ISN
International Society
for Neurochemistry



Welcome to our October edition of *What's on ISN*!

After a pause in our newsletters since May, we are very glad to be back. The past few months have brought some unexpected operational challenges for ISN, which temporarily reduced the capacity of our Secretariat. While some matters are still being resolved, we are working hard to return to our usual rhythm, and we are grateful for the patience and support of our members throughout this period.

There is plenty to reconnect with. In this edition, we look ahead to ISN at SfN in Washington, D.C., revisit September's Flagship School in Brazil, and explore the connection between ISN and this year's Nobel Prize-recognised work in optogenetics. We also have ISN-supported events, an opportunity in China, JNC research highlights, and a little hint of what is coming next for ISN, including new opportunities for our community and a fresh new chapter in how our Society connects with you.

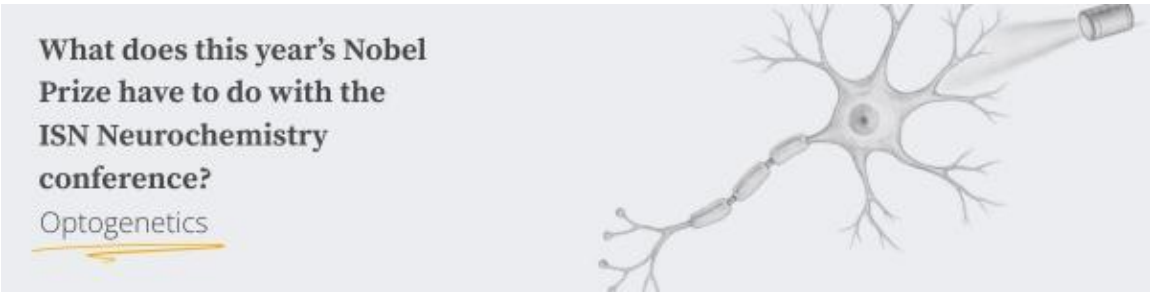


This year, ISN's annual grants application timeline will look a little different. While our grant deadline normally falls on 31 October, following the recent operational disruptions within the Society, we have adjusted the schedule to ensure members have sufficient time to prepare and submit their applications.

The application window will open on **1 November** and close on **30 November**. We will be sharing further information with our membership very soon, including details on the available grants and how to apply, so keep an eye on ISN communications over the coming weeks.

November will be bringing more than just the opening of our grants application window. We are also preparing to introduce a fresh new face for ISN and new ways for our community to connect, discover, and engage with neurochemistry.

There is plenty more to come, from conversations with leading voices in the field to new opportunities to explore the people, ideas, and topics shaping neurochemistry today. We are keeping the details a secret just a little longer, but we are excited to share what we have been working on. Stay tuned, a new chapter for ISN is just around the corner!



On 5 October, the 2026 Nobel Prize in Physiology or Medicine was awarded jointly to Karl Deisseroth, Peter Hegemann and Georg Nagel for their discoveries concerning light-gated ion channels and optogenetics. What began with research into how a single-celled alga responds to light ultimately gave neuroscience a remarkable new tool: **the ability to control the activity of specific nerve cells using light.** Optogenetics has since transformed the way researchers investigate how neural circuits contribute to memory, behaviour, emotion and disease.

This year's Nobel Prize also has a special connection to our own scientific community. At the ISN-ASN 2025 Meeting in New York, optogenetic approaches were part of the scientific programme, including a presentation exploring optogenetic insights into neurosecretion and neurotransmitter release. Seeing a field represented within our recent conference programme receive this level of recognition is an exciting reminder of how rapidly neurochemistry continues to evolve, and of the importance of bringing together the ideas, technologies and researchers helping to shape what comes next.





In September, the 6th ISN-JNC Flagship School brought early-career researchers and leading scientists together in Armação dos Búzios, Brazil, for five days exploring “Glial Cells: From Molecules to Medicine.” The programme was packed with scientific sessions, lively discussions with the speakers and poster sessions that gave participants a chance to share their own research, ask questions and exchange ideas in a much more informal setting.

But the Flagship School was about much more than just the lecture room. There was plenty of time to get to know one another between sessions, enjoy Búzios and its surroundings, and even meet some of the local along the way - capybaras. And what a highlight Shane Liddelow’s quiz night was! It brought everyone together for an evening of competition, so many laughs and a very different kind of test after several hours of neurochemistry that day.

That combination of excellent science, direct access to experienced researchers and time spent together outside the scientific programme is exactly what makes the ISN Flagship Schools so special. We all left Brazil with new ideas, friendships and great memories from an unforgettable week.



The Argentine Society for Neuroscience (SAN) Annual Meeting recently brought the neuroscience community together in Buenos Aires for a programme of symposia, plenary lectures, poster sessions and discussions spanning a wide range of topics across the field.

ISN was pleased to support the pre-congress course “Introduction to Neuronal Modelling: From Spikes to Circuits,”which explored computational approaches ranging from Hodgkin-Huxley models to memory storage in neural networks. Our support also helped provide scholarships for students to take part, contributing to SAN’s strong focus on creating opportunities for the next generation of neuroscientists.

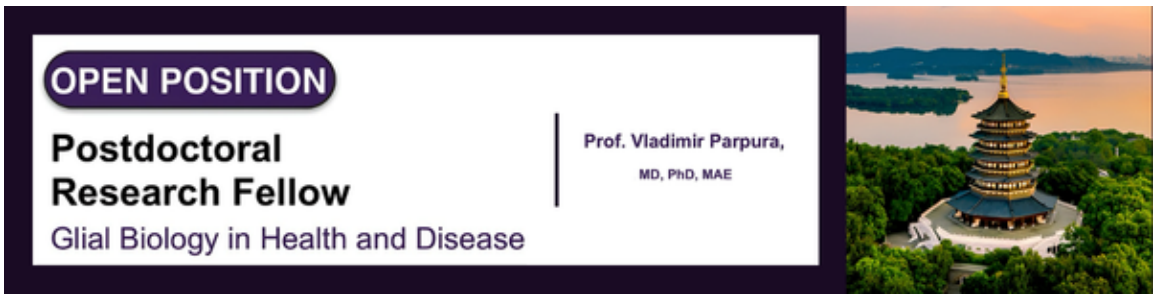
ISN-SUPPORTED SCHOOLS

ISN is proud to support two neurochemistry schools in Nigeria this year, both focused on strengthening training, research capacity and opportunities for early-career scientists across Africa.

In August, the **ISN-ABUAD Advanced School at Afe Babalola University** brought together around 30 postgraduate students, early-career researchers and clinicians for an intensive programme on “Stroke Neurochemistry and Cerebrovascular Resilience.” The School explored the molecular mechanisms of stroke and cerebrovascular disease, African-specific biomarkers and potential neuroprotective approaches, while creating opportunities for participants to learn from an international faculty and build new research collaborations.

Later this month, the **1st ISN–Port Harcourt Neurochemistry School** will take place from 25–31 October at the Provictoire Research Hub, University of Port Harcourt. With a focus on neurogenetics and Drosophila models of neurodevelopmental and neurodegenerative disorders, the programme will combine expert lectures with hands-on training in fly handling, DNA extraction, behavioural assays and low-cost laboratory technologies. Through initiatives like these, ISN continues to support practical training, mentorship and the development of the next generation of neurochemists.

CAREER OPPORTUNITIES



The **International Translational Neuroscience Research Institute (ITNRI)** at Zhejiang Chinese Medical University in Hangzhou, China, is looking for postdoctoral researchers interested in exploring **glial biology and glial-neuronal signalling in health and disease.** The Institute is directed by **ISN Treasurer Prof. Vladimir Parpura** and brings together researchers from across disciplines to investigate the molecular mechanisms of gliotransmission and their relevance to neurological disease.

The positions offer the opportunity to work in a highly multidisciplinary research environment spanning neurochemistry, molecular and cell biology, advanced microscopy, electrophysiology, omics, computational neuroscience, biomedical engineering and translational disease models. Researchers from neuroscience as well as physics, chemistry, engineering and related fields are encouraged to apply. Applications are reviewed on a rolling basis, with flexible start dates.

Interested in taking your next research step in Hangzhou? Find full details about the position, eligibility and how to apply **here.**

Have a position to share?

We're happy to help! ISN members are welcome to send us a brief description and link to any open positions they'd like to promote. Whether you're recruiting or seeking your next career step, we're here to support the community in making meaningful connections.

To have a position featured, please contact the ISN Office at **secretariat@neurochemistry.org**.





The latest research from the Journal of Neurochemistry continues to show just how broad modern neurochemistry has become, spanning the microbiome, gut signalling, mental health and the technologies used to observe neurochemical communication in real time.

One new study explores the **microbiota-gut-brain axis**, showing that the microbial metabolite butyrate can enhance hippocampal synaptic plasticity in mice, with intriguing sex-specific differences in the mechanisms involved. **Another turns** to the human enteric nervous system, mapping **GLP-1 receptors across the gastrointestinal tract** and offering new insight into how GLP-1 may regulate colonic motility and sensory signalling.

On the technology side, **the review** **"Illuminating the Future of Catecholamine Detection"** looks at advances in optical sensors capable of tracking dopamine and norepinephrine with remarkable spatial and temporal precision. These approaches are opening new possibilities for observing catecholamine signalling as it happens and for understanding how these important neuromodulators operate across different biological scales.

Also featured is **"Towards Mechanism-Informed Treatments for Mental Health,"** which looks beyond the traditional focus on dopamine and serotonin to examine a wider range of neurochemical systems that could help shape future therapies for neuropsychiatric disorders. The review has a special connection to ISN: it originated **from the 5th ISN/JNC Flagship School in Naxos, Greece, in 2024**, showing how scientific conversations within our community can continue to grow into new collaborations and published research.

Want your JNC paper featured?

Increase your research's visibility by sharing it on social media and tagging us (**@jneurochem.bsky.social** on *Bluesky*, **@ISN_society** on *Instagram*). Or, email the ISN Office at **secretariat@neurochemistry.org** with your social media handles and a suggested caption - we'd love to help spread the word!



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