Report of the ISN-Wiley-Blackwell-JNC-International Lectureship Organized at Guru Nanak Dev University, Amritsar, India

Title of the meeting: XXX Annual Conference of Indian Academy of Neurosciences (IAN-2012)

Theme of the Symposium: Translational Neurosciences: Unravelling Mysteries of Brain in Health and Disease

Title of ISN-Wiley-Blackwell-JNC-International Lectureship:

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

Prof. PJ Robinson

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It gives us immense satisfaction to share that the XXX Annual Conference of Indian Academy of Neurosciences (IAN-2012) and International Symposium: Translational Neurosciences: Unraveling Mysteries of Brain in Health and Disease was attended by about 450 delegates from India, USA, Australia, Japan, France, Germany, Singapore, Canada, Sri Lanka etc. The four day meet included four workshops for the young delegates, 6 Plenary talks, 15 symposia, 3 oral sessions and 190 poster presentations. The detailed Scientific Program is appended in Annexure-I.

Brief outline of the scientific content of ISN-Wiley-Blackwell-JNC-International Lectureship:

The ISN-Wiley-Blackwell-JNC-International Lecture was delivered on the second day of the conference (28th Oct) by Prof. P.J. Robinson from Cell signaling unit- Children's Medical Research institute, Australia who delivered the talk on 'Dynamin Modulators in Synaptic Vesicle Endocytosis: A pathway to Anti Epileptic Drugs'. The session was chaired by ISN Council Member Dr. KP Mohanakumar from CSIR-IICB, Kolkata, who introduced the speaker, and briefed about International Society for Neurochemistry, its various activities, the Journal of Neurochemistry and the ISN-Wiley-Blackwell-JNC-International Lectureship Award, to the audience. The Organizers made arrangements for appropriate advertisement of 'The ISN-Wiley-Blackwell-JNC-International Lecture' in print (in the form of invitation cards—copy attached Annexure-II), electronic media (News Paper cutting attached Annexure-III) as well as distributed brochures (a copy of same is attached Annexure-IV) that helped in popularization of the lecture and highlighting the importance of ISN –Wiley-Blackwell-JNC-International Lectureship. As a result, there was overwhelming response from the delegates

and the talk was attended by more than 300 delegates and students of IAN 2012 as well as faculty and students of various Life Sciences Departments of the university.

During his presentation, Prof. Robinson discussed how understanding the basic molecular mechanisms of synaptic transmission may lead to new therapeutic approaches for treatment of disorders of synaptic transmission such as Epilepsy which is affecting up to 1% of the global population. Seizures may be managed by anti-epileptic drugs, but over 30% of people don't respond to any drugs. He apprised the audience about his recent research on the role of Dynamin I, an attractive candidate for a novel anti-epileptic drug and explained how reducing its function would not affect synaptic transmission at lower frequency, but would reduce synaptic transmission during excessive brain activity. He further discussed that their group has developed a range of drugs that inhibit dynamin by multiple distinct mechanisms. The compounds reversibly inhibit SVE and cause an activity-dependent run-down in synaptic transmission. Two of the GTP-targeted compounds have shown anti-convulsant activity in two animal models of epilepsy.

Prof Robinson's visit was also helpful in several ways in nurturing neurochemistry interest in young participants. Prof Robinson was a part of the Press conference held on the first day, Neuroscience Education and Training session aimed at interaction with school and college students and was available for discussions and informal interactions with all the young participants during the meeting. He emerged to be source of inspiration to all the poster presenters as he visited and interacted with poster presenters.

Selected photographs depicting the events in which Prof. PJ Robinson participated during the conference are also attached in a separate folder under Annexure-V.