



# International Society for Neurochemistry

## Report

on the ISN Symposium “Neurochemistry in the 21st Century” in honour of Prof.

Anthony J (Tony) Turner

organised by Dr Natalia N Nalivaeva (Leeds, UK) and Prof. Sue Wonnacott (Bath, UK)

The Symposium took place on June 22-23, 2013 prior to the European Society for Neurochemistry Biennial Conference “Advances in molecular mechanisms underlying neurological disorders” which was held at the University of Bath. The symposium consisted of 4 sessions and 16 lectures presented by leading neurochemists around the world (the final programme is below).

### Saturday, June 22

**14.00 – 15.00 Registration & Social Gathering (3E foyer)**

#### Session 1

**Chair: Phil Beart (Melbourne, Australia)**

**15.00-15.10 Sue Wonnacott (Bath, UK)**

**Opening Remarks**

**15.10-15.35 ARUK Lecture**

**John Hardy (London, UK)**

Genetics and neurological disease

**15.35-16.00 Nigel Hooper (Leeds, UK)**

Proteolysis and lipid rafts in Alzheimer’s disease

**16.00-16.25 Lilly Lecture**

**Ian Smith (Melbourne, Australia)**

Metalloproteases as Potential Biomarkers for Cardiovascular and Neurological Disease

**16.25-16.50 Eric Karran (ARUK, UK)**

The status of clinical development in Alzheimer’s disease

**16.50-17.20 Coffee break**

#### Session 2

**Chair: Keith Tipton (Dublin, Ireland)**

**17.20-17.30 Keith Tipton (Dublin, Ireland)**

**Introduction**

**17.30-18.00 Tony Turner (Leeds, UK)**

Proteolytic processes in the brain: from health to disease

**18.00-18.20 Marcus Rattray (Bradford, UK)**

Amyloid and astrocytes

**18.20-18.40 Rebecca Matsas (Athens, Greece)**

Towards cell therapeutics for CNS injury and disease

**18.40 Reception and Greetings (3E foyer)**

**20.00 Dinner (Wessex House restaurant)**

**Sunday, June 23**

**Session 3**

**Chair: Alois Saria (Innsbruck, Austria)**

**9.00-9.20**

**Elwyn Isaac (Leeds, UK)**

Evolutionary aspects of neuropeptides and their peptidases

**9.20-9.40**

**Illana Gozes (Tel Aviv, Israel)**

From gene to behavior and drug development

**9.40-10.00**

**Alessandro Prinetti (Milan, Italy)**

Lipid rafts in neurodegeneration and neuroprotection

**10.00-10.20**

**Joerg Schulz (Aachen, Germany)**

Mechanisms of synuclein toxicity

**10.20-10.40**

**Dusan Dobrota (Martin, Slovakia)**

Potentials of proton magnetic resonance spectroscopy for studying neurological and psychiatric disorders

**10.40-11.00**

**Coffee break**

**Session 4**

**Chair: Juan Bolanos (Salamanca, Spain)**

**11.00-11.30**

**Biochemical Society Lecture**

**Nigel Bunnett (Melbourne, Australia)**

Proteases: Gnawing Away at Inflammation and Pain

**11.30-11.50**

**Elena Rybnikova\* (St. Petersburg, Russia)**

Neuroprotective effects and mechanisms of hypoxic pre- and postconditioning

**11.50-12.10**

**Alois Saria (Innsbruck, Austria)**

Nucleus accumbens signaling and drug-associated memory

**12.10-12.30**

**Anne Stephenson (London, UK)**

From GABA<sub>A</sub> receptors to moving mitochondria: the TRAK family of kinesin adaptor proteins

**12.30-12.50**

**Phil Beart (Melbourne, Australia)**

Programmed cell death and autophagy in neuropathologies

**12.50-13.00**

**Natalia Nalivaeva (Leeds, UK)**

**Closing remarks**

\*Because Dr Rybnikova had not been issued her visa to UK in time she had to cancel her travel and the talk was not presented although she had sent her slides. However, due to the overrunning previous session NNN and SW have decided not to present them.

The symposium attracted a significant number of participants, 74 in total (58 registered paying a fee of £30 to contribute towards the catering and dinner budget) and 16 invited attendees (who had not paid the fees), representing 17 countries. There were 10 PhD students from various universities in UK (Leeds, Sheffield, Lancaster, Cardiff, Bristol and Bath) who participated in the symposium and their expenses have been covered from the budget.

The Symposium was a real celebration of neurochemistry and the input which Tony Turner had in development of various modern areas of research in the last and 21<sup>st</sup> century. All participants agreed that the symposium was very interesting and the atmosphere was very warm and friendly.

Since the budget provided by the ISN symposium grant would cover only partially the costs of symposium organisation and travel expenses by the speakers and invited PhD students, additional funding has been sought and in total an extra £4350 has been received from The Biochemical

Society, ARUK, Wiley (to contribute to the conference dinner), Lilly and the University of Leeds. From the budget obtained, £3500 will go to the University of Bath for the auditorium, foyer, poster boards, IT facilities, coffee breaks, reception and the dinner) and all remaining money will be used for reimbursement of the expenses of the participants. Sponsorship of all organisations has been widely advertised in the posters, displayed prior the Symposium and during its work as well as in the PowerPoint slides and the Programme booklet. The "Tony Turner" prize in the form of a certificate and a gift ceramic plate was awarded to the three best posters from those presented at a blitz poster session during the ESN conference. The awardees were two PhD students, Sufana Anwar E Al Mashhadi (University of Sheffield, UK) and Eva Brekke (Norwegian University of Science and Technology, Oslo, Norway), and Dr Julie Vallortigara (King's College London, UK) . Photos of the awardees at the prize giving ceremony are available on request.

The organisers express deep gratitude to the ISN for encouraging and supporting this Symposium which will definitely be beneficial for future development of neurochemistry in the 21<sup>st</sup> century.

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