, Kolkata, India; *Email ID:* poddar.jit@gmail.com

Topic: Effect of systemic administration of lipopolysaccharide or 2-deoxyglucose on brain mitochondrial functions and amyloid beta homeostasis in rats.

[P53] <u>Shweta Singh Chauhan</u>¹, ArchanaVerma¹, Vaishali Pankaj¹, Neha Srivastva^{1,2} and Prachi Srivastava^{1*}

¹AMITY Institute of Biotechnology, AMITY University, Lucknow, India; ²Dr. APJ Abdul Kalam Technical University, Lucknow, India; *Email ID: shwetasingh1chauhan@gmail.com*

Topic: Identification and 3D structure prediction of potential drug targets against Selected Neurodevelopmental Disorders by establishing network analysis: A system biology approach.

[P54] Neethi Prem¹, Laxmi T Rao¹, John P John² and Bindu M Kutty^{1*}

¹Department of Neurophysiology, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, India; ²Department of Psychiatry, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bangalore, India; *Email ID: neethiprem.nimhans@gmail.com*

Topic: Behavioral assessment of schizophrenia-like symptoms in a partial animal model of schizophrenia using GABA_A receptor antagonist picrotoxin.

[P55] Parul Bali^{1,2}, Bimla Nehru², Avijit Banik¹ and Akshay Anand^{1*}

¹Neuroscience Research Lab, Department of Neurology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Biophysics, Panjab University, Chandigarh, India; *Email ID: parul28bali@gmail.com*

Topic: Optimization of Amyloid β dose for establishing memory deficit mouse model of Alzheimer's Disease.

[P56] Surya Narayan Rath^{1,2} and Manorama Patri*

¹Department of Bioinformatics, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India; ²Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; *Email ID: snrbioinfo@gmail.com*

Topic: Understanding ligands driven mechanism of wild and mutant Aryl Hydrocarbon Receptor in presence of phytochemicals combating Parkinson's disease: A computational approach.

[P57] <u>Dibyashree Mallik</u>, Sushma Rani Martha and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; *Email ID: dibyashree.mallik@gmail.com*

Topic: New targets for schizophrenia treatment to establish a possible health management strategy through antipsychotic drugs by using bioinformatics tools.

[P58] Sapana Goswami and Prachi Srivastava*

AMITY Institute of Biotechnology, AMITY University, Lucknow, India; *Email ID:* goswami12sapana@gmail.com

Topic: Computational Approaches for Fighting Against Anxiety Neurosis through Targeting BDNF & CFR1 Protein.

[P59] <u>Vaishali Pankaj</u>¹, Shweta Singh Chauhan¹, ArchanaVerma¹, Neha Srivastva^{1,2} and Prachi Srivastava^{1*}

¹AMITY Institute of Biotechnology, AMITY University, Lucknow, India; ²Dr. APJ Abdul Kalam Technical University, Lucknow, India; *Email ID: vaishali.pankaj124@gmail.com*

Topic: Pathway analysis of DRD4, SNAP25 and AKT1genes to establish their role as a possible potential future targets for Attention Deficit Hyperactivity disorder, Intellectual Disability and Autism disorders: A system biology approach.

[P60] Larica Mohanta¹, Ashis Kumar Mohanty^{1*} and Niranjan Sahoo²

¹College of Basic Science and Humanities, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India; ²College of Veterinary Science and Animal Husbandry, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India; *Email ID: larica.pepsi@gmail.com*

Topic: Effect of behavioral response and haematological parameter in healthy and Parvo infected canines.

[P61] Prosenjit Pal^{1,2}, Andrew Waddell², Abhishek Chowdhury⁵, Raghunath Chatterjee⁶, Shyamal K. Das⁷, Mark Peggie³, Kunal Ray⁸, Miratul M. K. Muqit^{2,4} and Jharna Ray^{1*}

¹S.N. Pradhan Centre for Neurosciences, University of Calcutta, Kolkata, India; ²MRC-Protein Phosphorylation and Ubiquitylation Unit; ³Division of Gene Regulation and Expression; ⁴School of Medicine, University of Dundee, Dundee, DD1 5EH, UK; ⁵Indian Institute of Chemical Biology, Kolkata, India; ⁶Indian Statistical Institute, Kolkata, India; ⁷Bangur Institute of Neurosciences, Kolkata, India; ⁸Academy of Scientific & Innovative Research (AcSIR), New Delhi, India; *Email ID: pal.prosen21@gmail.com*

Topic: Role of Heterozygous *PINK1*Mutants and *DJ-1* Promoter Variants in Parkinson's Disease Pathogenesis.

[P62] Privam Narain¹, James Gomes¹, Rohit Bhatia² and Perumal Vivekanandan^{1*}

¹Kusuma School of Biological Sciences, Indian Institute of Technology (IIT) Delhi, New Delhi, India; ²All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID:* pnarainiitd@gmail.com

Topic: ATXN2 Intermediate Length Repeat Expansions in Indian Patients with Amyotrophic Lateral Sclerosis.

[P63] Abhishek Balmik and Subashchandrabose Chinnathambi*

Neurobiology Group, Biochemical Sciences Division, CSIR-National Chemical Laboratory, Pune, India; *Email ID: abhi.balmik@gmail.com*

Topic: HDACs as the modifier of Microtubule Associated Protein Tau structure and function.

Poster Session II (Monday; 30th October 2017)

[D] Neuronal and glial pathology

[P64] Aarzoo Charaya, Smriti Gupta and Rajat Sandhir*

Department of Biochemistry, Panjab University, Chandigarh, India; *Email ID:* aarzoo.charaya22@gmail.com

Topic: Milk Peptides and Brain: Existing Crosstalk.

[P65] Anuradha Mehta, Chitra Mohinder Singh Singal and Pankaj Seth*

National Brain Research Centre (NBRC), Manesar, India; *Email ID: mehta.radhaanu@gmail.com* **Topic:** Effect of HIV-1 Transactivator of Transcription (Tat) on ephrinA3-EphA4 interaction and astrocyte mediated neurotoxicity.

[P66] Payal Bajaj and Gurcharan Kaur*

Department of Biotechnology, Guru Nanak Dev University (GNDU), Amritsar, India; *Email ID:* bajajpayal92@gmail.com

Topic: Chloroform extract of *Tinospora cordifolia* as a potential candidate for differentiation based therapy of glioblastoma.

[P67] <u>Preeti Kute</u>^{1,2}, Praveen Anand¹, Sudhriti Ghosh Dastidar¹, Sarayu Ramakrishna^{1,3}, Nagammal Neelagandan¹, Sumantra Chattarji⁴, Dasaradhi Palakodeti¹ and Ravi Muddashetty^{1*}

¹Institute for Stem Cell Biology and Regenerative Medicine (inStem), Bangalore, India; ²SASTRA University, Thanjavur, India; ³Trans-Disciplinary University, Bangalore, India; ⁴National Centre for Biological Sciences (NCBS), Bengaluru, India; *Email ID: preetimk@instem.res.in*

Topic: Translational regulation downstream of NMDAR signalling mediated by AGO2-MOV10-FMRP complex.

[P68] Raviranjan Kumar and Rohit Joshi*

Lab of Drosophila Neural Development, Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, India; *Email ID: raviranjanibb@gmail.com*

Topic: Notch pathway together with epigenetic regulation is playing important role in apoptosis of Drosophila Larval Neural Stem Cells

[P69] Shikha Kalotra and Gurcharan Kaur*

Department of Biotechnology, Guru Nanak Dev University (GNDU), Amritsar, India; *Email ID:* kalotrashikha@gmail.com

Topic: Neuroregeneration potential of 5-nonyloxytryptamine oxalate against acute glutamate excitotoxicity in neuronal cultures.

[P70] Reshma Bhagat*, Himali Arora* and Pankaj Seth*

Molecular and Cellular Neuroscience, National Brain Research Centre (NBRC), Manesar, India; Email ID: himali.b15@nbrc.ac.in

Topic: Zika Virus E Protein Causes Activation of Astrocytes.

[P71] Sudhriti Ghosh Dastidar and Ravi Muddashetty*

Institute for Stem Cell Biology and Regenerative Medicine (inStem), Bengaluru, India; *Email ID:* sudhritigd@ncbs.res.in

Topic: Bioenergetics of the protein synthesis in response to NMDAR and mGluR stimulation.

[P72] Manmeet Singh¹, Abhinoy Kishore¹, Sreeparna Vappala¹, Dibyajyoti Maity², Lawrence C Kenyon³, Debnath Pal⁴ and Jayasri Das Sarma^{1*}

¹Department of Biological Science, Indian Institute of Science Education and Research (IISER), Kolkata, India; ²IISc Mathematics Initiative, Indian Institute of Science (IISc), Bengaluru, India; ³Department of Pathology, Anatomy and Cell Biology, Thomas Jefferson University, Philadelphia, USA; ⁴Department of Computational & Data Sciences, Indian Institute of Science (IISc), Bengaluru, India; *Email ID: ms13rs039@iiserkol.ac.in*

Topic: Two consecutive central prolines in the fusion domain of the Mouse Hepatitis Virus spike protein play a major role in the cell-to cell fusion and neuro-pathogenicity.

[P73] Pushpa Kumari, Balakumar Srinivasan and Sourav Banerjee*

Synapse Biology Laboratory, National Brain Research Centre (NBRC), Manesar, India; *Email ID:* pushpa4octbhu@gmail.com

Topic: Modulation of hippocampal synapse maturation by an activity-regulated E3 ligase, Rnf2, *via* non-canonical pathway.

[P74] Zeeshawn Ali and Siv Kumar*

Department of Physiology, Kasturba Medical College, Manipal, India; *Email ID:* zeeshawn7@gmail.com

Topic: Developing a cost-effective affordable technology for neuronal tracing and comparing it with the conventional methods for its accuracy and validity.

[P75] Risha Khandelwal, Rashmi Sipani, Sriivatsan Govindarajan, Raviranjan Kumar and Rohit Joshi*

Laboratory of Drosophila Neural Development, Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, India; *Email ID: risha910@gmail.com*

Topic: Combinatorial action of Grainyhead, Extradenticle and Notch in regulating *Hox* mediated apoptosis in Drosophila larval CNS.

[P76] Anjali Amrapali Vishwanath*, Narendrakumar Ramanan and James Chelliah

Jawaharlal Nehru Centre for Advance Scientific Research (JNCASR), Bengaluru, India; *Email ID:* anjaliav@jncasr.ac.in

Topic: Effect of *Syngap1* heterozygous mutation on astrocytes.

[P77] Smriti Gupta and Rajat Sandhir*

Department of Biochemistry, Panjab University, Chandigarh, India; *Email ID:* smritibhu22@gmail.com

Topic: Glial Cells: Silent Regulatory node in Alzheimer's disease pathology.

[P78] Juhi Singh, Kedar Sharma and Prakash P Pillai*

Department of Zoology, The Maharaja Sayajirao University of Baroda, Vadodara, India; *Email ID: juhivsingh@gmail.com*

Topic: Role of PDGF-A signalling in glioma growth and migration.

[P79] Sarika Singh Kushwaha^{1,2}, Nisha Patro² and Ishan K Patro^{1,2*}

¹School of Studies in Zoology, Jiwaji University, Gwalior, India; ²School of Studies in Neuroscience, Jiwaji University, Gwalior, India; *Email ID: sarika.sr@gmail.com*

Topic: Phenotypic changes of microglia in aging rat hippocampus.

[P80] Atin Kumar Mandal

Division of Molecular Medicine, Bose Institute, Kolkata, India; *Email ID: atink99@yahoo.com* **Topic:** Role of E3 ligase.

[E] Prophylactic and therapeutic strategies towards neuropathy

[P81] Mohit Kumar and Rajat Sandhir*

Department of Biochemistry, Panjab University, Chandigarh, India; *Email ID:* mohit.biotech@pu.ac.in

Topic: Hydrogen sulfide ameliorates nitro-oxidative stress and cognitive deficits following chemically induced hyperhomocysteinemia.

[P82] <u>Aaleya Sanyal Talapatra</u>, Dhwani Popat, Lalgi Hima, Kishore Aravind Ravichandran and Srinivasan ThyagaRajan*

Integrative Medicine Laboratory, Department of Biotechnology, School of Bioengineering, SRM University, Chennai, India; *Email ID: aaleya.sanyal@gmail.com*

Topic: Virgin Coconut Oil Enhances Intracellular Signaling Molecules and Antioxidant Enzyme Activities in Mesenteric Lymph Nodes of Female Wistar Rats.

[P83] <u>Archana Verma</u>¹, Shweta Singh Chauhan¹, Vaishali Pankaj¹, Neha Srivastva^{1,2} and Prachi Srivastava^{1*}

¹AMITY Institute of Biotechnology, AMITY University, Lucknow, India; ²Dr. APJ Abdul Kalam Technical University, Lucknow, India; *Email ID: archanaverma433@gmail.com*

Topic: Molecular Interaction studies of screened phytochemicals to establish their promising potentiality against identified protein target of selected neurodevelopmental Disorders.

[P84] Somoday Hazra^{1,2}, Sourav Kumar³ and Amal Chandra Mondal^{4*}

¹Department of Zoology, University of Calcutta, Kolkata, India; ²Sagol Department of Neurobiology, University of Haifa, Israel; ³Neuroscience Research Unit, Department of physiology, Raja Peary Mohan College, Uttarpara, India; ⁴Cellular and Molecular Neurobiology, School of Life Sciences, Jawaharlal Nehru University (JNU), New Delhi, India; *Email ID: somoday.drdo@gmail.com*

Topic: A Peptide Based Pro-Drug Ameliorates Amyloid- β Induced Neuronal Apoptosis in *in vitro* SH-SY5Y cells.

[P85] Chaitra Venugopal¹, Kiranmai S Rai², Shobha K¹ and Anandh Dhanushkodi^{1*}

¹School of Regenerative Medicine, Manipal University, Bangalore, India; ²Dept. of Physiology, Melaka Manipal Medical College (MMMC), Manipal University, Manipal, India; *Email ID:* venuchaitra17@gmail.com

Topic: Neuroprotective Effect of Adult Mesenchymal Stem Cell Secretome against Excitotoxicity.

[P86] <u>Dhwani Popat</u>, Aaleya Talapatra, Kishore Aravind Ravichandran, Lalgi Hima and Srinivasan Thyaga Rajan*

Integrative Medicine Laboratory, Department of Biotechnology, School of Bioengineering, SRM University, Kattankulathur, India; *Email ID: dhwanipopat19@gmail.com*

Topic: Virgin coconut oil enhances antioxidant status in the thymus of female wistar rats through cell signaling molecules.

[P87] Amrita Mukherjee Paul¹, Rajarshi Roy^{1, 2}, Avijit Paul³, <u>Kuntal Ghosh</u>¹

¹Indian Statistical Institute, Kolkata, India; ²Indian Institute of Technology Indore, India; ³Tata Consultancy Services, Kolkata, India; *Email ID: kuntal.isical@gmail.com*

Topic: Blind Spot filling-in from Retino-cortical perspectives based on colour and texture

[P88] Rajesh T^{1*}, Ramesh Rao.T² and Kiranmai. S. Rai³

¹Dept. of Anatomy, Melaka Manipal Medical College, Manipal University, Manipal, India; ²Dept. of Preclinical Sciences, Faculty of Medical Sciences, The University of The West Indies, Trinidad;

³Dept. of Physiology, Melaka Manipal Medical College- Manipal Campus, Manipal University, Manipal, Karnataka, India; Email ID: ; *Email ID: rajeshkmcic@gmail.com*

Topic: Effects of physical exercise and environmental enrichment on prenatal inflammation induced alterations in hippocampal neuronal morphology in adolescent Wistar rats

[P89] <u>Sharmistha Dey</u>^{1*}, Shashank Sehekar¹, Nitish Rai¹, Amrendra Pratap Singh¹, Yudhishthir Yadav¹ and AB Dey²

¹Department of Biophysics and ²Department of Geriatric Medicine, All India Institute of Medical Sciences, New Delhi, India; *Email ID: sharmistha_d@hotmail.com*

Topic: Exploration of an inflammatory protein, 5-LOX in Alzheimer's disease

[P90] Abhisek Singh¹ and Manorama Patri^{2*}

¹ School of Life Sciences, JNU, New Delhi and ² Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; *Email ID: abhishek2582@gmail.com*

Topic: Neuroprotective Effects of Catecholamine Against Benzo[a]pyrene-Induced Oxidative Stress Responses in Brain Derived Cells (Neuro2a and C6 cell lines)

[P91] Arpita Prusty¹, Swagat Kumar Das², H.N. Thatoi³ and Luna Samanta¹ and <u>Srikanta Jena</u>^{1*}

¹Departmet of Zoology, Ravenshaw University, Cuttack, India; ²Department of Biotechnology, College of Engineering and Technology, Bhubaneswar, India; ³Department of Biotechnology, North Odisha University, Baripada, India; *Email ID: jenasrikanta@yahoo.co.in*

Topic: Effect of ethanolic bark-extracts of *Xylocarpus granatum* (Mangrove plant) on oxidative stress and antioxidant defences in diabetic mice brain.

[P92] Rishabh Charan Choudhary¹, Kavita Gulati² and Krishnan Ravi^{3*}

Department of Bioscience, Suresh Gyan Vihar University, Jaipur¹; Departments of Pharmacology² and Physiology³, Vallabhbhai Patel Chest Institute, Delhi University, India; *Email ID:* c.rishabh84@gmail.com

Topic: Influence of GABAergic and NOergic systems in the paraventricular nucleus of the hypothalamus in pulmonary renal reflex

[P93] BK Chandrasekhar Sagar¹ and Chittaranjan Andrade²

¹EM Facility, Department of Neuropathology, National Institute of Mental health and Neuro Sciences (NIMHANS), Bengaluru, India; ²Department of Psychopharmacology, National Institute of Mental health and Neuro Sciences (NIMHANS), Bengaluru, India; *Email ID: drbkcsagar@gmail.com*

Topic: Electroconvulsive shock modulated synaptic organization in the rat brain

[P94] Ipsita Mohanty, Saroj Kumar Das and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, School of Life sciences, Ravenshaw University, Cuttack, India; *Email ID: ipsitamt@gmail.com*

Topic: Pentylenetetrazole-induced epileptic seizures in rats and its possible amelioration through *Marsilea quadrifolia* leaf extract.

[P95] Kala P Nair, Srikumar BN, Bindu M Kutty and BS Shankaranarayana Rao*

Department of Neurophysiology, National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bengaluru, India; *Email ID: kala.nair200@gmail.com*

Topic: Enriched environment ameliorates temporal lobe epilepsy-induced behavioral hyperexcitabilty.

[P96] Kowshik K and Anita Jagota*

Neurobiology and Molecular Chronobiology Laboratory, Department of Animal Biology, School of Life Sciences, University of Hyderabad, Hyderabad, India; *Email ID: kowshik242@gmail.com*

Topic: Effect of *Withania somnifera* leaf extract on age induced alterations in daily clock gene expression rhythms in the SCN of male Wistar rats

[P97] Raghava Jagadeesh Salaka, BN Srikumar, Bindu M Kutty and BS Shankaranarayana Rao*

Department of Neurophysiology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; *Email ID: raghavajagadeesh.s@gmail.com*

Topic: Temporal Lobe Epilepsy-Induced Abnormal Synaptic Plasticity in the Hippocampus: Modulation by Levetiracetam and Enriched Environment.

[P98] Reema Mitra, Lipsa Das and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, School of Life Sciences, Ravenshaw University, Cuttack, India; *Email ID: shine.reema12@gmail.com*

Topic: Effect of Benzo[a]pyrene on behavioural response and its restoration by dietary supplementation in Zebrafish.

[P99] Ruby Singh^{1,2}, K Pani Prasad² and Prachi Srivastava^{1*}

¹AMITY Institute of Biotechnology, AMITY University, Lucknow, India; ²ICAR-Central Institute of Fisheries Education, Mumbai, India; *Email ID: rubys922@gmail.com*

Topic: Virtual Screening Of Potential Herbal Antiviral Agent Through Targeting MX Protein Of Betanoda Virus Causing Problem Of Nervous Necrosis in Barramundi sp.

[P100] Silvery Anand and Prachi Srivastava*

AMITY Institute of Biotechnology, AMITY University, Lucknow, India; *Email ID:* sdotanand@gmail.com

Topic: Insilco identification of phytochemical gink-A as a strong antidepressant by targeted REDD1 & β pcatenin protein.

[P101] Swati Sahoo and Brijesh Sukumaran*

Department of Biological Sciences, Sunandan Divatia School of Science, SVKM's NMIMS, Vile Parle (West), Mumbai, India; *Email ID: swatisahoo009@yahoo.co.in*

Topic: Anxiolytic activity of *Tabernaemontana divaricata* flower extract on immobilization stress induced anxiety and effect on y -aminobutyric acid and glutamate levels in brain

[P102] Abdul Ghani^{1,2}, Kim Vaiphe², R Nagarathna³ and Akshay Anand^{1*}

¹Neuroscience Research lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Histopathology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ³Swami Vivekananda Yoga Anusandhana Samsthana, Bengaluru, India; *Email ID: ghanibhai199@gmail.com*

Topic: Effects of three-month yoga intervention on general health of Diabetic Population.

[P103] Hareram Birla, and Surya Pratap Singh*

Department of Biochemistry, Institute of Science, Banaras Hindu University (BHU), Varanasi, India; *Email ID: harerambirla76@gmail.com*

Topic: Tinospora cordifolia attenuates neuroinflammation through NF-κB pathway in MPTP induced parkinsonian mice model.

[P104] Vipendra Kumar, Ankit Sharma and Nihar Ranjan Jana*

Cellular and Molecular Neuroscience Laboratory, National Brain Research Centre (NBRC), Manesar, India; Email ID: vipendra@nbrc.ac.in

Topic: Simvastatin ameliorates behavioral deficits in Angelman syndrome model mouse

[P105] Koushik Debnath and Nikhil Ranjan Jana*

Centre for Advanced Materials, Indian Association for the Cultivation of Science, Kolkata, India; Email ID: camkd@iacs.res.in

Topic: Nanoparticle Form of Anti-amyloidogenic Molecule for Prevention and Curing of Neurodegenerative Diseases

[P106] Rishi Das^{1,2}, Tathagata Sengupta¹, Trina Ghosh¹ and Jharna Ray^{2*}

¹Dept of Electrophysiology, Biolab, TCG Lifesciences Ltd, Kolkata, India; ²S. N. Pradhan Centre for Neurosciences, University of Calcutta, Kolkata, India; *Email ID: rdb010@gmail.com*

Topic: Enhancement of Cognitive Function using *Convolvulus pluricaulis* and *Aloe vera* – An Electrophysiological and Behavioral Study

[P107] Muskan Gupta and Gurcharan Kaur*

Department of Biotechnology, Guru Nanak Dev University (GNDU), Amritsar, India; *Email ID:* muskangupta88@yahoo.com

Topic: Neuroprotective potential of *Withania somnifera* against microglial mediated neuroinflammation

[P108] Madhavrao C1 and Mythili Bai K2

¹Department of Pharmacology, AIMSR, Kollam, India; ²Department of Physiology, AIMSR, Kollam, India; *Email ID: drmythili4u1981@gmail.com*

Topic: Screening of antidepressant activity of fibrates: preclinical studies using forced swim test and tail suspension tests

[P109] Madhavrao \mathbb{C}^{1*} and Mythili Bai \mathbb{K}^2

¹Department of Pharmacology, Azeezia Institute of Medical Sciences & Research (AIMSR), Kollam, India; ²Department of Physiology, Azeezia Institute of Medical Sciences & Research (AIMSR), Kollam, India; *Email ID: madhavchavan78@gmail.com*

Topic: Benzimidazole group of drugs and their analgesic properties in wistar albino rats

[P110] <u>Nabanita Ghosh</u>¹, Priyobrata Sinha², SohamMitra¹, Nilkanta Chakrabarti², Arindam Bhattacharyya^{1*}

¹Immunology Lab, Department of Zoology, University of Calcutta, Kolkata, India; ²Department of Physiology, University of Calcutta, Kolkata, India; *Email ID: nabanitaghosh89@gmail.com*

Topic: TNF- α mediated TNFR2 activation prevents MPTP-induced neurotoxicity in mouse hippocampus.

[F] Understanding brain behavior during stress responses

[P111] Debanjana Sen^{1,3}, Parama Bhattacharya^{1,3}, Shyamal Kumar Das², Atanu Biswas², Pubali Dhar³, Basant K Tiwary⁴ and Nilkanta Chakrabarti¹

¹Department of Physiology, University of Calcutta, Kolkata, India; ²Bangur Institute of Neurosciences and Institute of Post-Graduate Medical Education and Research (IPGMER), Kolkata, India; ³Laboratory of Food Science and Technology, Food & Nutrition Division, Department of Home Science, University of Calcutta, India; ⁴Centre for Bioinformatics, Pondicherry University, Pondicherry, India; *Email ID: sendebanjana27@gmail.com*

Topic: Evaluation of Anthropometric Parameters and Nutritional Statusas Potential Factors for the Assessment of Neurodegenerative Diseases using ARobust Statistical Approach

[P112] Shivani Gupta, Mayank Gautam, Rahul Kumar and Subrata Basu Ray*

Department of Anatomy, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: sgupta714@gmail.com*

Topic: To study the role of endocannabinoids and somatostatin at the spinal level in morphine-tolerant rats.

[P113] Bhupesh Patel, Lipsa Das and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, School of Life Sciences, Ravenshaw University, Cuttack, India; *Email ID: bhupeshpatelbhupu@gmail.com*

Topic: Neonatal exposure of Benzo[a]pyrene causes neuromorphological changes leading to altered antioxidant defence system in adolescent rats

[P114] <u>Gurkeerat Kaur</u>¹, Atul Kumar Goyal^{2,1}, Disha Bhanushali³, Rishi Nityapragya⁴ and Akshay Anand^{1*}

¹Neuroscience Research Lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Otolaryngology and Head Neck Surgery, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ³Teacher, AOL Foundation, India; ⁴Senior Teacher, AOL Foundation, India; *Email ID: kaurgurkeerat6@gmail.com*

Topic: The effect of Integrated Yoga-Hollow Empty Meditation (IYHEM) on the neurological, physiological and biochemical profiles of practising volunteers exposed to high altitudes.

[P115] <u>GC Baskey</u>, Sajalendu Ghosh, Ravindra Kumar Prasad, Binita Ghosh and Vaishnavi kumari Mirdha*

Ranchi College, Ranchi, Jharkhand, India; Email ID: ganesh327@gmail.com

Topic: Prevalence of Insomnia among the NCC cadets of Jharkhand

[P116] Harpal Singh and Gurcharan Kaur*

Department of Biotechnology, Guru Nanak Dev University (GNDU), Amritsar, India; *Email ID:* hrplrandhawa@gmail.com

Topic: Chronic sleep Deprivation and brain functions impairments

[P117] Meenakshi Maurya, Tapas Chandra Nag*, Tara Sankar Roy and Shashi Wadhwa

Department of Anatomy, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: mmmnkshi@gmail.com*

Topic: Apoptosis and neuroprotective role of BDNF and regulatory pathway in postnatal chick retina exposed to light of variable photoperiods

[P118] Minurani Dalai and Anita Jagota*

Neurobiology and Molecular Chronobiology Laboratory, Department of Animal Biology, School of Life Sciences, University of Hyderabad, Hyderabad, India; *Email ID: ranidalaiminu@gmail.com*

Topic: Daily rhythms in various clock gene expression in the holometabolous insect Bombyx mori during post embryonic development

[P119] Omprakash Singh^{1,2}, Devraj Singh^{1,2,3}, Dipti Ranjan Pradhan^{1,2}, Santosh Kumar^{1,2}, Saptarsi Mitra^{1,2}, Vinod Kumar ⁴ and Praful S Singru^{1,2*}

¹School of Biological Sciences, National Institute of Science Education and Research (NISER), Bhubaneswar, India; ²Homi Bhabha National Institute, Training School Complex, Mumbai, India; ³Department of Biology, Indiana University, Bloomington, USA; ⁴IndoUS Centre for Biological Timing, Department of Zoology, University of Delhi, New Delhi, India; *Email ID: opsinghlu001@gmail.com*

Topic: Thyrotropin-releasing hormone (TRH)-containing system in the brain of zebra finch, *Taeniopygia guttata*: Organization, association with neuropeptide Y and response to changes in energy status.

[P120] <u>Poorti Kathpalia</u>, Tapas Chandra Nag*, Tania Sanyal, Shashi Wadhwa, Arundhati Sharma and Tara Sankar Roy

Department of Anatomy, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: poorti.kathpalia@gmail.com*

Topic: Differential gene expression in hippocampus of neonatal chicks in response to prenatal sound stimulation at 110 dB

[P121] Lipsa Das, Bhupesh Patel and Manorama Patri*

Neurobiology laboratory, Department of Zoology, School of Life sciences, Ravenshaw University, Cuttack, India; *Email ID: lipsadas9999@gmail.com*

Topic: Effect of In Utero Exposure to Benzo[a]pyrene on lipid peroxidation, Antioxidant enzyme activity and histopathological changes in rat brain

[P122] <u>Shilpa Gorla</u>, Meenakshi Maurya, Poorti Kathpalia, Tapas Chandra Nag* and Tara Shankar Roy Department of Anatomy, All India Institute of Medical Sciences (AIIMS), New Delhi, India; *Email ID: shilpa.gorle12@gmail.com*

Topic: Expressions of neuroprotective molecules in neonatal chick retina under continuous exposure to light

[P123] Arathi Rajendran, Bipin Nair and Shyam Diwakar*

Amrita School of Biotechnology, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri Campus, Kollam, India; *Email ID: arathignair@gmail.com*

Topic: Pattern Abstraction and Sensory Encoding during Auditory and visual Stimuli using Cerebellum Neuronal Network Model

[P124] Chaitanya Nutakki, Bipin Nair and Shyam Diwakar*

Amrita School of Biotechnology, Amrita Vishwa Vidyapeetham (Amrita University), Amritapuri, India; *Email ID: chaitunutakkis@gmail.com*

Topic: Modelling Neurovascular Coupling for fMRI BOLD reconstructions

[P125] Poonpun Das¹ and Manorama Patri*

¹Neurobiology Laboratory, Department of Zoology, School of Life Sciences, Ravenshaw University, Cuttack, India; *Email ID: poonpun64@gmail.com*

Topic: Impact of environmental pollutant exposure on anthropometric measures of neonates and serum homocysteine level of pregnant women of three distinct districts of Odisha, India.

[P126] Lalit P Chandravanshi and Surendra K Trigun*

Biochemistry Section, Department of Zoology, Institute of Science, BHU, Varanasi, India; *Email ID:* chandravanshi04@gmail.com

Topic: Effects of Perinatal and Early Life Exposure to Arsenic, Lead, Manganese, and Metal Mixtures on Dopaminergic Signaling in Corpus Striatum of Rats.

[P127] UD Kumaresan, Kumari Anshu, BN Srikumar and Laxmi T Rao*

Department of Neurophysiology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; Email ID: kumarvafew@gmail.com

Topic: Neural correlates of sleep in prenatal valproic acid exposed rat

[P128] <u>Sushant Kaushal</u>¹, Abdul Ghani^{1,2}, Gunjan Didwal^{1,3}, Rahul Tyagi¹, Abha Tiwari¹, Parul Bali^{1,4} and Akshay Anand^{1*}

¹Neuroscience Research Lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ²Department of Histopathology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India;

³Department of Paediatrics, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; ⁴Department of Biophysics, Panjab University, Chandigarh, India; *Email ID: sushantkaushal@gmail.com*

Topic: Validation processes in raw data acquisition, compilation and analysis by using internal Quality Assurance program in DBT project at Neuroscience Research Lab, PGIMER, Chandigarh

[P129] <u>Santosh kumar Das</u>, Radha kumari, Sagarika Mahali, Aishwarya Muduli, Sushree Abhidhatri Sharma, Khusboo kumari Thakur, Himraj Dash, Sakuntala Priyadarsini and Manorama Patri*

Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; *Email ID:*santoshkumardas424@gmail.com

Topic: Effect of waterborne benzo[a]pyrene exposure on neurobehavioral response and protein content in zebrafish brain

[P130] Debasish Biswal and ManoramaPatri*

Neurobiology Laboratory, Dept. of Zoology, Ravenshaw University, Cuttack, India; *Email ID:* debasishbiswal1492@gmail.com

Topic: Manmade pollution and effect of hypoxia on behavioral changes of aquatic organisms: A threat to aquatic ecosystem

[P131] Keerthi S Chandran, Swati Banerjee and Kuntal Ghosh*

Indian Statistical Institute, Kolkata, India; Email ID: kuntal.isical@gmail.com

Topic: Sound-symbolism based forced choice task and its possible relation to neural mechanisms

[P132] <u>Debprasad Dutta</u>¹, Monojit Debnath¹, Rahul Wahatule², Madhu Nagappa², Sanjib Sinha², PS Bindu² and Arun B Taly²

¹Department of Human Genetics, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; ²Department of Neurology, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, India; *Email ID: debdutta.bio@gmail.com*

Topic: Antibodies against ganglioside complexes in Guillain-Barré Syndrome: Experience from a Tertiary care University Hospital in South India

[P133] dos Santos Natalia L¹, Tandon Neha R^{1,2} and Thompson Lucien T¹

¹Neuroscience, BBS, University of Texas at Dallas, USA; ²Biology, NS&M, University of Texas Dallas, USA; *Email ID: NataliaLucia.DosSantos@utdallas.edu*

Topic: High fat die impairs memory and sex-dependently alters hippocampal intrinsic excitability and insulin signaling in hippocampus.

[P134] Susanta Kumar Rout

Science & Technology Department, Bhubaneswar, Odisha, India; *Email ID: odishapic@gmail.com* **Topic:** Evaluation of psychopharmacological activity of different extracts of *Nerium oleander* Linn

XXXV Annual Meeting of



Indian Academy of Neurosciences





October 29 - 31, 2017

Convention Centre, Ravenshaw University, Cuttack, Odisha, India

Guidelines for

Award Session and Poster Presentation

Dr. D.M. Kar Prize

Number of Prize - 1, Age limit - 35 years, Mode of presentation - Oral

Tulsabai Somani Educational Trust Award

Number of Award – 1, Age limit - 40 years, Mode of presentation – Oral

The presenter should be member of the Academy.

The presentation will be for 8 minutes followed by discussion/question(s) if any for 2 minutes.

Multimedia facilities will be available for presentation.

The presenters are advised to organize their presentation in the following way-

Prior art, Rationale/Hypothesis, Methods, Salient observations (Figures/Tables) with discussion and conclusion.

Judgment is made on the following points:

Clear objectives,

Approach to the problem,

Findings in relation to aims and objectives,

Conclusion,

Clarity of presentation,

Ability to answer the question (s).

There will be minus points for candidates if aided by mentors or colleagues and / or not keeping time. The decision of the referees will be final.

S.S. Parmar Research Foundation Prize

- 1. Number of Prizes 2, Age limit 35 Years, Mode of presentation Poster
- 2. The presenter should be member of the Academy.

A small card sheet of <u>4 X 3 ft (length X width)</u> bearing the words **FOR SS Parmar Research Foundation Prize** should be affixed to the upper right corner of the poster.

All conditions related with the judgment are the same as above.

The decision of the referees will be final.

For Poster Presentation -

The size of the poster should be <u>4 X 3 ft (length X width)</u>. It is advised that the poster should be organized in the following format: **Title of the paper, Authors and Affiliation, Introduction,**Materials and Methods, Observations (Tables/Figures) and Conclusion.



PRE-CONFERENCE WORKSHOPS

Ravenshaw University, Cuttack, India

Workshop I: Schedule 27th October 2017

Communicating science can be challenging as stated in a recent BioTechniques(http://www.biotechniques.com/news/365934) paper: "The Time for Science Communication is now"

Organizers:

Prof. Raghu Vemuganti and Prof. Bikash R Pattnaik

University of Wisconsin-Madison, USA

The overall goal is to infuse excellence in scientific communication skills. This workshop is geared towards trainees (senior MD/PhD students, Post-doctoral fellows, or junior faculties) at a transition phase of their career. Through a series of facilitated sessions, we will help you overcome your inner inhibitions to be a forward thinker and confident communicator. Let us then explore together what why and how to communicate science may it be communicating to the public, or generating high-quality journal article for publication, or for outstanding visual presentations.

Time	Sessions	Learning Objective (LO)
08.00-09.00Hrs	Breakfast	
09:00-10:00Hrs	Team Building	To keep everyone attentive and aligned to his or her purpose
10:00-11:15Hrs	Component of scientific articles	To understand the different means of scientific communication
11:15-11:30Hrs	Coffee Break	
11:30-12:45Hrs	Writing a manuscript	To communicate thoughts and logical representation of a study outcome
12:45-13:30Hrs	Lunch Break	
13:30-14:45Hrs	Presentation skills oral and poster	To effectively present at professional scientific meetings
14:45-15:00Hrs	Tea Break	
15:00-16:15Hrs	Grantsmanship	Communication skills for acquiring funds for conducting research
16:15-17:45Hrs	Alternate careers and extra time for writing	To be able to identify where you are and where you want to be in your career
17:45-Onwards	Final comments and Certificate Distribution	

Learning Outcome:

- 1. Organize random content to a constructive scientific message.
- 2. Overcome roadblocks to become an effective communicator of SCIENCE.
- 3. Compose and edit sections of scientific paper/slides.
- 4. Apply the tools to your current work opportunity.
- 5. Be able to write an effective grant proposal.
- 6. Help transition to become a valuable faculty member.

Team Building – Activities include; Arrange alphabetical in 30 seconds, 1 min, describe yourself through a picture and describe your neighbor. Small skits/writing activity for 15 minute.

Types of Scientific Articles – This will include Example –Press release, Newspaper article, Lab report, Paper, thesis etc.

Activities will include outline for

Writing a Manuscript: Message, Format, and Audience Activities will include reconstructing figures from published papers and writing about it. Example to be covered-https://cirt.gcu.edu/research/developmentresources/tutorials/researchpaper

Presentation skills oral and poster – Difference between the two and comparison of benefits. Formatting content. https://www.nature.com/naturejobs/science/career_toolkit/presentations

Grantsmanship – We need one for International and one for Indian context.

Alternate career and extra time for writing skills – We would prefer someone from Industry or policy.

Workshop-II: Schedule 28th October 2017

Hands on Training Workshop on Transcranial Magnetic stimulation: a noninvasive therapeutic strategy for Neurological disorders

Time	Sessions	Speakers
9.00 - 9:30 AM	Introduction and applications of TMS	Dr Suman Jain
9.30 – 9: 50 AM	Magnetic field exposure in animal studies	Ms Supti Bhattacharyya
9.50 – 10.10 AM	TMS : Clinical Application in Neurology	Dr Vinay Goel
10.10 -10:30 AM	Effect of TMS in Spastic Cerebral Palsy	Dr Dinesh Bhatia
10:30 – 10:50 AM	TMS for studying brain plasticity	Dr Ashish Arvind
10:50 – 11:15 AM	Tea Break	
11:15 – 1: 00 PM	Hands on training and demonstration Training	

SYMPOSIUM Art of Imperfect Brain

Inauguration
Paint and Brush
Talks and Workshop
Skype Meeting with Elizabeth Jameson
Release of Magical Broom Returns
Science-Art Convergence Display

Venue: Ravenshaw University, Cuttack, Odisha, Date: October 28, 2017

Art and neuroscience are considered two divergent fields as art is imaginative while neuroscience is logical. Increased mutual interest between scientists and artists lead to convergence of two paths leading to a common goal in their quest for knowledge and its expression. With the growing curiosity towards convergence of neuroscience and art, it is proposed to have symposia on the topic to make learning of Neuroscience more engaging.

Pre-Registration Available by Email: neuroyogasym@gmail.com

- f www.facebook.com/neuroscience research lab
- f Enjoy live video streaming of Symposium

To be published in *Integrative Medicine Internationa*Background Picture Credit: Elizabeth Jameson

Inspired by Elizabeth Jameson

Scientific Program- Art of Imperfect Brain

Art and Neuroscience are considered two divergent fields, as art is imaginative, ingenious, prejudiced and narrative, while neuroscience is characterized as logical, objective and factual. Interest among scientists is increasing towards recognizing artists work as investigators of reality. This inquisitiveness has led to the conclusion that although these divergent streams have different approaches yet artists and scientists are moving towards a converging path leading to a common goal in their quest for knowledge and its expression is replete with sensitivity.

This pursuit has given birth to a new discipline, "Neuroesthetics" which is scientific study of the neural basis for the contemplation and creation of a work of art. Neuroesthetics is use neuroscience as a tool to explicate and recognize the aesthetic experiences at the neurological level. This particular topic has attracted scholars from many disciplines including Neuroscience, Art, History, Art, Psychology, and Philosophy.

With the growing curiosity towards convergence of neuroscience and art, it is proposed to have symposium on the topic to make learning of Neuroscience more engaging.

Convener: Akshay Anand

Inauguration at 1:45PM

Sudarsan Pattnaik	Motivational Art on Sand	International Sand Artist	2:00- 2:15 PM
Yoko Sen	The Future of Hospital Sound	Founder Sensound	2:15- 2:30PM
N S Dinesh	Challenges in building Bioengineering Products	Indian Institute of Science, Bengaluru	2:30- 2:45PM
S. Sankara Raman	Attitude determines Altitude	Amar Seva Sangam, Ayikudy	2:45- 3:00PM
Sadasivan Pillai	Importance of Quality Assurance in Science and Art discourse	Frontier Life Line, Chennai	3:00- 3:15PM
Tea Break		7 697	3:15- 3:45PM
NB Nair	Media's role in Science and Art	Indian Science Journal, Delhi	3:45- 4:00PM
M.C Arunan	Art as a tool of educating Science	CUBE Lab, Homi Bhaba Centre for Science Education, TIFR, Mumbai	4:00- 4:15 PM
Rakesh Biswas	Art of Medicine	Kamineni Institue of Medical Sciences, Hyderabad	4:15- 4:30PM
Raagav	How DMD kids respond to Music	MDCRC, Coimbatore	4:30- 4:45PM
Vinod Mehta	Expressing Neuroscience by Paint And Brush	Neuro Artist, Chandigarh	4:45- 5:00PM
Akshay Anand	Humanising Neuroscience in Lab	Editor, Annals of Neurosciences	5:00- 5:15 PM

Panel Discussion: Avenues for Integration of Art in Scientific Enterprises

Chairpersons	S. Sankara Raman (Amar Seva Sangam, Ayikudy), Sudarsan Patnaik (International Sand Artist)
Member	N B Nair (Indian Science Journal, Delhi)
Member	N S Dinesh (Indian Institute of Science, Banglore)
Member	Shimona Kanwar (Times of India)
Member	Manorama Patri (Ravenshaw University)
Member	Sangram Patnaik (Legal commentator)
Member	B.S.S Rao (NIMHANS)
Member	Yoko Sen (Founder Sensound)
Member	Rakesh Biswas (Kamineni Institue of Medical Sciences, Hyderabad)
Member	Sadasivan Pillai (Frontier life line, Chennai)
Member	M.C Arunan (CUBE Lab, Homi Bhaba Centre for Science Education, TIFR, Mumbai)
Member	Raagav (MDCRC, Coimbatore)
Member	Vinod Mehta (Neuro Artist, Chandigarh)
Member	Akshay Anand (Editor, Annals of Neurosciences)

Working Draft

Introduction (I)

We invite you to be a part of our participatory action research group whose goal is to reach out and create a positive impact on the lives of as many entities in the shortest time possible with follow up and maintenance of that impact for the longest period possible.

Our brains by their very design are genomically imperfect (aka jeev) and consequently, we constantly keep striving towards perfection (aka param). We invite all jeevs such as us, to a perennial workshop where we can collaboratively learn to utilize available science and art based tools and create/integrate newer ones towards our goal.

Methods (M)

Citizen participants from all walks of life, shall by actionable research and by generating data from their own brains around their experiences (for example a patient or researcher or software professional relating his own history/story/learning journey) and other's lives (for example a medical student or physician or patient relative relating their patient's stories or students relating the learning journeys of their colleagues) and expressing them onto our canvas/story-board/platform where all these stories can be captured and collated and made available for subsequent analysis, education and translation.

The data provided by all the individual brains of our study participants can be captured using human anatomical tools such as sounds generated by our vocal cords (voice, audio) or handwritten or typed text, drawings, paintings and sounds generated by strings or membrane, controlled by humans (aka music) and or muscle movements that can be expressed in resonance with the string and membrane movements (aka dance).

All these individual data collection sessions will be gathered through collective sharing in group sessions/gatherings that will invariably begin with a period of meditation/silence when we expect our brain EEGs to reach an alpha state that is known to be conducive to such a data gathering through creativity.

Once all the data is digitally collated through text, audio and video, it will be stored in an open online repository in the form of individual online learning portfolios/patient records and participants are encouraged to develop their portfolios within this time frame by regularly entering follow up data of their experiences in their chosen format utilizing afore mentioned tools. Many users may not like to upload their own data themselves we can train some participants to do it for others as an elective that we are currently running as a perennial workshop in some of our centers.

Results (R) expected outcomes

Large data sets of lived experiences of individual brains shall be graphically plotted and using tools of sense-making, similarities and unique features identified in the data to generate useful insights that can be fed back to the system in the form of newer solutions to the individual problems identified. This process could be as simple as identifying in the data certain solutions already being utilized by those individual brains utilizing them) and the same solutions may be trialed on those individual brains currently not availing of the same solutions and currently otherwise recording a lower quality of life portfolio.

A grant application will also be written focusing on Public Engagement fund of Welcome Grant, UK. Please see the link below

https://wellcome.ac.uk/funding/public-engagement-fund

A consensus review will also be circulated for publication in Integrative Medicine International.

Analysis (A):

Outcomes from using the afore mentioned tools of data collection, representation and shared learning intervention to improve quality of lives in individual imperfect brains will be compared using standard quantitative and qualitative approaches.

Discussion and Conclusions (D)

We present a feasible collectively driven strategy to augment positive optimization strategies in our imperfect brains striving toward perfection with better quality of life outcomes and we hope to run this strategy soon in a sample of action research participants.

Speakers Details



N S Dinesh is Professor in Department of Electronic Systems Engineering in Indian Institute of Science, Bangaluru. His expertise involves mechatronics, Telematics and Biomedical Engineering.



Yoko Sen is a Japanese American sound alchemist and Founder of Sen sound. She is working on sound experience research to explore how sound affects people's environment, experience and emotions, using human-centered design.



S. Sankra Raman is Secretary of Amar Seva Sangram working for disabled communities in rural areas of Tamil Nadu.



N B Nair is an eminent Digital Media Journalist and Editor of Indian Science Journal.



He is Deputy Managing Director at frontier life line hospital in Chennai. He is Ph.D. in Toxicology. He is an expert of Quality Assurance, GLP certified CRO and a pharmaceutical industries.



M C Arunan is currently visiting Professor at Homi Bhabha Centre for Science Education, TIFR, Mumbai. His areas of interests are Biological Plasticities: Biological basis of Learning and memory; Teaching-Learning in Neurosciences and Collaborative Undergraduate Biology Research through College-Research Center Networking.



Shimona Kanwar is Assistant Editor in Times of India. She covers science, health, and prefers an interdisciplinary approach. She loves simplifying science stories, sheering them of jargon to ensure enjoyable reading.



Rakesh Biswas graduated from Post Graduate Institute of Medical Education and Research, Chandigarh and is currently Professor, Kamineni Institue of Medical Sciences, Hyderabad. His interest in neuroscience is related to his special interest in creating a 'user driven health care' community of patients and health professional users for better health care outcomes.



Shankaranarayana Rao did PhD and M.Phil in Neurophysiology at NIMHANS, Bangalore. His areas of research includes cellular and molecular mechanisms of learning and memory, amelioration of stress and depression-induced cognitive deficits, activation of resident stem cells in the adult brain.



Vinod Mehta is an eminent painter of Tricity Chandigarh.



Sudarsan Pattnaik is a noted international sand artist.



Sangram Patnaik is an eminent Legal commentator



Manorama Patri, Ravenshaw University, Cuttack is Organizing Secretary for IAN-2017. Her research is aimed at understanding the molecular and cellular mechanisms underlying learning and memory.