



IAN 2012



XXX Annual Conference of Indian Academy of Neurosciences  
and  
International Symposium on Translational Neuroscience:  
Unravelling Mysteries of Brain in Health and Disease

**Scientific Program**

**Day 1 Saturday, October 27, 2012**

**Venue: Guru Nanak Bhawan Auditorium, Guru Nanak Dev University, Amritsar**

**10:00 am - 05:00 pm**

**Registration**

**09:00 am - 12:00 noon (Hall 3)**

**Workshop on 'Scientific Communication and Grant Writing'**

**Conveners – V Vaidya (TIFR, Mumbai) and P Seth (NBRC, Manesar)**

Hall 1	Hall 2
<p><b>10:00 am - 11:30 am</b></p> <p><b>Chairpersons: KD Gill (PGIMER, Chandigarh) S Das (IICB, Kolkata)</b></p> <p><b>Oral Session –I</b></p> <ol style="list-style-type: none"> <li>1. R Shukla (CDRI, Lucknow): Involvement of NMDA receptor in Okadaic acid induced Neurotoxicity and Tau phosphorylation in rat brain</li> <li>2. S Das (IICB, Kolkata): Is addiction epigenetically regulated? Lessons from studies with a novel anti-addictive drug</li> <li>3. M Patri (JNU, New Delhi): Noradrenalin prevents B[a]P-induced Ca<sup>2+</sup>-influx mediated neuronal DNA damage</li> <li>4. A Anand (PGIMER, Chandigarh): DICER1 as a marker for age related macular degeneration in Indian patients</li> <li>5. S Sharma (CRCHUM, Canada): Withdrawal of palatable high-fat diet leads to negative emotional consequences and adaptations in brain reward circuitry</li> </ol>	<p><b>10:00 am - 11:30 am</b></p> <p><b>Chairpersons: UC Srivastava (Allahabad Univ., Allahabad) S Wadhwa (AIIMS, New Delhi)</b></p> <p><b>Oral Session - II</b></p> <ol style="list-style-type: none"> <li>1. PA Alladi (NIMHANS, Bengaluru): Growth factor supplementation and reversal of neurodegenerative changes: insight through an <i>in-vitro</i> model of Amyotrophic Lateral Sclerosis</li> <li>2. Anurag Tomar (NIMS Univ, Jaipur): Status of serum micronutrients and its association with reduced intelligence score in children's with fluorosis</li> <li>3. KH Reeta (AIIMS, New Delhi): Protective effect of tianeptine, a selective serotonin reuptake enhancer (SSRE), against experimentally induced seizure in rats</li> <li>4. SC Biswas (IICB, Kolkata): FoxO3a is activated and mediates neuron death via Bim and PUMA in response to <math>\beta</math>-amyloid.</li> <li>5. SS Lakhman (DYC, USA): Genomics : A need to know</li> </ol>
<p><b>11:30 am - 12:00 noon -- Tea</b></p>	



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12:00 noon - 01:15 pm (Hall 2)

**Workshop on 'Neuroscience communication in Emerging Economies; The Challenge of Change'**

**Convener - A Anand (PGIMER, Chandigarh)**

01:15 pm – 02:00 pm Lunch

02:00 pm – 03:00 pm (Hall 1)

**Plenary Lecture – I**

**S Sinha (NBRC, Manesar)**

A novel regulatory pathway for inflammation in gliomas

**Plenary Lecture – II**

**GN Pandey (UIC, USA)**

Inflammatory markers in depression and suicide

**Chairpersons: BN Dhawan (CDRI, Lucknow)**

**NK Mehra (AIIMS, New Delhi)**

03:00pm -03:15pm Tea

**Hall 1**

**Hall 2**

03:15pm – 04:45 pm

**Oral Session III:**

**Chairpersons: R Shukla (KGMU, Lucknow)  
AB Pant (IITR, Lucknow)**

**Speakers:**

1. SC Pandey (UIC, USA): Epigenetic landscape of anxiety and alcoholism
2. G Palit (CDRI, Lucknow): Neuropharmacological Studies Of *Bacopa monniera*
3. S Ganguly (IMM, New Delhi): Photo-neural Network in brain and Neuroendocrine function of the Pineal gland: Is there a Immune Link?
4. R Mathur (AIIMS, New Delhi): Effect of bone marrow stromal cell

03:15pm – 04:45 pm

**Symposium I: Adult Brain Plasticity**

**Chairpersons: NZ Baquer (JNU, New Delhi)  
RD Mehra (AIIMS, New Delhi)**

**Speakers:**

1. RD Mehra (AIIMS, New Delhi): Milestones on steroids and the nervous system : A decade of basic and translational research
2. G Paolo (INSERM, France): Semaphorins' signalling in development and function of GnRH neurons: setting the stage for reproduction
3. S Prasad (BHU, Varansai): Molecular basis of memory enhancing effects of *Bacopa monnieri* extract on diabetes mellitus induced memory impairment in mice



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transplantation and exposure to magnetic field on spinal and supraspinal effects of spinal cord injury

5. A Jagota (UH, Hyderabad): Differential neuropharmacological effects of melatonin on age induced alterations in chronomics of serotonin metabolism and clock gene expression in SCN

4. TN Sathyaprabha (NIMHANS, Bengaluru): The unsung substrate in epilepsy – Autonomic nervous system

5. S Datta (BUSM, USA): Gift of Sleep: How Today's Experiences Become Tomorrow's Memories

**Convener:** RD Mehra (AIIMS, New Delhi)

**06:00 pm – 07:30 pm**

**Inaugural Programme**

**07:30 pm – 08:30 pm**

**Cultural Evening**

**08:30 pm**

**Dinner**



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**Day 2 Sunday, October 28, 2012**

***Venue: Guru Nanak Bhawan Auditorium, Guru Nanak Dev University, Amritsar (Hall 1)***

**09:00 am – 9:40 am**



**ISN**  
International Society  
for Neurochemistry

**ISN-Wiley-Blackwell-JNC-International Lectureship**



**WILEY-  
BLACKWELL**

**PJ Robinson**

**Cell Signalling Unit, Children's Medical Research Institute, NSW, Australia**

**Dynamin Modulators in Synaptic Vesicle Endocytosis:  
A Pathway to New Anti-Epileptic Drugs**

**Chairperson: KP Mohanakumar (IICB, Kolkata)**

**09:45 am – 10:30 am Dr. BK Bachhawat Memorial Life Time Achievement Award Lecture**

**Vijayalakshmi Ravindranath (CNS – IISc, Bengaluru)**

**The degenerating brain: Mechanisms to therapy**

**Chairpersons: S Sinha (NBRC, Manesar)**

**10:35 am – 11:10 am**

**Group Photograph and Tea**

**11:15 am – 11:45 am**

**Plenary Lecture – III**

**Sarah Dunlop**

**Principal Research Fellow, NHMRC, Experimental & Regenerative Neurosciences  
The University of Western Australia, Australia**

**Translating Science: Clinical trials for spinal cord injury**

**Chairpersons: PK Seth (Biotech Park, Lucknow)**



**IAN 2012**

**Day 2, Sunday, October 28, 2012**

***Venue: Guru Nanak Bhawan Auditorium, Guru Nanak Dev University, Amritsar***

Hall 1	Hall 2
<p><b>11:45 am – 01:15 pm</b></p> <p><b>Symposium II: <i>Breaking of the Barrier and its Implication on Brain Cells</i></b></p> <p><b>Chairpersons: P Seth (NBRC, Manesar) S Roy (UMN, USA)</b></p> <p><b>Speakers:</b></p> <ol style="list-style-type: none"> <li>1. Y Persidsky (TUHS, USA): Blood brain barrier dysfunction in neuroinflammation: Mechanisms and protective strategies</li> <li>2. S Buch (UNMC, USA): HIV and Cocaine Go Hand in Hand.</li> <li>3. J Haroah (UNMC, USA): What makes alcohol the Good, the Bad, and the Ugly in Neuro-AIDS?</li> <li>4. P Seth (NBRC, Manesar): Neuronal damage by HIV-1 Tat – Who is to be blamed?</li> </ol> <p><b>Conveners: S Buch (UNMC, USA) P Seth (NBRC, Manesar)</b></p>	<p><b>11:45 am – 01:15 pm</b></p> <p><b>Symposium III: <i>Neurogenesis and Gliogenesis</i></b></p> <p><b>Chairpersons: S Tole (TIFR, Mumbai) J James (RGCB, Trivandrum)</b></p> <p><b>Speakers:</b></p> <ol style="list-style-type: none"> <li>1. PP Pillai (MSU, Vadodra): Intracellular signalling in migration, proliferation, differentiation of oligodendrocyte progenitors during development of the brain</li> <li>2. S Tole (TIFR, Mumbai): Regulation of the neuron-glia cell fate switch in the developing hippocampus</li> <li>3. N Chatterjee (VRF, Chennai): Immunomodulation of Muller glia during retinal inflammation</li> <li>4. J James (RGCB, Trivandrum): Pax6 and Tlx3 mediated regulation of granule neuron genesis and cerebellar patterning</li> </ol> <p><b>Conveners: S Tole (TIFR, Mumbai) J James (RGCB, Trivandrum)</b></p>
<p><b>01:15 pm - 02:00 pm</b></p> <p><b>02:00 pm - 03:15 pm</b></p> <p><b>Workshop on ‘<i>Mentorship in Ethics</i>’</b></p> <p><b>Convener: S Tole (TIFR, Mumbai)</b></p>	<p><b>02:00 pm - 03:15 pm</b></p> <p><b>Symposium IV: <i>Neurobics</i></b></p> <p><b>Chairpersons: H Singh (AMC, Amritsar) BL Goyal (VSIMH, Amritsar)</b></p> <p><b>Speakers:</b></p> <ol style="list-style-type: none"> <li>1. C Nath (CDRI, Lucknow): Neurobics: A new hope for patients of Alzheimer’s disease</li> <li>2. H Singh (AMC, Amritsar): Neurobics- The Brain Chargers</li> <li>3. R Deshumukh (ISFCOF, Moga): ‘Brain’ use it or lose it: Neorobics/physical exercise improves synaptic connectivity and cognitive functions in aging brain</li> </ol> <p><b>Convener: H Singh (AMC, Amritsar)</b></p>



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03:15 pm - 03:45 pm Plenary Lecture IV (Hall 1)

H Okamoto (RIKEN - BSI, Japan)

The roles of the habenula in aversive learning and gain of self-confidence in aggressive behaviour

Chairpersons: MK Thakur (BHU, Varanasi)

03:45 pm - 04:00 pm

Tea

04:00 pm - 05:30 pm

**Symposium V: Alternatives to Animal Models in Neuroscience Research**

Chairpersons: KC Singhal (NIMS Univ., Jaipur),  
LS Shashidhara (IISER, Pune)

**Opening Remarks: LS Shashidhara (IISER, Pune):** *Drosophila* as a model system to study development and function of the nervous system

**Speakers:**

1. AB Pant (IITR, Lucknow): Expression and inducibility of cytochrome P450s and their regulators in differentiating neurons derived from human hematopoietic stem cells
2. A Ghose (IISER Pune): Actin nucleation and mechanical forces in axon guidance
3. A Nazir (CDRI, Lucknow): Extrinsic epigenetic interventions and Parkinson's disease: Studies employing model system *Caenorhabditis elegans*
4. RV Omkumar (RGCB, Thiruvananthapuram): Investigations on NMDA receptor functions using subcellular and heterologous cell culture models

**Convener: VK Khanna (IITR, Lucknow)**

04:00 pm - 05:30 pm

**Symposium VI: Role of Sleep in Cognitive Development**

Chairpersons: S Datta (BUSM, USA),  
BN Mallick (JNU, India)

**Speakers:**

1. BR Tubaki (KLEU, Belgaum): Anxiety Disorders and Sleep: Treatment Approaches in Ayurveda
2. U Panjwani (DIPAS, New Delhi): Sleep deprivation induced cognitive decline and countermeasures
3. LT Rao (NIMHANS, Bangaluru): Early maternal separation and isolation stress: implications for sleep and memory functions
4. KK Gulia (SCTIMST, Kerala): Relationship between maternal sleep restriction and anxiety in offspring
5. MS Rao (Kuwait Univ, Kuwait): Role of sleep in adult neurogenesis and cognition

**Convener: KK Gulia (SCTIMST, Kerala)**

05:30 pm – 7:30 pm

Tea and Poster Session – I  
Venue: Sangat Hall

7:30 pm - 08:15 pm

IAN General Body Meeting

08.30 pm

Dinner



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**Day 3, Monday, October 29, 2012**

**Venue: Guru Nanak Bhawan Auditorium, Guru Nanak Dev University, Amritsar**

**08:30 am - 09:00 am Plenary Lecture V**

**BN Mallick (JNU, New Delhi)**

**Activation of inactivation process initiates rapid eye movement sleep**

**Chairpersons: R Singh (JNU, New Delhi)**

### Hall 1

**9:00 am - 11:00 am**

### **Neuroscience Education and Training** *Interactive Session with School/College Students*

**Convener: Prof SK Shankar (NIMHANS, Bengaluru)**

**9:00 am – 9:20 am**

SK Shankar (NIMHANS, Bengaluru): Introduction to Human brain anatomy and diseases; Pictorial illustration

**9:20 am - 10:00 am**

**Panelists:**

1. PJ Robinson (CMRI, Australia): Synapses are traffic lights in the brain, controlling flow between electrical and chemical communication
2. S Dunlop (NHMRC, Australia): Neurons that fire together wire together
3. BSS Rao (NIMHANS, Bengaluru): Brain Plasticity and Repair Mechanisms
4. A Anand (PGIMER, Chandigarh)
5. MC Arunan (Sophia College, Mumbai)

**Each speaker will present different aspects of brain functions for 8 minutes**

**10:00 am – 11:00 am: Interaction with students**

### Hall 2

**9:00 am - 11:00 am**

### **Symposium VII: Neurodegeneration, Neurotoxicity and Neuroprotection: Advances in Therapeutics**

**Chairpersons: YK Gupta (AIIMS, New Delhi)  
C Nath (CDRI, Lucknow)**

**Opening Remarks: PK Seth, Biotech Park, Lucknow**

**Speakers:**

1. V K Khanna (IITR, Lucknow): Neurotoxicity of Lambda-Cyhalothrin in Developing Rats: Involvement of Dopaminergic and Cholinergic Systems
2. SK Trigun (BHU, Varanasi): Characterization of NMDAR-NOS pathway as a target for methylcobalamine mediated neuro-protection in hyperammonemic neuro-excitotoxicity model
3. S Chakrabarti (IPGMER, Kolkata): Oxidative stress and altered brain amyloid peptide metabolism: experimental studies in aged rat brain and SHSY5Y cells in culture
4. SZ Imam (NCTR, USA): Drug repositioning as smart therapeutics: Example PD
5. P Balasundaram (NIMHANS, Bangalore): Keap1-Nrf2 System: A new therapeutic drug target in neurodegenerative disease

**Closing Remarks: YK Gupta (AIIMS, New Delhi)**

**Conveners: SZ Imam (NCTR, USA)  
PK Seth (Biotech Park, Lucknow)**





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11:00 am - 11:15 am		Tea	
11:15 am - 11:45 am		<p><b>KT Shetty Memorial Oration</b></p> <p><b>IK Patro (Jiwaji Univ, Gwalior)</b></p> <p><b>Glia in injury, infection and aging: Our understandings and future prospects</b></p> <p><b>Chairpersons: RC Srimal (IITR, Lucknow)</b></p>	
11:45 am - 01:15 pm	<p><b>Symposium VIII: <i>Glial Cells in Health and Disease</i></b></p> <p><b>Chairpersons: SC Pandey (UIC, USA)</b> <b>IK Patro (Jiwaji Univ, Gwalior)</b></p> <p><b>Speakers:</b></p> <ol style="list-style-type: none"> <li>1. TR Raju (NIMHANS, Bengaluru): Amyotrophic Lateral Sclerosis (ALS) pathogenesis - Do Microglia and Astroglia play complimentary or contradictory roles?</li> <li>2. P Joshi (NIMHANS, Bengaluru): Neuron-astrocyte collaboration in brain function and pathophysiology of epilepsy</li> <li>3. AB Patel (CCMB, Hyderabad): NMR studies of astroglial and neuronal energetics in cerebral disorders and health</li> <li>4. N Patro (JU, Gwalior): Glial and cognitive implications of developmental neurotoxicity</li> <li>5. S Singh (CDRI, Lucknow): Neurodegeneration and neuroprotection: Role of glia</li> </ol> <p><b>Convener: IK Patro (Jiwaji Univ, Gwalior)</b></p>	11:45 am - 01:15 pm	<p><b>Symposium IX: <i>New Neurons in the Old Brain: Implications for Neuropsychiatric Disorders</i></b></p> <p><b>Chairpersons: GN Pandey (UIC, USA)</b> <b>V Vaidya (TIFR, Mumbai)</b></p> <p><b>Speakers:</b></p> <ol style="list-style-type: none"> <li>1. A Kumar (CCMB, Hyderabad): Epigenetic regulators Jumonji domain histone demethylases (Jmjd)s mediate the effects of chronic stress on hippocampal neurogenesis</li> <li>2. S Brene (CSS-KUH, Sweden): Exercise and neurogenesis</li> <li>3. V Vaidya (TIFR, Mumbai): Antidepressants and neurogenesis</li> <li>4. BSS Rao (NIMHANS, Bengaluru): Hippocampal neurogenesis and restoration of cognitive functions in stress and depression</li> <li>5. P Shastri (NCCS, Pune): Laminin-1-induced neuritogenesis in human bone marrow derived mesenchymal stem cells (MSC) : Regulation of transcription factor- c-Jun/AP-1 and signaling pathways</li> </ol> <p><b>Convener: V Vaidya (TIFR, Mumbai)</b></p>
1:15 pm - 01:45 pm		Lunch	
Hall I		Hall 2	
01:45 pm - 03:45 pm		01:45 pm - 03:45 pm	
<p><b>Dr. DM Kar Prize</b></p> <p><b>Chairpersons: VK Khanna (CSIR - IITR, Lucknow)</b></p>		<p><b>First Meeting of Principal Investigators funded by DBT's National Initiative on Glial Cell Research in Health and Disease</b></p>	





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**A Jagota (UoH, Hyderabad)**

1. Akash Gautam (BHU, Varanasi): Arc expression is correlated with memory loss and its restoration by Ashwagandha extract in amnesic mice
2. Arshed Nazmi (NBRC, Manesar): TLR7 regulates Suppressors of Cytokine Signaling (SOCS) expression in Brain Post Japanese Encephalitis Virus infection.
3. Sippy Singh (Univ. of Allahabad, Allahabad): Morphological changes in dendritic spines associated with seasonal variation in dorsomedial forebrain of female *Psittacula krameri*
4. Shilpa BM (NIMHANS, Bengaluru): Enriched environment restores stress-induced hippocampal hypotrophy, behavioral depression and cognitive deficits
5. Hina Kauser (DIPAS, New Delhi): Activation of alpha-2A receptor modulates adrenergic transmission and dendritic morphology in hypobaric hypoxia
6. Yasir Hasan Siddique (AMU, Aligarh): Effect of epicatechin gallate dietary supplementation on transgenic *Drosophila* model of Parkinson's disease
7. Debashis Dutta (IICB, Kolkata): Mitochondrial chaperones and sirtuin family of deacetylases: Sensitivity of dopaminergic neurons in SN vs. VTA to parkinsonian neurotoxin
8. Preeti Jaiswal (MVRDC, Kolkata): Genetic correlation study on SLC6A4 markers, 5-HTTLPR and rs3813034 with Autism spectrum disorder (ASD)
9. Dhananjay Huilgol (TIFR, Mumbai): Dual origins of the mammalian accessory olfactory bulb revealed by an evolutionarily conserved migratory stream

**3:45 pm - 5:00 pm Hall I**

**Tulsabai Somani Educational Trust Award**

**Chairpersons: AK Agrawal (Lucknow)  
SK Trigun (BHU, Varanasi)**

1. Avijit Banik (PGIMER, Chandigarh): Behavioural and pathological outcome in amyloid- $\beta$  induced



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mouse model of memory loss upon intra-hippocampal transplantation of hUCB derived Lin-ve stem cells.

2. Mythri (NIMHANS, Bengaluru): Evaluation of oxidative / nitrosative stress markers in non-SN regions of post-mortem Parkinson's Disease Brain: Neuroprotection by natural antioxidant
3. Khushbu Jain (DIPAS, New Delhi): Mitochondrial Dynamics under Hypobaric Hypoxia
4. Suneel (AIIMS, New Delhi): Recovery of central effects of complete thoracic spinal cord injury in rats after bone marrow stromal cell transplantation
5. Pranay Srivastava (CSIR - IITR, Lucknow): Protective efficacy of curcumin in arsenic induced mitochondrial dysfunctions, apoptosis and memory impairment in rats
6. Rachana Mishra (GNDU, Amritsar): Differentiation and Senescence Inducing Potential of Aqueous-Ethanol Extract of *Tinospora cordifolia* in Neuroblastoma cells

05:00 pm - 06:30 pm

Tea and Poster Session – II  
Venue - Sangat Hall

06:30 pm - 08:30 pm

Visit to Golden Temple

08:30 pm

Dinner

**Day 4, Tuesday, October 30, 2012**

*Venue: Guru Nanak Bhawan Auditorium, Guru Nanak Dev University, Amritsar*

08:30 am - 09:00 am

Plenary Lecture VI (Hall 1)

R Wadhwa (AIST, Japan)

**Understanding the Functionality of Mortalin in Cancer and Neurodifferentiation**

**Chairpersons: SC Lakhotia (BHU, Varanasi)**

**Hall 1**

**Hall 2**

09:00 am - 10:00 am

**Symposium X: HIV and Brain**

**Chairpersons: SK Shankar (NIMHANS, Bengaluru)  
M Kaul (IIDCSMRI, USA)**

**Speakers:**

1. A Kumar (UMKC, USA): HIV-1 Vpr and neuroinflammatory cytokines
2. S Maggirwar (URMC, USA): Love affair of two systems inflamed by HIV-1
3. M Kaul (IIDCSMRI, USA): Disease

09:00 am - 10:30 am

**FAONS Symposium: Healthy Brain Aging and Interventions**

**Chairpersons: SC Kaul (AIST, Japan)  
C Kaur (NUS, Singapore)**

**Speakers:**

1. SC Kaul (AIST, Japan): Molecular biology of Ashwagandha effects on age pathologies
2. MK Thakur (BHU, Varanasi): Modulation of memory related gene expression by



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Mechanisms of NeuroAIDS: From HIV-Coreceptors via Protein Kinases to Brain Injury

**Convener: A Kumar (UMKC, USA)**

Ashwagandha extract

3. SC Lakhota (BHU, Varanasi): Ayurvedic formulations on fly models of human neurodegeneration diseases
4. G Kaur (GNDU, Amritsar): Search for natural products with neuroplasticity potential from water extract of Ashwagandha leaves
5. C Kulkarni (SJMC, Bengaluru): The Pharmacological Challenges in treatment of disorders of aging brain

**Conveners: SC Kaul (AIST, Japan)  
R Wadhwa (AIST, Japan)**

**10:00 am - 12:00 noon**

**Symposium XII: *Translational Clinical Neuroscience***

**Chairpersons: BSS Rao (NIMHANS, Bengaluru),  
P Srivastava (AIIMS, New Delhi)**

**Speakers:**

1. M Tripathi (AIIMS, Delhi): Translational research in epilepsy
2. P Srivastava (AIIMS, Delhi): Stem cell therapy in stroke
3. V Benegal (NIMHANS, Bengaluru): Neural basis of susceptibility to Addiction
4. JP John (NIMHANS, Bengaluru): Translational approach in schizophrenia Genetics of Psychiatric Disorders
5. S Jain (NIMHANS, Bengaluru): Neurodegenerative and Psychiatric Syndromes Disorders: a genetics perspective from India
6. MR Rajeswari (AIIMS, New Delhi): Quantification of differentially expressed proteins and Cell-Free Circulating Nucleic acids in plasma of spinocerebellar ataxia type 2 and 12

**Convener: BSS Rao (NIMHANS, Bengaluru)**

**10:30 am - 12:00 noon**

**Symposium XIII: *Advances in Neurodegeneration and Neurorepair mechanisms in Neurological Disorders***

**Chairpersons: I Singh (MUSC, USA)  
R Wadhwa (AIST, Japan)**

**Speakers:**

1. I Singh (MUSC, USA): Rho A mediated Mechanisms in Neurodegeneration and Neurorepair
2. N Banik (MUSC, USA): Calpains in Neurodegeneration and Neurorepair
3. R Sandhir (PU, Chandigarh): Preventive effect of N-acetyl-L-cysteine on oxidative stress and cognitive impairment in hepatic encephalopathy following bile duct ligation
4. KP Mohanakumar (IICB, Kolkata): A cross-talk between mitochondrial and nuclear genomes in neurons
5. S Rasool (NYU, USA): Vaccination with a non-human random sequence amyloid oligomer mimic results in improved cognitive function, reduced plaque deposition and microhemorrhage in Tg2576 mice

**Conveners: I Singh (MUSC, USA)  
R Sandhir (PU, Chandigarh)**



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12:00 noon - 01:00 pm		Lunch	
01:00 pm - 02:30 pm		01:00 pm - 02:30 pm	
Symposium XIV: <i>Brain responses to low oxygen</i>		Symposium XV: <i>Computational Neuroscience</i>	
Chairpersons: TR Raju (NIMHANS, Bengaluru), SB Singh (DIPAS, New Delhi)		Chairpersons: M Bhattacharya (IIITM, Gwalior) A Ghosh (ISI, Kolkata)	
Speakers:		Speakers:	
<div>1. SB Singh (DIPAS, Delhi): Neurophysiological and neuropsychological changes at high altitude.</div> <div>2. SB Deshpande (BHU, Varanasi): Nitric oxide as an inhibitory transmitter/modulator in spinal synaptic transmission</div> <div>3. C Kaur (NUS, Singapore): Glial changes in hypoxia and ischemia</div> <div>4. SK Hota (DIHAR, Leh): Neuroprotective mechanisms in hypoxia</div> <div>5. J Singh (CAAS, Singapore): Altitude Hypoxia-an overview</div>		<div>1. A Ghosh (ISI, Kolkata): Introduction to neuro computing</div> <div>2. J Joseph (CNS-UH, Hyderabad): A model of olfactory pathway with simultaneous rich set of constraints</div> <div>3. K Bajaj (Brain Data Systems, New Delhi): Brain mechanisms underlying consciousness without subject and object duality</div> <div>4. PN Yadav (CDRI, Lucknow): CNS diseases with respect to GPCR</div> <div>5. M Bhattacharya (IIITM, Gwalior): Study of degeneracy in human brain using computational approach of image analysis</div>	
Convener: SB Singh (DIPAS, New Delhi)		Convener: M Bhattacharya (IIITM, Gwalior)	
02:30 pm - 03:30 pm (Hall 1)			
<div>➤ <i>Panel Discussion with Chairpersons of Scientific Sessions</i></div> <div>➤ Session on “Neuroscience Research Promotion programs” of National funding agencies</div> <div>Chairpersons : B Dey (DBT, GOI, New Delhi) and M Sharma (ICMR, New Delhi)</div>			
03:30 pm - 04:30 pm (Hall 1)			
Valedictory Function			
04:30 pm - 05:00 pm			
High Tea			