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**

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

**Chairpersons:**
KP Mohanan Kumar, 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

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### 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

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### Symposium – 3

**New Insights on the Role of Glia in Neuronal Signaling**
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<th>Time</th>
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<th>Talks</th>
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<td>13:15 – 14:15</td>
<td>Lunch</td>
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<td>Annex – I</td>
<td>Oral Session – 1</td>
<td>Chairpersons:</td>
<td>Microglial Internalization and Post-Translational Modifications of Tau</td>
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<tr>
<td>14.15 - 16.15</td>
<td>Neurodegenerative Diseases – Complexities and Challenges</td>
<td>AK Parida, ILS, Bhubaneswar, PK Seth, Lucknow</td>
<td>1. SC Bose Chinnathambi, NCL, Pune</td>
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<td>Early life Neuroinflammation - a challenge for old age</td>
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<td>2. IK Patro, Jiwaji University, Gwalior</td>
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<td>Maternal protein malnutrition: Its impact on gliogenesis</td>
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<td>3. SK Goswami, JNU, New Delhi</td>
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<td>SG2NA, a scaffold for many diseases</td>
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<td>4. N Patro, Jiwaji University, Gwalior</td>
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<td>SG2NA, a scaffold for many diseases</td>
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<td>5. P Seth, NBRC, Manesar</td>
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<td>Cellular and Molecular Mechanisms of HIV-1 Neuropathogenesis</td>
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<td>6. A Kumar, UMKC School of Pharmacy, Kansas City, USA</td>
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<td>HIV-1 gp120 induces type-1 programmed cell death through ER-stress employing IRE-1α, JNK and AP-1 pathway</td>
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</table>

| Annex – II | Oral Session – 2                            | Chairpersons:                                         | HIV-1 gp120 induces type-1 programmed cell death through ER-stress employing IRE-1α, JNK and AP-1 pathway |
| 14.15 - 16.15 | Understanding the Biological Basis of Cognition |                                                        | 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                        |

Chairpersons:
AK Panda, Bhubaneswar
IK Patro, Jiwaji University, Gwalior
| T Isa, Kyoto University, Kyoto  
<table>
<thead>
<tr>
<th>TR Raju, SVYASA Yoga University, Bengaluru</th>
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</thead>
</table>
| 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 Kinase 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* |

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### 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* |
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<tr>
<th>Time</th>
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<td>08.30 – 09.15</td>
<td>Convention Center</td>
<td>BK Bachhawat Memorial Life Time Achievement Award (2016-17)</td>
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<td>Chairpersons: S Sinha, NBRC, Manesar</td>
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<td>M Gourie-Devi, New Delhi</td>
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<td>Building dynamic connection between Clinical, Overlap syndromes and Genetic profiles of Amyotrophic Lateral Sclerosis, critical for unraveling the complexity of the disorder</td>
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<td>09.15 – 09.45</td>
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<td>KT Shetty Memorial Oration</td>
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<td>AB Pant, CSIR-IITR, Lucknow</td>
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<td>In vitro models of developmental neurotoxicity: A journey with human cord blood stem cells</td>
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<td>09.45 – 10.15</td>
<td>Annex – I</td>
<td>Plenary Lecture – 5</td>
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<td>AK Mahapatra, AIIMS, New Delhi</td>
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<td>Split Cord Malformation and G.K. Therapy in Vestibular Schwannoma</td>
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<td>09.45 – 10.15</td>
<td>Annex – II</td>
<td>Plenary Lecture – 6</td>
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<td>S Picaud, Institut de la Vision, Paris</td>
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<td>Visual restoration by retinal prostheses and optogenetic therapy: validation in non-human primates</td>
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<td>10.15 - 10.30</td>
<td>Annex – I</td>
<td>Tea / Coffee</td>
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<td>10.30 – 12.00</td>
<td>Annex – I</td>
<td>Symposium – 4</td>
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<td>Brain Response to Low Oxygen</td>
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<td>Chairpersons:</td>
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<tr>
<td>SC Mahapatra, AIIMS, Bhubaneswar</td>
<td>S Mishra, SCB Medical College and Hospital, Cuttack</td>
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<tr>
<td>1. N Khan, DIPAS, New Delhi</td>
<td>Role of small conductance calcium activated potassium (SK) channels in hypobaric hypoxia</td>
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<tr>
<td>2. SK Hota, DIHAR, Leh-Ladhak</td>
<td>Improving neurovascular coupling to ameliorate hypobaric hypoxia induced cognitive impairment: A system biology approach</td>
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<td>3. KK Barhwal, AIIMS, Bhubaneswar</td>
<td>Salidroside as a potential pharmacological molecule for treatment of hypoxia induced neurodegeneration</td>
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<td>4. TS Roy, AIIMS, New Delhi</td>
<td>Age-related changes in the expression of glutamic acid decarboxylase (GAD67) and NMDA receptor (NMDAR1) in the human inferior colliculus</td>
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<td>5. R Sandhir, Panjab University, Chandigarh</td>
<td>Anti-inflammatory effects of H2S in hyperhomocysteinemia-induced neurodegeneration</td>
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### Annex – II
10.30 – 12.00

**Symposium – 5**
Adaptive Brain: Gender-based Differences in Affective and Cognitive Neuroscience

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<tr>
<td>A Chattopadhyay, CCMB, Hyderabad</td>
<td>Sachidananda Das, Bhubaneswar</td>
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<tr>
<td>1. MK Asthana, Medak, Telangana</td>
<td>Physiological Differences Between Gender: Implications for Affective Stimuli Processing</td>
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<tr>
<td>2. B Bhushan, IIT Kanpur, Kanpur</td>
<td>Significance of Self-reported Biological Sex in Psychophysiological Research</td>
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<td>3. K Vemuri, IIIT Hyderabad, Hyderabad</td>
<td>Relook at gender stereotypes? - Presenting experimental evidence from two distinct studies - narrative empathy and risk-taking in gambling game</td>
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<td>4. P Srivastava, IIIT Hyderabad, Hyderabad</td>
<td>Do Male and Female differ in Making Sense of Desktop 360-degree Virtual Space?</td>
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<td>5. TC Nag, AIIMS, New Delhi</td>
<td>Experimental iron overload with aging in rat retina: histopathological analysis and expressions of iron transporters and storage proteins</td>
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### Annex – III
10.30 – 12.00

**Oral Session - 4**
Neuroscience Education and Research-Initiatives, Innovations and Approaches
| 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*

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**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-nonyloxtryptamine, 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*

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**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 tumorigensis* |
| 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 large-scale 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
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<td><strong>Oral Session – 6</strong></td>
<td><strong>Neuroprotection and Brain Plasticity</strong></td>
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<td><strong>Chairpersons:</strong></td>
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<tr>
<td>G Paul, University of Kalyani, Kolkata</td>
<td>Sarala Das, Cuttack</td>
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<tr>
<td>1. A Anand, PGIMER, Chandigarh</td>
<td>Low dose lead exposure in postnatal mice enhances retinal degeneration induced by late life retinal ischemia</td>
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<td>2. UB Pandey, University of Pittsburgh, Pittsburgh</td>
<td>Perturbed stress granule dynamics in motor neuron disease</td>
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<td>3. O. Chakrabarti, Saha Institute of Nuclear Physics, Kolkata</td>
<td>ESCRT machinery accessory proteins regulate balance between cell survival and apoptosis</td>
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<td>4. S Ghosh, CSIR-IICB, Jadavpur</td>
<td>Microtubule targeted neuroprotective peptide</td>
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<td>5. R Muddashetty, In Stem, NCBS, Bengaluru</td>
<td>Synaptic protein synthesis: “power” behind the plasticity</td>
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<td>6. R Mishra, BHU, Varanasi</td>
<td>Compartmentalization and interactions of Pax6 in brain of mice</td>
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<th>Annex – III</th>
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<td><strong>Oral Session – 7</strong></td>
<td><strong>Oxidative Stress and Brain</strong></td>
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<td>S Mishra, Cuttack</td>
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<td>NR Jana, NBRC, Manesar</td>
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<tr>
<td>1. TK Ghosh, University of Calcutta, Kolkata</td>
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<td>Nitric oxide synthase is involved in the neurodegeneration in intracerebroventricular colchicine injected rats</td>
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<td>2. P Dhar, AIIMS, New Delhi</td>
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<td>Role of Antioxidant (AOX) supplementation on expression pattern of Calbindin (CB) in cerebellar cortex of rat pups following postnatal exposure to sodium arsenite</td>
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<td>3. S Singh, Guru Ghasidas Vishwavidyalaya, Bilaspur</td>
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<td>Profiles of oxidative and nitrosative factors in the brain of minimal hepatic encephalopathy rats</td>
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<td>4. P Singru, NISER, Bhubaneswar</td>
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<td>Organization and importance of transient receptor potential vanilloid (TRPV) ion channels in the brain</td>
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<td>5. J Joseph, University of Hyderabad, Hyderabad</td>
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<td>A network motif that does fine tuning of a negative feedback in a memory center</td>
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<td>6. S Srivastava, KN Govt Post Graduate College, Gyanpur</td>
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<td>Neurobiology of vocal learning and language: Insight from non human animals into the evolution of language</td>
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<td>7. S. Mahapatra, Ravenshaw University, Cuttack</td>
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<td>Planning Behaviour as a Function of Ageing</td>
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<tr>
<th>Convention Center (16.30 – 17.30)</th>
<th>Poster Session II</th>
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<tbody>
<tr>
<td>Neuronal and glial pathology; Prophylactic and therapeutic strategies towards neuropathy; Understanding brain behavior during stress response</td>
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<tr>
<td>Tea / Coffee</td>
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<tr>
<th>Annex I 16.00 – 17.30</th>
<th>NASI Sponsored Children Interaction Meet</th>
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<tr>
<td>‘Meet the Scientists’</td>
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<tr>
<td>Venue: Seven Pillars of Wisdom</td>
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<tr>
<th>Annex II 18.00 – 19.00</th>
<th>General Body Meeting</th>
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<th>19.00 – 20.00</th>
<th>Cultural Program</th>
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<th>20.00 onwards</th>
<th>Dinner</th>
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### Day 3, Tuesday, October 31, 2017

#### 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*

#### 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**
| 4. | AA Naik, Jiwaji University, Gwalior | Axonal regeneration and functional connectivity repetitive magnetic stimulation in spinal cord injured rats |
| 5. | R Gupta, AIIMS, New Delhi | Impulsive and hyperactive behaviour in rats following maternal protein malnutrition is associated with impaired astrogenesis |
| 6. | SJ Tripathi, NIMHANS, Bangalore | Comparison of the socio-demographic, clinical and GRIN2A SNP profiles in Alcohol and Opioid dependent subjects |
| 7. | SS Mohapatra, Ravenshaw University, Cuttack | Transient Inactivation of Basolateral Amygdala Prevents Stress-induced Maladaptive Changes in the Prefrontal Cortex |
| 8. | Meetu Wadhwa, Department of Neurophysiology, DIPAS, New Delhi | Effectiveness of CBT in the Management of OCD: A Case Study |

### 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 role 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-committant development of rostral nucleus of tractus solitarius (rNST) in developing human foetus

6. **N Lenka, NCCS, Pune**  
   Wnt rescues Stat3 deficiency during early neurogenesis

### 11.40 – 11.50
**Tea / Coffee**
| 11.50 – 13.30 | Oral Session – 9  
Molecular Mechanisms of Neurodegenerative Disorders |
|----------------|--------------------------------------------------------------------------------|
| **Chairpersons:** | R Shukla, CSIR-CDRI, Lucknow  
P Srivastava, Amity University, Lucknow |
| 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 |
| 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 | Oxidative Stress Induced in Rat Brain By Altered Thyroid Hormone Titer is Rescued by Curcumin |

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<tr>
<th>13.30 – 14.30</th>
<th>Lunch</th>
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| **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 |

| Annex-I  
15.00 – 16.30 | 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 | cOFM: An excellent tool to study neuroinflammatory response |
| 3. A Konar, IGIB, New Delhi | Transcriptome signatures of early life trauma induced pathological |
4. I Baitharu, Sambalpur University, Sambalpur  
*Amelioration of hypobaric hypoxia induced memory impairment by Withania 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*

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<tr>
<th>Annex-II</th>
<th>15.00 – 16.30</th>
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<tr>
<td><strong>Young Scientist Colloquium II</strong></td>
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<tr>
<td><strong>Chairpersons:</strong></td>
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<tr>
<td>SP Swain, SCB Medical College and Hospital, Cuttack</td>
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<tr>
<td>A Mishra, Dispensary, Ravenshaw University, Cuttack</td>
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<tr>
<td>1. KP Haridas, AIIMS, Jodhpur</td>
<td><em>Correlation between peak cardiac autonomic response latency and geriatric cognition</em></td>
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<tr>
<td>3. P Tayade, AIIMS New Delhi</td>
<td><em>Mapping of EEG microstate in young adults in eye closed resting conditions</em></td>
</tr>
<tr>
<td>4. RS Yadav, Dr. Harisingh Gour Vishwavidyalaya, Sagar</td>
<td><em>Pesticide Induced Neurobehavioral Abnormalities in Agriculture Workers</em></td>
</tr>
<tr>
<td>5. N Bhuyan, SCB Medical College and Hospital, Cuttack</td>
<td><em>Cognitive Deficits in Autism</em></td>
</tr>
<tr>
<td>6. V Paramanik, Indira Gandhi National Tribal University, Amarkantak</td>
<td><em>Identification and physiochemical analysis of ERK1/2 interacting proteins in the brain</em></td>
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| Convention Centre  
(Annex I) | 16.30 - 17.30 |
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<tr>
<td><strong>Valedictory Function and Prize Distribution</strong></td>
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<tr>
<td>Director, ICMR-RMRC, Bhubaneswar to be the Chief Guest at 35th Valedictory Function of Indian Academy of Neuroscience (IAN 2017)</td>
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<td><strong>Convenor:</strong></td>
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<td>L Samanta, Ravenshaw University, Cuttack</td>
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<td>PK Mohapatra, Ravenshaw, University, Cuttack</td>
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<td><strong>Co-ordinator:</strong></td>
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<td>PK Jena, Ravenshaw, University, Cuttack</td>
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<tr>
<td>L Patnaik, Ravenshaw University, Cuttack</td>
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**Poster Session I (Sunday; 29th October 2017)**

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

[P1] **Suwarna Chakraborty**, 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] **Soumya Kundu**¹, Rahul Kumar¹, Vineeth A. Raveendran¹, Debnath Pal² and Jayasri Das Sarma¹*  
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 Chakraborty**¹, 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 Bhaduri**¹, Shyamal Kumar Das², Kunal Ray³ and Jharna Ray¹*  
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] **Debashree Das**, 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 Roy**¹, Prosenjit Pal¹, Arunibha Ghosh¹, Sampurna Ghosh², Shyamal K Das³, Prasanta K Gangopadhyay⁴, Ashish Bavdekar⁵, Kunal Ray⁶, Mainak Sengupta² and Jharna Ray¹*  
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] Deepti Sharma,** 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: deepiti1361@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: alphonso.sheryl@gmail.com

**Topic:** Effect of Valproic acid on the Nervous system of Hydra.

**[P10] Shrestha Sinha**¹², Nisha Patro² and Ishan Patro¹²*

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 Aβ₄₂ 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] **Zeeinia Avari** and Hemalatha Ramachandran*
Department of Life Sciences, Sophia College, Mumbai, India; Email ID: zeeiniaavari95@yahoo.co.in

**Topic:** To study the effects of Risperidone on the retina and brain of chick embryo.

[P18] **Taranjeet Kaur**¹, Bhupinder Singh², Sunil Kumar Gupta³ and Gurcharan Kaur¹*
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 Kambali**¹, Ravi M Muddashetty² and Laxmi T Rao¹*
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] **Gunjan Didwal**¹, ², Rahul Tyagi¹, Harshita Rachel¹,³, Manju Mohanty³, R Nagarathna⁴, Savita Verma Attri² and Akshay Anand¹*
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 Samsthan, 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 Singh1,2 and Praful S Singru1,2*

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-GAP expression 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 Ca$^{2+}$ 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] Navneet Kaur**1,2, Deepak Kumar Pal1, Neeru Malik3, R Nagarathna4, HR Nagendra4 and Akshay Anand1*

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.

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[P30] **Binita Ghosh**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 Khanore⁵, Nayana Guddeti⁵, Akash Tiwari⁵, Jai Malvi², Ruchi Modgekar², Harshita Bhanushali², Manaswi Dekate², Hrushikesh Bendale² and Mayur Gaikwad²*

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; ⁵International 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.

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[P31] **Sayantani Behura**¹ and Sangeeta Rath²*

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.

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[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.

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[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.

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[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

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[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] Arpita Chakraborty1, 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] Shashi Shekhar Kumar, 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 Clement1*
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 rats.

[P42] Brijesh Kumar Singh, 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 Dubey¹,² and Subashchandrabose Chinnathambi¹,²*

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 Seth¹* 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]** Simran Sudhir Sahare¹, Shreyas Khanore¹, Abhijeet Singh², Arjun Jeswani³, Shivani Gidla⁴ and Jaikishan Advani⁵*

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 Alladi³*

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, Upma Dave, 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] **Debanjana Chakravarty**¹#, **Fareeha Saadi**¹#, Soumya Kundu¹, Abhishek Bose¹, Reas Khan², Kimberley Dine², Lawrence C Kenyon³, Kenneth S Shindler² and Jayasri Das Sarma¹*  
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] **Arindam Biswas**¹, Dipanwita Sadhukhan¹, Atanu Biswas², Shyamal K Das², Tapas Kumar Banerjee³, Sandip Pal¹, Kunal Ray⁵ and Jharna Ray¹*  
¹S. N. Pradhan Centre for Neurosciences, University of Calcutta, Kolkata, India; ²Bangur Institute of Neurosciences, Kolkata, India; ³National Neuroscience Centre, 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] **Jit Poddar**, 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] **Shweta Singh Chauhan**¹, Archana Verma¹, Vaishali Pankaj¹, Neha Srivastva¹,² and Prachi Srivastava¹*  
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 systems biology approach.

[P54] **Neethi Prem**¹, Laxmi T Rao¹, John P John² and Bindu M Kutty¹*  
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 GABAA receptor antagonist picrotoxin.

[P55] **Parul Bali**¹,², Bimla Nehru², Avijit Banik¹ and Akshay Anand¹*
Neuroscience Research Lab, Department of Neurology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; Department 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**¹² and Manorama Patri*¹

¹Department of Bioinformatics, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India; ²Neurobiology Laboratory, Department of Zoology, Ravenshaw University, Cuttack, India; Email ID: snrbiobinfo@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] **Dibyashree Mallik,** Sushma Rani Martha and Manorama Patri*¹

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*¹

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] **Vaishali Pankaj**¹, Shweta Singh Chauhan¹, Archana Verma¹, Neha Srivastva¹² 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 AKT1 genes 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 Mohanta**¹, Ashis Kumar Mohanty*² 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**¹², Andrew Waddell², Abhishek Chowdhury⁵, Raghunath Chatterjee⁶, Shyamal K. Das⁷, Mark Peggie⁵, Kunal Ray⁸, Miratul M. K. Muqit²⁴ and Jharna Ray*¹
Priyam Narain¹, James Gomes¹, Rohit Bhatia² and Perumal Vivekanandan¹*

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.

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)

[De] Neuronal and glial pathology

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.

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.

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.

Preeti Kute¹,², Praveen Anand¹, Sudhriti Ghosh Dastidar¹, Sarayu Ramakrishna¹,³, Nagammal Neelagandan¹, Sumantra Chattarji⁴, Dasaradhi Palakodeti¹ and Ravi Muddashetty¹*

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 PINK1Mutants and DJ-1 Promoter Variants in Parkinson’s Disease Pathogenesis.
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 Sarma1*

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: anjaliiav@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: juhinvsingh@gmail.com

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

**[P79] Sarika Singh Kushwaha**1,2, Nisha Patro2 and Ishan K Patro1,2*
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] Aaleya Sanyal Talapatra,** 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] **Archana Verma**, Shweta Singh Chauhan, Vaishali Pankaj, Neha Srivastva and Prachi Srivastava

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**, Sourav Kumar and Amal Chandra Mondal

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, Uttarpura, 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 Venugopal**, Kiranmai S Rai, Shobha K and Anandh Dhanushkodi

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.


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.


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**, Ramesh Rao and Kiranmai S. Rai

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

[P89] Sharmistha Dey¹*, 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 Patri²*

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 Srikanta Jena¹*

¹Department 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] Rishabhb Charan Choudhary¹, Kavita Gulati² and Krishnan Ravi³*

¹Department of Bioscience, Suresh Gyan Vihar University, Jaipur; 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 Patri⁷

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 hyperexcitability.

[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**¹², K Pani Prasad² and Prachi Srivastava¹*

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:** Insilico identification of phytochemical gink-A as a strong antidepressant by targeted REDD1 & βcatenin 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 γ -aminobutyric acid and glutamate levels in brain

[P102] **Abdul Ghani**¹², Kim Vaiphe², R Nagarathna³ and Akshay Anand¹*

¹AMITY Institute of Biotechnology, AMITY University, Lucknow, India; ²ICAR-Central Institute of Fisheries Education, Mumbai, India; ³Sikkim Institute of Agricultural & Forestry Research, Gangtok, Sikkim, India; *Email ID: sdotanand@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.
1 Neuroscience Research lab, Department of Neurology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; 2 Department of Histopathology, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India; 3 Swami 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**¹², Tathagata Sengupta¹, Trina Ghosh¹ and Jharna Ray²*

¹ Dept of Electrophysiology, Biolab, TCG Lifesciences Ltd, Kolkata, India; ² S. 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**

¹ Department of Pharmacology, AIMSR, Kollam, India; ² Department 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 C**¹* and Mythili Bai K²
Department 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]** Nabanita Ghosh1, Priyobrata Sinha2, SohamMitra1, Nilkanta Chakrabarti2, Arindam Bhattacharyya1*

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 Sen1,3, Parama Bhattacharya1,3, 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 Status as Potential Factors for the Assessment of Neurodegenerative Diseases using A Robust 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]** Gurkeerat Kaur1, Atul Kumar Goyal2,1, Disha Bhanushali3, Rishi Nityapragya4 and Akshay Anand1*

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 practicing volunteers exposed to high altitudes.

**[P115] GC Baskey**, 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

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 postembryonic development

**[P119] Omprakash Singh1,2, Devraj Singh1,2,3, Dipti Ranjan Pradhan1,2, Santosh Kumar1,2, Saptarsi Mitra1,2, Vinod Kumar 4 and Praful S Singru1,2*

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] Poorti Kathpalia**, 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]** **Shilpa Gorla**, 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 Das**1 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]** **Sushant Kaushal**1, Abdul Ghani1,2, Gunjan Didwal1,3, Rahul Tyagi1, Abha Tiwari1, Parul Bali1,4 and Akshay Anand1*

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] **Santosh kumar Das**, 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 Manorama Patri*

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: kantal.isical@gmail.com

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

[P132] **Debprasad Dutta**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 L**¹, Tandon Neha R¹,² 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 diet 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
Theme:
Translational Neurosciences and its Application in Protection of Mental Health

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 4 X 3 ft (length X width) 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 4 X 3 ft (length X width). 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.
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.

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

1. Organize random content to a constructive scientific message.
2. Overcome roadblocks to become an effective communicator of SCIENCE.
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 non-invasive therapeutic strategy for Neurological disorders

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

To be published in Integrative Medicine International
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

<table>
<thead>
<tr>
<th>Sudarsan Pattnaik</th>
<th>Motivational Art on Sand</th>
<th>International Sand Artist</th>
<th>2:00-2:15 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoko Sen</td>
<td>The Future of Hospital Sound</td>
<td>Founder Sensound</td>
<td>2:15-2:30PM</td>
</tr>
<tr>
<td>N S Dinesh</td>
<td>Challenges in building Bioengineering Products</td>
<td>Indian Institute of Science, Bengaluru</td>
<td>2:30-2:45PM</td>
</tr>
<tr>
<td>S. Sankara Raman</td>
<td>Attitude determines Altitude</td>
<td>Amar Seva Sangam, Ayikudy</td>
<td>2:45-3:00PM</td>
</tr>
<tr>
<td>Sadasivan Pillai</td>
<td>Importance of Quality Assurance in Science and Art discourse</td>
<td>Frontier Life Line, Chennai</td>
<td>3:00-3:15PM</td>
</tr>
</tbody>
</table>

Tea Break

<table>
<thead>
<tr>
<th>NB Nair</th>
<th>Media’s role in Science and Art</th>
<th>Indian Science Journal, Delhi</th>
<th>3:45-4:00PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.C Arunan</td>
<td>Art as a tool of educating Science</td>
<td>CUBE Lab, Homi Bhaba Centre for Science Education, TIFR, Mumbai</td>
<td>4:00-4:15 PM</td>
</tr>
<tr>
<td>Rakesh Biswas</td>
<td>Art of Medicine</td>
<td>Kamineni Institute of Medical Sciences, Hyderabad</td>
<td>4:15-4:30PM</td>
</tr>
<tr>
<td>Raagav</td>
<td>How DMD kids respond to Music</td>
<td>MDCRC, Coimbatore</td>
<td>4:30-4:45PM</td>
</tr>
<tr>
<td>Vinod Mehta</td>
<td>Expressing Neuroscience by Paint And Brush</td>
<td>Neuro Artist, Chandigarh</td>
<td>4:45-5:00PM</td>
</tr>
<tr>
<td>Akshay Anand</td>
<td>Humanising Neuroscience in Lab</td>
<td>Editor, Annals of Neurosciences</td>
<td>5:00-5:15 PM</td>
</tr>
</tbody>
</table>
Panel Discussion: Avenues for Integration of Art in Scientific Enterprises

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