



August 2022



Dr. Ishan Patro

## *Message from the President*

Dear Friends,

It's a great pleasure to present to you the Newsletter of the Indian Academy of Neurosciences for the year 2022.

Due to the pandemic, we had the meetings of the Academy in virtual mode. This had both advantages and disadvantages. While we could meet leading neuroscientists of the world and listen to ground-breaking advances in neuroscience, we have started missing each other. Each of us now has a great urge to meet and share academic and personal experiences during these gloomy days. Personally, I want to meet all of you ASAP.

Past two virtual meetings organized by Professor Anita Jagota and Professor Shashi Bala Singh in 2020 and Professor Jayasri Das Sarma and her team in 2021 were great successes and we are indebted to them for their contributions.

With God's Grace, we can now get together at Shillong at the XL Annual Meeting of Indian Academy of Neurosciences under the patronship of Professor Prabha Shankar Shukla, Hon'ble Vice Chancellor of North-Eastern Hill University (NEHU) and the dynamic organizational skills of Dr. Sudip Paul during December 8 - 10, 2022. The theme of the Conference has been set as Neuroscience Research: Current Trends and Future Needs. The Meeting will have opportunities for all to participate, present, interact and even win several awards of the Academy. One of the major attractions would be the posters from leading Neuroscientists of the country, in addition to the lead lectures.

I would also urge that the local chapters organize events and the Academy may consider partial support for them.

May I request all lab-leaders to attend the Conference with their scholars, students and collaborators.

I would stay here Congratulating !! the newly elected Fellows, Professor BK Bachhawat Memorial Lifetime Achievement Awardee Professor U.C. Srivastava (Allahabad, India) and the KT Shetty Memorial Oration Awardee Dr. Suresh L. Mehta (Madison, Wisconsin, USA).

Looking forward to seeing you at Shillong.

Regards,

**Ishan Patro**  
Jiwaji University, Gwalior

## *Report*



**Dr. Vinay K. Khanna**



**Dr. Pankaj Seth**

**Dear Colleagues,**

Last two years have been quite eventful for researchers across the globe. We have learned to work with limited resources in pressing times. Neuroscientists are faced with a new challenge to understand the cellular and molecular mechanisms of psychiatric and neurological complications prevalent in COVID-19 survivors. Several large-scale studies have established the fact that SARS-CoV2 viral sequelae leads to neurocognitive deficits in majority of patients and hence warrant extensive research into this area. It is a pleasure to share with fellow members that several important contributions have been made from India into this direction. A major limiting factor for such research efforts is availability of brain and other biological samples from COVID-19 patients. However, Indian neuroscientists have helped in overcoming this challenge. In fact, the Human Brain Tissue Repository at National Institute of Mental Health and Neurosciences (NIMHANS) in Bangalore and some other institutions in India have come forward to collect and disseminate the required bio-samples to facilitate neuroCOVID research to find answers for Brain Fog. The neuropsychiatric disorders such as depression, psychosis, obsessive compulsive disorders etc. are on the rise. This is in addition to the existing neurological diseases which have only increased with ageing populations and due to the trauma following death and disabilities during various waves of the pandemic.

Despite all the odds, Academy and its members mustered courage to continue with their research activities and academic engagements. The academy welcomed the idea to continue with its annual meetings through online mode for the safety of the delegates and its members. The conference was organized by Dr. Jayasri Das Sarma, Indian Institute of Scientific Education and Research-Kolkata (IISER-K), with local CSIR- Indian Institute of Chemical Biology (CSIR-IICB) and Netaji Subhas Open University (NSOU) as partners Kolkata. It was a highly successful meeting with participation from India and other countries.

Furthermore, the Annals of Neurosciences, the official journal of the academy continued with its regular issues, and has been able to attract more submissions of research articles and gathered the due visibility through this partnership with an International publisher, the Sage.

IAN local chapters offer platform to fulfill our commitment for public outreach programs. Our global alliance with IBRO and Japanese Neuroscience Society (JNS) is further strengthened, we plan to expand this to other sister neuroscience societies in the Asia Pacific region. We will be holding the XL annual conference of IAN from December 7-10, 2022. This year the meeting is being organized by Dr. Sudip Paul, at the North Eastern Hill University (NEHU). This is for the first time IAN is being organized in the North Eastern region of India. More details are available at the conference (<https://ian2022nehu.com/>) and IAN website (<http://www.neuroscienceacademy.org.in/>). We look forward to your active participation during the meeting.

**Vinay K. Khanna**  
Secretary HQ

**Pankaj Seth**  
General Secretary

## *BK Bachhawat Memorial Life Time Achievement Award - 2021*

***The Award is bestowed to a Neuroscientist for his / her scientific contributions in biochemistry/neuroscience in memory of stalwart of Indian Biochemistry & Neurochemistry, Professor BK Bachhawat.***



**Dr. Subrata Sinha, MD, PhD**  
FAMS, FNA, FASc, FNASc  
Dean (Research), Professor and Head  
Department of Biochemistry  
Head, Department of Laboratory Medicine  
All India Institute of Medical Sciences  
New Delhi – 110 029, India  
Email: sub\_sinha@hotmail.com; sub\_sinha2004@yahoo.co.in

### **Title of Oration –**

*Learning disability, families, and molecules: a journey through dyslexia*

Dr. Subrata Sinha has graduated in Medical Sciences (MBBS) and specialized with an MD (Biochemistry) from the All India Institute of Medical Sciences (AIIMS), New Delhi and then did his Ph.D. from the MRC Toxicology Unit, UK. He has been a faculty at the Department of Biochemistry, AIIMS, since 1988 and Head since 2003. Currently, he is also Dean (Research) at AIIMS and also, Head, Department of Laboratory Medicine. From 2010 to 2017 he was on deputation as Director, National Brain Research Centre (NBRC), Manesar.

At AIIMS, Dr. Sinha has built multi-disciplinary research groups and promoted research at all levels, including medical undergraduates. Additionally, as Dean (Research) he is responsible for the administration of about 1000 distinct research projects with the faculty, as well as the Centralized Core Research Facility, and steering numerous institutional programs, including an Incubator and international collaborations. At NBRC, he actively promoted an integrative approach towards Neuroscience, both in teaching and in research. Professor Sinha has been working on the genetics of dyslexia, where he had set up a collaborative group combining behavioral studies, genetics (including NGS) and stem cell biology to study genetically determined endophenotypes in this specific learning disability. This work, on three extended endogamous families, has led to the identification of three distinct genetic loci influencing distinct pathways related to neuronal differentiation, cell-cell communication and neurotransmitter activity. His work on glial tumor biology identified a novel atypical cadherin (FAT1) based pro-tumorigenic pathway that is important for driving hypoxia signaling. Another area is the generation of recombinant antibodies for infectious diseases (HIV, HBV) and tumor targeting. He has numerous research publications and 7 patents, including 3 US patents.

Dr. Sinha is a recipient of many awards and honors, including the Swarnajayanti and J C Bose Fellowships. He is a fellow of all Indian National Science Academy (currently Vice President), the Indian Academy of Sciences, National Academy of Sciences, and the National Academy of Medical Sciences. He is a fellow of the Indian Academy of Neurosciences and was its Dean from 2012 to 2014 and President from 2015 to 2017. He has actively promoted the development of Neuroscience at various levels, including in the educationally disadvantaged sectors.

## *KT Shetty Memorial Oration - 2021*

***KT Shetty Memorial Oration was instituted in recognition of impeccable scientific contributions of Professor KT Shetty. The oration is conferred on a midcareer neuroscientist for his/her outstanding contributions in research.***



**Dr. Rajat Sandhir**

Professor  
Department of Biochemistry  
Punjab University  
Chandigarh – 160 014, India  
Email: sandhir@pu.ac.in

**Title of Oration –**

*Altered insulin signaling as a pathogenic mechanism in sporadic Alzheimer's disease: GSK3 beta as a potential therapeutic target*

Dr. Rajat Sandhir is currently a Professor at the Department of Biochemistry at Panjab University in Chandigarh. He received his M.Sc. and Ph.D. degrees in Biochemistry from the Postgraduate Institute of Medical Education and Research, Chandigarh. He received postdoctoral training at the Medical University of South Carolina (USA) and at the Kansas University Medical Centre (USA). He has held several administrative positions at Panjab University including Associate Director (Research) from 2017-2018.

His research interests are to understand the biochemical and molecular mechanisms involved in development of neurodegenerative conditions like metabolic encephalopathies, dementias and Parkinson's Disease with a particular interest to understand role of inflammation, oxidative stress, mitochondria and alterations in Blood-Brain-Barrier. In addition, his interest is also to identify neuroprotective strategies that could ameliorate neurodegenerative conditions. He has over 180 research papers to his credit and has mentored over three-dozen students for Ph.D. He has an h-index of 46 and i10 index of 130 and is listed among the World 2% Scientists for the year 2020 released now by the Stanford researchers from Panjab University, Chandigarh.

Dr. Rajat Sandhir is an elected fellow of the Indian Academy of Neurosciences and Association of Biomedical Scientists of India. He is on the Editorial Board of Neurochemistry International and Neuroscience Research Notes. He is on the Conference Committee of the International Society of Neurochemistry (ISN). He has organized several IBRO/APRC schools and meetings to promote neuroscience and has been associated with Indian Academy of Neurosciences for more than three decades.

## IAN Elected Fellows - 2021



**Dr (Ms). Jayasri Das Sarma**

Professor

Department of Biological Sciences

Indian Institute of Science Education and Research-Kolkata

Mohanpur, Nadia – 741 246, West Bengal, India

**Email:** dassarmaj@iiserkol.ac.in; jayasridassarma@gmail.com



**Dr (Ms). Usha Panjwani**

Scientist G

Defence Institute of Physiology & Allied Sciences

Defence Research & Development Organization

Lucknow Road, Timarpur

Delhi – 110 054, India

**Email:** ushapanjwani6@gmail.com



**Dr. Surya Pratap Singh**

Head

Department of Biochemistry

Institute of Science

Banaras Hindu University

Varanasi – 221 005, Uttar Pradesh, India

**Email:** suryasingh@hotmail.com; ssingh35@bhu.ac.in

## Executive Committee

### President

Dr. Ishan K. Patro 2021 - 2023  
Gwalior

### Vice President

Dr (Ms). Suman Jain 2020 - 2022  
New Delhi

### Dean

Dr. Trichur R. Raju 2021 - 2023  
Bengaluru

### General Secretary

Dr. Pankaj Seth 2020 - 2022  
Manesar

### Secretary HQ

Dr. Vinay K. Khanna 2022 - 2024  
Lucknow

### Secretary International Affairs

Dr. Suresh L. Mehta 2022 - 2024  
Madison, USA

### Treasurer

Dr. Ashok K. Agrawal 2020 - 2022  
Lucknow

### Chief Editor

Dr. Akshay Anand 2021 - 2023  
Chandigarh

### Members

Dr (Ms). Jayasri D. Sarma 2020 - 2022  
Kolkata

Dr. Aurnab Ghose 2020 - 2022  
Pune

Dr (Ms). Meenakshi Bawari 2021 - 2023  
Silchar

Dr (Ms). Anita Jagota 2021 - 2023  
Hyderabad

Dr (Ms). Phalguni A. Alladi 2022 - 2024  
Bangalore

Dr. Amit Mishra 2022 - 2024  
Jodhpur

### IBRO and FAONS Representative

Dr. Prahlad K. Seth  
Lucknow

### Immediate Past President

Dr (Ms). Shashi B. Singh  
Hyderabad

### Immediate Past General Secretary

Dr. Mahendra K. Thakur  
Varanasi



## IAN - 2021 Awardees

### Tulsabai Somani Educational Trust Award

**Bhanu Prakash Tewari**, Department of Neuroscience, University of Virginia, Charlottesville, Virginia, USA,  
Email: [bptewari@gmail.com](mailto:bptewari@gmail.com)

*Perineuronal nets regulate homeostatic functions of Astrocytes*

### Dr. DM Kar Prize

**Debaleena Basu**, Centre for Neuroscience, Indian Institute of Science, Bengaluru – 560012, Karnataka, India;  
Email: [basu.debaleena@gmail.com](mailto:basu.debaleena@gmail.com)

*Neural mechanisms of saccade sequencing in the frontal eye field*

### Jyotsnamoyee-Raghunath Bhattacharya Prize

**Bhawana Maurya**, Department of Molecular and Human Genetics, Institute of Science, Banaras Hindu University, Varanasi – 221 005, India; Email: [bhawana.mhgbhu12@gmail.com](mailto:bhawana.mhgbhu12@gmail.com)

*Maheshvara regulates JAK/STAT signaling by interacting and stabilizing hopscotch transcripts which leads to apoptosis in Drosophila melanogaster* (Cell Death & Disease Volume 12, Article number: 363 (2021); <https://doi.org/10.1038/s41419-021-03649-0>)

### Professor SS Parmar Research Foundation (USA) Award

**Madhav Sharma**, Department of Biological Sciences, Indian Institute of Science Education and Research-Kolkata, Mohanpur, Nadia – 741 246, West Bengal, India; Email: [ms17ip006@iiserkol.ac.in](mailto:ms17ip006@iiserkol.ac.in)

*Interferon-Induced Tetratricopeptide Repeat Protein (Ifit2) deficiency exacerbates the neurological manifestation of murine coronavirus induced neuroinflammation and chronic progressive demyelination*

**Anima Kumari**, Developmental Toxicology Laboratory, Systems Toxicology & Health Risk Assessment Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow - 226001, Uttar Pradesh, India; Email: [animalifescience@gmail.com](mailto:animalifescience@gmail.com)

*Lambda-cyhalothrin induced dopaminergic dysfunctions in rats: involvement of P38 /JNK MAPK / Nrf2-ARE Signaling*

### Suttee Nag Prize

**Jhilik Dey**, Cell biology and Physiology Division, CSIR-Indian Institute of Chemical Biology, Jadavpur, Kolkata - 700032, West Bengal, India; Email: [jhilik9692dey@gmail.com](mailto:jhilik9692dey@gmail.com)

*Potential role of endogenous neural progenitors in regeneration of hippocampal pyramidal neurons following neurodegeneration*

**Priya Tiwari**, Department of Pharmacology, CSIR-Central Drug Research Institute, Lucknow - 226031, Uttar Pradesh, India; Email: [tiwaripriya95.pt@gmail.com](mailto:tiwaripriya95.pt@gmail.com)

*Anti-inflammatory effect of Angiotensin converting enzyme 2 activation mitigates LPS Induced glial activation by modulating ACE2/Angiotensin (1-7)/Mas Receptor axis*

### S/N Bangalore Chapter

**Aishwarya Segu**, Indian Institute of Science Education and Research Thiruvananthapuram, Maruthamala PO, Vithura, Thiruvananthapuram – 695551, Kerala, India; Email: [aishwaryasegu17@iisertvm.ac.in](mailto:aishwaryasegu17@iisertvm.ac.in)

*Chronic caffeine treatment disrupts the circadian rhythm in Drosophila*

**Rupsha Mondal**, Department of Cell Biology and Physiology, CSIR-Indian Institute of Chemical Biology, Kolkata – 700032, West Bengal, India; Email: [rupsha.mondal@gmail.com](mailto:rupsha.mondal@gmail.com)

*Dopamine can lead to enhanced mitochondrial fission by increased translocation of Dynamin related protein 1 (DRP1)*

### Best Paper Award from the Organizers

**Shumayila Khan**, Kusuma School of Biological Sciences, Indian Institute of Technology-Delhi, Hauz Khas, New Delhi – 110016, India; Email: [shumayilakhan@gmail.com](mailto:shumayilakhan@gmail.com)

*Structure-function insights into the role of D-amino acid oxidase mutations implicated Amyo-trophic Lateral Sclerosis*

**Neha Pandey**, Molecular Biology Unit, Institute of Medical Sciences, Banaras Hindu University, Varanasi – 221 005, Uttar Pradesh, India; Email: [neha.pandey04@bhu.ac.in](mailto:neha.pandey04@bhu.ac.in)

*Chandipura virus activates NF-κBp65 by increasing the expression of hsa-miR-21-5p in human microglial cells*

IAN – 2022  
at North-Eastern Hill University (NEHU), Shillong, Meghalaya, India



# XL ANNUAL MEETING OF INDIAN ACADEMY OF NEUROSCIENCES (DECEMBER 8 - 10, 2022)



**PRE-CONFERENCE WORKSHOP: DECEMBER 7, 2022**

DEPARTMENT OF BIOMEDICAL ENGINEERING, SCHOOL OF TECHNOLOGY  
NORTH-EASTERN HILL UNIVERSITY, SHILLONG - 793022, MEGHALAYA, INDIA

With immense pleasure, we invite you to participate in the *XL Annual Meeting of Indian Academy of Neurosciences*, which will be held at North-Eastern Hill University, Shillong one of the leading central university in the country. The conference will highlight advances in the field of neuroscience and would create awareness among young researchers to carry out research activities as well as career options in the future, so that they could offer better solution(s) on different brain disorders.

**Theme: "Neuroscience Research : Current Trends and Future Needs"**

## Proposed Symposia

Aging and Dementia  
Artificial Intelligence and Neuroscience  
Brain Injury and Neuroregeneration  
Drug Repurposing for Neurological Diseases  
Emotion and Cognition  
Neurodevelopmental disorders  
Neuroglial signaling  
Neuroimaging  
Neurointerventions and Clinical Challenges  
Neurological Disorders and Cell Therapy  
Neuroprosthetics and Rehabilitation  
Neuroprotection  
Trends in Neurotoxicology  
...any other relevant symposia also invited

## Organizing Secretary

Dr. Sudip Paul  
Assistant Professor & Teacher In-Charge  
Department of Biomedical Engineering  
NEHU, Shillong, India

**Contact Us:** [ian2022.nehu@gmail.com](mailto:ian2022.nehu@gmail.com)  
<https://ian2022nehu.com/>

## Scientific Programme

Pre-conference workshops  
Plenary sessions  
Symposia  
Invited talks and Special lectures  
Young scientist sessions  
Poster sessions  
Panel discussion

### Deadlines

SUBMISSION OF PROPOSALS FOR SYMPOSIA & SATELLITE MEETINGS	AUGUST 16, 2022
EARLY BIRD REGISTRATION AND ABSTRACT SUBMISSION	AUGUST 16, 2022
ACCOMMODATION REQUEST	AUGUST 16, 2022



:: INDIAN ACADEMY OF NEUROSCIENCE IN INDIA :: ([neuroscienceacademy.org.in](http://neuroscienceacademy.org.in))



## *Awards for Young Neuroscientists*

To encourage and recognize the contributions of young researchers working in the area of neurosciences, the Indian Academy of Neurosciences has instituted following awards /prizes –

### **Tulsabai Somani Educational Trust Award**

(For best oral presentation by the young neuroscientist below 40 years of age at the time of annual conference).

### **Dr. DM Kar Prize**

(For best oral presentation by the young neuroscientist below 35 years of age at the time of annual conference).

### **Jyotsnamoyee - Raghunath Bhattacharya Prize**

(For best published research paper in the field of neurosciences. Paper should have been published during the year of the conference or last one year of the conference).

### **Professor SS Parmar Research Foundation (USA) Award**

(For best paper presentation in the Poster Session by young neuroscientist below 35 years of age at the time of annual conference).

### **Suttee Nag Prize**

(For best paper presentation in the Poster Session by young neuroscientist below 35 years of age at the time of annual conference).

**For more details, please visit <http://neuroscienceacademy.org.in/index.php> and click AWARDS**

Individuals willing to be considered for the awards may apply directly or get themselves nominated. The details of the awards are on the IAN website. Further information, if any may be obtained from **Dr Vinay K. Khanna**, Secretary (HQ), Chief Scientist and Professor-AcSIR, Developmental Toxicology Laboratory, Area coordinator - Systems Toxicology & Health Risk Assessment Group & Food, Drug and Chemical Toxicology Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow – 226 001, Uttar Pradesh, India, **Email:**neuroscienceacademy@gmail.com

**Last date of receiving nominations is Tuesday; August 16, 2022.**

## *Forthcoming Meetings / Symposia / Workshops / Neuroscience School*

- ❖ **ISN-APSN 2022**, August 28 to September 01, 2022, Honolulu, USA  
Website: <https://www.neurochemistry.org/isn-biennial-meetings/>
- ❖ **4<sup>th</sup> ISN-JNC Flagship School: “Brain Metabolism in Health and Disease”**, September 25-October 2, 2022, Schmerlenbach, Germany  
Website: <https://www.neurochemistry.org/isn-jnc-flagship-school/>
- ❖ **SfN Annual Meeting: Neuroscience 2022**, November 12-16, 2022, San Diego, California  
Website: <https://www.sfn.org/meetings/neuroscience-2022>
- ❖ **The 11<sup>th</sup> IBRO World Congress of Neuroscience: Spanish Society of Neuroscience (SENC)**, 9-13 September 2023, Granada, Spain  
Website: <https://ibro.org/ibro-2023-spotlight-on-spain/>



## *Nominations for BK Bachhawat Life Time Achievement Award & KT Shetty Memorial Oration*

Nominations for **BK Bachhawat Life Time Achievement Award and KT Shetty Memorial Oration for 2023** are invited. The nominee must be a Life Member of Indian Academy of Neurosciences. He / She should have at least 10 years standing in the area of neurosciences. The contributions in neuroscience will be judged by –  
**(i)** Research publications **(ii)** Honours and Awards **(iii)** Contributions in the growth of neuroscience in India.

Nominations along with complete bio-data and supporting documents should be sent to **Dr. TR Raju**, Dean-Indian Academy of Neurosciences, A.S. Paintal Distinguished Scientist Chair of ICMR, National Institute of Mental Health and Neurosciences, Bangalore, Karnataka, India **Email:** trraju.nimhans@gmail.com and a copy of the same to **Dr. Vinay K. Khanna**, Secretary (HQ), Chief Scientist and Professor-AcSIR, Developmental Toxicology Laboratory, Area coordinator - Systems Toxicology & Health Risk Assessment Group & Food, Drug and Chemical Toxicology Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow – 226 001, Uttar Pradesh, India, **Email:** neuroscienceacademy@gmail.com positively by **Thursday; September 15, 2022.**

## *Nominations for IAN Fellowship*

The Academy recognizes scientists who have excelled in neurosciences by electing them Fellows. A life member of the Academy with at least 10 years of research experience in the field of neurosciences can be nominated. Nominations on prescribed format available at the website duly proposed and supported by Fellows of Indian Academy of Neurosciences are invited along with curriculum vitae. Both soft copy and hard copy of nomination complete in all respects should be sent to **Dr. TR Raju**, Dean-Indian Academy of Neurosciences, A.S. Paintal Distinguished Scientist Chair of ICMR, National Institute of Mental Health and Neurosciences, Bengaluru – 560 029, Karnataka, India, **Email:** trraju.nimhans@gmail.com

Further, copy (both soft and hard copy) of the nomination papers should also be sent to **Dr. Vinay K. Khanna**, Secretary (HQ), Chief Scientist and Professor-AcSIR, Developmental Toxicology Laboratory, Area coordinator- Systems Toxicology & Health Risk Assessment Group & Food, Drug and Chemical Toxicology Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow – 226 001, Uttar Pradesh, India, **Email:** neuroscienceacademy@gmail.com latest by **Thursday; September 15, 2022.**

## *Nominations for the Executive Committee*

Nominations for the positions of Vice President (1), General Secretary (1), Treasurer (1) and Members (2) are invited on the prescribed format enclosed herewith. The term for these positions will be for 3 years. The nominations should be sent either to **Dr. Vinay K. Khanna**, Secretary (HQ), Chief Scientist and Professor-AcSIR, Developmental Toxicology Laboratory, Area coordinator - Systems Toxicology & Health Risk Assessment Group & Food, Drug and Chemical Toxicology Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow – 226 001, Uttar Pradesh, India, **Email:** <neuroscienceacademy@gmail.com> or to **Dr. Pankaj Seth**, General Secretary, Professor, National Brain Research Centre, NH-8, Nainwal Road, Manesar – 122 051, **Email:** <pseth@nbrc.ac.in> so as to reach them positively by **Thursday; September 15, 2022.**



# Indian Academy of Neurosciences

## Proforma for Nomination for the Election of Fellows

1. Name:.....

2. (a) Date of Birth: ..... (b) Gender: Male ☐ Female ☐

3. Designation/Affiliation:.....

4. Address:

(a) Official: .....  
.....  
.....

(b) Residential: .....  
.....  
.....

Telephone/Mobile: ..... Email: .....

5. Membership Status Yes / No  
[Date of Joining Academy as Life Member]: .....

6. Qualification (Degree and Post Graduation): .....

7. Specialization / Area of research: .....

8. Significant Contributions in the field of Neurosciences  
(About 200 words, Attach annexure if required)

9. Publications in the last five years  
(Please give complete references and attach copies of three publications)

	Proposed by	Supported by
Name	-----	-----
Address	-----	-----
Signature	-----	-----

### Note:

*Proposer and Secunder should be Fellows of the Academy. Complete set of nomination and CV of the nominee should be sent to the Dean, IAN and a copy of the set to the Secretary HQ of the Academy before the last date. Soft copy of the material should also be sent positively.*

**Incomplete nominations will not be entertained.**  
**Nominations received after the last date will be considered next year.**



# Indian Academy of Neurosciences

## FORM FOR ANNUAL ELECTION

Nomination for the post of: .....

Name: .....

Address:.....  
.....  
.....

Membership No.:.....

### **Proposer**

Name: .....

Membership No. ....

Signature .....

### **Secunder**

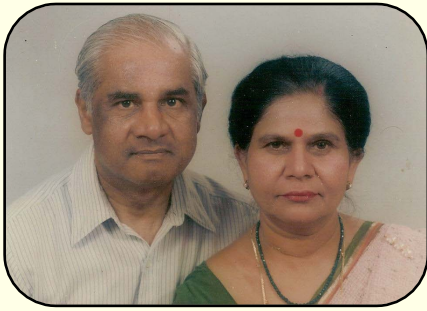
Name: .....

Membership No. ....

Signature .....



# *IAN - Lalita and Ravindra Nath International Travel Awards*



Applications are invited for the **IAN - Lalita and Ravindra Nath International Travel Awards** from researchers working in neurosciences intending to present a paper at a neuroscience conference or attend neuroscience schools / training workshops outside India.

## **Criteria and Guidelines**

1. Applicant should be the first author on the selected abstract, presenting their work as a talk or poster at an international neuroscience conference or selected for a neuroscience workshop and be an IAN member at the time of application.
2. Applicant should be at an advanced stage of pursuing research in neuroscience in a national laboratory or UGC recognized university as a Ph.D. candidate or a post-doctoral fellow (PDF) (awarded Ph.D. degree within the last 2 years from the application deadline).
3. Applicant should have a strong scholastic record and the application should be supported by two recommendation letters, including one from the Ph.D. supervisor.
4. Applicant should provide a paragraph to describe the scientific questions being pursued and as to how the conference / school / workshop will help in their research (within 200 words).
5. The application will be reviewed by a committee, and two awards will be announced 4 weeks after the last date of application.
6. Preference will be given to researchers (Ph.D. students or PDF) attending the FAONS conference or neuroscience school / training workshops / conference in the Asian region and conference or workshop in other regions of the globe.

## **What the award will cover?**

1. A bursary up to INR 50,000 (Rupees Fifty Thousand Only) will be provided to the selected candidates to cover partial expenses towards their registration, travel, boarding and lodging.
2. Total amount will be a maximum of INR 50,000 (Rupees Fifty Thousand Only) per award and will include a certificate signed by the President of the IAN.
3. Award money will be disbursed on return to India and after providing proof of participation (Participation certificate / picture at the meeting during talk / poster session), travel tickets (attested copy by the Head of Department; HOD), receipts of registration and accommodation charges (attested copy by HOD) and a brief report of the conference / school / workshop.

## **How to apply?**

### **Prepare following documents in MS Word or PDF and submit online**

1. Details of conference /workshop applicant wishes to attend.
2. Copy of the abstract and its acceptance for the neuroscience meeting. In case of neuroscience schools / training workshops, copy of the selection letter.
3. Curriculum vitae, including list of papers and abstracts presented in meetings.
4. Scan of two recommendation letters including one from the supervisor.
5. Statement as to how participation in the event will be helpful to the applicant (within 200 words)

**Deadline for receiving Applications: Thursday; September 15, 2022.**

**IAN International E-Conference**  
**XXXIX Annual Meeting of Indian Academy of Neurosciences**  
*Neuron-glia Interaction: Recent Concepts and Advances*  
**December 16 - 19, 2021**

**Brief Report**



The International XXXIX Annual E-Meeting of the Indian Academy of Neuroscience (IAN) 2021 had a unique theme - "Neuro-glia in health and disease." Professor Jayasri Das Sarma, Indian Institute of Science Education and Research-Kolkata jointly organized the meeting involving Dr. Subhas Chandra Biswas, CSIR-Indian Institute of Chemical Biology, Kolkata and Dr. Anirban Ghosh, Netaji Subhas Open University, Kolkata.

As a preface of IAN-2021, four satellite symposia were organized under the banner of IAN-2021. The first curtain-raiser satellite symposium on "Brainwave: Connection to cognition" was organized by Amity University Kolkata, on September 10, 2021, followed by the second satellite symposium on "Translational Neurophysiology and Cognition" organized by the Department of Physiology, University of Calcutta, third satellite symposium on November 16,

2021, on "Neurological Disorders- from Molecular to Mechanism" by CSIR-IICB Kolkata. IISER Kolkata organized the fourth Satellite program on December 15, 2021, on "Neuron-Glia interaction: Recent concepts and advances." Followed by the International XXXIX Annual E-Meeting of the Indian Academy of Neurosciences (IAN) 2021 spanned over four days from December 16 to December 19. Owing to the Covid 19 pandemic, the conference was conducted in a virtual model. Like every dark cloud with a silver lining, we received overwhelming participation with almost 300 participants. We could host around 125 eminent national and international speakers from the USA, UK, Finland, Poland, Italy, Germany, Singapore, Malaysia, and Japan.

The inaugural ceremony began with a devotional Vandana song praying to Goddess Saraswathi for knowledge and wisdom and was graced by delegates, members and EC members of Indian Academy of neurosciences. Dr. Bruce Alberts delivered the inaugural lecture on "The Great Complexity of Biology, from Cells to Tissues." He also released the book "The Biology of Glial Cells: Recent Advances." The book edited by Dr. Ishan Patro, Dr. Pankaj Seth, Dr. Nisha Patro and Dr. Prakash Narain Tandon has valuable contributions from IAN members and Fellows. Dr. Alberts in recognition of his contributions to the field of Biology was elected Honorary Fellow of Indian Academy of Neurosciences. Dr. Prakash N. Tandon, the founder president of NBRC, Manesar and former president of IAN, and Dr. Prahlad K. Seth, the founding member of the Academy also graced the inaugural ceremony. The delegates provided their words of encouragement which set the meeting to a great start.

The scientific session of the meeting started with the Key Note lecture by Dr. Ishan Patro on a unique theme of "Glial response to early life adversities". Professor Avindra Nath delivered a Distinguished Lecture on "Retroviral elements in brain development." The conference was also scheduled to include three plenary talks. Prof Diane Griffin graced the plenary lecture I by her deliberation on "Alphavirus encephalomyelitis: Determinants of the outcome." The plenary lecture II was delivered by Prof Stanley Perlman on "The animal models of COVID-19". Dr. M.V Padma Srivastava talked about a crucial and relevant subject in today's pandemic situation, "COVID and Brain." The BK Bachhawat Memorial lifetime achievement award for the year 2021 was awarded to Dr. Subrata Sinha. He delivered the award lecture on "Learning disability, families, and molecules: a journey through dyslexia." Dr. Rajat Sandhir delivered the KT Shetty memorial oration on "Altered signalling as a pathogenic mechanism in sporadic Alzheimer's disease: GSK3 beta as a potential therapeutic target."

Throughout the meet, eighteen symposia on various themes of neuro-glial biology were scheduled. With developments in medicine, the life expectancy of people has increased. Owing to this and the increased environmental risks, there is an increase in patients with neurological and neurodegenerative disorders. Thus a few symposia themed around Normal aging versus Dementia, Epigenetics and drug repurposing for neurodegenerative diseases, the Brain response to environmental stress, Molecular mechanisms of neurodegeneration, Neuropharmaceutical, Experimental models and neurodegeneration, Rare genetic variants and neurological disorders, Clinical and cellular basis of neurodegeneration, Neuroglia in aging and neurodegeneration were arranged to breach the gap between translational and basic research and provide a platform for clinicians and scientists to discuss their research and sharing their views how to improve the neuro-glial health and homeostasis. Symposia like Neuroimmune inflammation and neuroimmune synapse, Astroglia in CNS health and disease, Glioma biology, Cognition, and memory stem cell plasticity and neuronal injury, Neural plasticity, and repair in neurotraumatic injury, Translational research in movement neuroscience, discussed the mechanisms and involvement of neurons and glia in maintaining nervous system health and alterations that lead to disease. Microglia discovery in 1919 by Pio del Rio - Hortega turned 100 years longstanding in 2019. Microglia

research thus has continued for more than 100 years since its discovery and the new term neuroinflammation was coined with the advent of microglia as CNS resident immune cells. Microglial biology was one of the primary focuses in neuroscience research. With this in mind, there was one symposium dedicated to Microglia: past controversies and current concepts. With the increase in the number of patients with Covid-19 showing neurological symptoms, a symposium on Neuro COVID was arranged, which is the need of the hour in this worldwide pandemic to garner attention to this critical aspect of COVID. In addition to this, there were also three oral sessions of the invited talk by young budding scientists.

To nurture the young minds and their interest in neuroscience research, every year, the academy awards several prizes recognizing promising research presented by young scientists in the form of oral and poster presentations. The DM Kar prize and Tulsabai Somani Educational Trust award are given each year for oral presentation at the annual conference. The DM Kar is given for the best paper presented in the oral session by a candidate who is a member of the IAN and is below 35 years of age at the conference. Eight abstracts were shortlisted for the DM Kar prize competition to deliver an oral talk. Debaleena Basu, IISc, Bengaluru received the prize for the paper "Neural mechanisms of saccade sequencing in situ the frontal eye field." The Tulsabai Somani Educational Trust award is given for the best paper presented in the oral session at the annual conference by a candidate who is a member of IAN and is below 40 years of age at the conference. Seven abstracts were shortlisted to deliver an oral talk. Bhanu Prakash Tewari, the University of Virginia at Charlottesville, USA, received the paper "Perineuronal nets regulate homeostatic functions of Astrocytes." The Jyotsnamoyee-Raghunath Bhattacharya Prize is given for the published research paper. This prize was awarded to Bhawana Maurya for the paper published in Cell Death and Disease entitled "Maheshvara regulates JAK/STAT signalling by interacting and stabilizing hopscotch transcripts which leads to apoptosis in *Drosophila melanogaster*."

There are four awards under the poster presentation category: the Professor S. S. Parmar Research Foundation (USA) Award, the Sutttee Nag Prize, SFN Bangalore chapter category award, and the organizer's best paper award. A total of 81 abstracts were selected for a poster presentation. The Professor S. S. Parmar Research Foundation (USA) Award is given to the two best papers presented in the Poster session to the candidate who is a member of IAN and below 35 years of age at the time of the conference. Madhav Sharma, IISER Kolkata, and Anima Kumari, CSIR-IITR, Lucknow, won the award. The Sutttee Nag prize is given to the two best papers presented in the Poster session to the applicant who is a member of IAN and below 35 years of age at the conference and Dilip K, CSIR-IICB, Kolkata and Priya Tiwari, CSIR-Central Drug Research Institute, won the award. Two awards were also awarded in the SFN Bangalore chapter category. These were awarded to Aishwarya Segu, IISER Thiruvananthapuram, for the paper entitled "Chronic caffeine treatment disrupts the circadian rhythm in *Drosophila*" and Rupsha Mondal CSIR-IICB, Kolkata for the paper entitled "Dopamine can lead to mitochondrial fission by increased translocation of DRP1". Two awards for the best paper from the organizer Shumayila Khan from IIT DELHI for the paper entitled "Structure-function insights into the role of D-amino acid oxidase mutations implicated Amyotrophic Lateral Sclerosis" and Neha Pandey, Banaras Hindu University for the paper entitled "Chandipura virus activates NF- $\kappa$ Bp65 by increasing the expression of hsa-miR-21-5p in human microglial cells."

In the general body meeting Dr. Vinay Kumar Khanna, Secretary Headquarters, IAN, announced the name of the three newly elected fellows Dr. Jayasri Das Sarma, IISER Kolkata; Dr. Usha Panjwani, DIPAS New Delhi, and Dr. Surya P. Singh, BHU Varanasi.

The closing ceremony and award declaration ceremony were glorified by Professor SS Parmar and Professor Prahlad K. Seth, the founding members of IAN. Professor SS Parmar gave a glimpse into IAN's history and foundation and provided his valuable guidance to the current and upcoming generation of neuroscientists. The E-abstract book for the International XXXIX Annual E-Meeting of the Indian Academy of Neurosciences (IAN) 2021 was also released by Professor SS Parmar. The Chief Guest for the ceremony was Professor Sourav Pal, Director of IISER Kolkata. He appreciated the heritage of the society and the efforts of the IAN executive committee and the organizing committee for making 2021 meet a success. Dr. Vinay Kumar Khanna, Secretary Headquarters, IAN, announced the names of award recipients. Dr. Pankaj Seth, General Secretary, IAN, also summarized the virtual event. The meeting ended with the vote of thanks delivered by the Organizing Secretary, IAN 2021, Professor Jayasri Das Sarma. She emphasized that mutual trust among the members of the Core Committee, organizing committee including students and the fellow feeling of the members, It made this virtual mega-conference a grand success. Last but not the least, she conveyed her most profound gratitude to Goddess Saraswathi and Goddess Durga for their blessings to have the meeting successful.

### Jointly organized by

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## Science Communication Workshop - Report



The Mind Gala is a neuroscience outreach venture run collaboratively by the lab of Dr (Ms). Poonam Thakur from Indian Institute of Science Education and Research (IISER), Thiruvananthapuram and Project Encephalon, an international trainee-led neuroscience outreach organization. This initiative is funded by the India Bioscience Outreach Grant. The Mind Gala community has served more than 750 beneficiaries from 20 countries around the world through their various events. They recently organized a science communication workshop in the online mode to introduce people to the art of science communication and storytelling. The workshop was done in collaboration with Indian Academy of Neurosciences.

This workshop was open for anyone and everyone willing to explore science communication as a field. The workshop took place on Saturday, May 21, 2022. The workshop featured a stellar line-up of speakers including - Ms. Shriya Naidu (IIT-Gandhinagar), Dr. Somdatta Karak (CSIR-CCMB), and Mr. Siddharth Kankaria (NCBS). The speakers covered a variety of aspects such as designing a two-way science communication program, building low-cost science communication projects, and using storytelling for communicating science.

The workshop also featured a special appearance made by Dr. Pankaj Seth, General Secretary, IAN. He highlighted the organization's vision and mandate and their contribution towards building the neuroscience community in India. He also appraised the audience about various funding opportunities available for students through IAN.

The Mind Gala's Science Communication Workshop was attended by over 250 beneficiaries including high-schoolers and undergraduate students. The workshop observed insightful discussions, thought-provoking questions, and ingenious ideas from attendees. At present, we aim to organize more interactive webinars to educate more and more people about the wonders of the brain.



# INDIAN ACADEMY OF NEUROSCIENCES

## MEMBERSHIP FORM

I wish to become a member of the Indian Academy of Neurosciences. I have read the Rules and Byelaws / Constitution of the Academy and agree to abide by it.

1. Sur Name:.....First Name:.....Middle Name:.....
2. Educational Qualification:.....
3. Designation / Affiliation:.....
4. Official Address:.....  
Tel:.....Fax:.....Email:.....
5. Residential Address:.....  
Tel:.....Cell number:.....
6. Are you actively engaged in work related to neurosciences: Yes ☐ No ☐
7. Field of specialization:.....
8. Type of membership\* desired (Tick or circle the appropriate one)  
I. Life Member ☐ II. Associate Life Member ☐ III. Associate Member ☐  
(DD / Cheque Number:.....Drawn on Bank.....Date.....)
9. Nominated by:.....  
Name & Membership No:.....  
Address:.....

Signature of the applicant

Signature of the proposer

### Note:

1. Admission fees Rs. 50/- additional shall be charged for secretarial purpose and included in the fee.
2. Subscription fees\* for Life Membership and Associate Life Membership is Rs. 4000/-, Associate Membership is Rs. 500/-.
3. Category of Associate Life Membership will be upgraded to Life Membership once the candidate submits his / her Ph.D. certificate.
4. Associate Membership is valid for one calendar year and shall become due on the 1st of January each year.
5. Payment in cash/ DD or local cheque drawn in favour of Treasurer, Indian Academy of Neurosciences payable at Lucknow should be sent along with the duly completed form at the following address:  
Dr. A.K. Agrawal  
Treasurer, Indian Academy of Neurosciences  
C/o. Dr. Vinay K. Khanna  
Chief Scientist & Professor - AcSIR  
Developmental Toxicology Laboratory  
Area Coordinator - Systems Toxicology & Health Risk Assessment & Food, Drug and Chemical Toxicology CSIR - Indian Institute of Toxicology Research  
Vishvigyan Bhavan, 31, Mahatma Gandhi Marg  
Lucknow - 226 001, Uttar Pradesh, India  
Email: aka33@rediffmail.com
6. Online NEFT transfer may also be made as per following details,  
Punjab & Sind Bank, Branch: Hazratganj, Lucknow with IFSC Code PSIB0000166, Branch code: L0166 & Account No. 01661000050015, It is mandatory to enclose the online transaction printout of successful NEFT Transfer for verification.

### For Office Use Only

Membership No. ....Type of Membership.....Subscription Details.....  
DD / Cheque Number:.....Drawn on Bank.....Date.....OR  
Receipt No. ....Date.....(if payment made in cash).....  
Date .....Treasurer's Signature.....

## *Call for Proposals to hold Next IAN Meeting*

Proposals to host the **XLI meeting of Indian Academy of Neurosciences (IAN) in 2023** (preferably October) are invited. The venue should have the facility to hold 3 parallel scientific sessions (~ 100 delegates) and an auditorium with capacity to seat ~ 300 delegates for major events such as inauguration, plenary talks and keynote lectures. Details on accommodation facility in guest houses, hotels of different range for national / international delegates (faculty, students, post-docs) and connectivity by rail, road and air for delegates to the venue should be included. The proposal may also list earlier experience of handling national and international meetings and participation in IAN meetings.

A written proposal with a brief background duly forwarded by the head of the institution/competent administrative authority mentioning the availability of infrastructure in their institute (at the venue) may be sent to **Dr. Vinay K. Khanna**, Secretary (HQ), Chief Scientist and Professor-AcSIR, Developmental Toxicology Laboratory, Area coordinator - Systems Toxicology & Health Risk Assessment Group & Food, Drug and Chemical Toxicology Group, CSIR - Indian Institute of Toxicology Research, Vishvigyan Bhavan, 31, Mahatma Gandhi Marg, Lucknow – 226 001, Uttar Pradesh, India, **Email:** neuroscienceacademy@gmail.com. The deadline for submitting the proposal is **September 15, 2022**.

### **Address for Correspondence**

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Chief Scientist & Professor - AcSIR  
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