

Conference Report

Chemical and Biological Therapeutic Approaches to Neurological Disorders III, 18 April, 2016

Report

Neurological disorders together with mental health issues cost the UK alone ~112 billion (GBP) annually. Thus they have emerged as a priority health problem. Although many advances have been made in molecular diagnostics, medicinal chemistry, imaging spectroscopy, and cell and gene therapy there is still a long road ahead towards finding cures for these devastating disorders.

This one-day symposium (Programme appended), held at the RSC Chemistry Centre, Burlington House, Piccadilly, London, brought together some of the top influential researchers intent on solving the mechanisms involved that will move us ever closer to disease-modifying treatments.

The symposium attracted 41 delegates including 7 PhD students and two PDRs each of whom presented posters.

At the end of each presentation there were lively question and answer sessions. There were also fruitful interactions between the students and the senior delegates during the refreshment breaks and the poster session. A poster prize, as judged by the organising committee and Dr Peter Machin, was awarded to a PhD student, Naomi Hartopp, Department of Basic and Clinical Neuroscience, King's College London for her poster on; *Mitochondrial-endoplasmic reticulum membrane associations as a therapeutic target for ALS : identification of a compound which enhances VAPB-PTPIP51 interactions*. The prize of £100 was sponsored by Stem Cell Technologies.

The Biotechnology Group Conference Planning Committee would like to thank the Motor Neuron Disease Association, Stem Cell Technologies for their generous sponsorship, the RSC's Travel Grant Committee for travel grants for postgraduate students and the staff at Burlington House for their excellent services and organisation during the conference.

Irene Francois

The Conference Planning Committee

Dr Irene Francois, Consultant, Drug Discovery and Development

Prof Joe Sweeney, Dept. of Chemical and Biological Sciences, University of Huddersfield

Mr Neville Nicholson, Consultant, Drug Discovery

Programme

09.30 Coffee and registration

10.00 SESSION 1

Chair: Doctor Irene François

10.05 Doctor Eric Karran, Director of Research, Alzheimer's Research, UK

Possibilities and pitfalls: disease modifying drugs for Alzheimer's disease

10.40 Professor John Hardy, Department of Molecular Neuroscience, University College London, UK

Genomic analysis of neurodegenerative disease

11.15 Doctor Kristian Stromgaard, Department of Drug Design and Pharmacology, University of Copenhagen, Denmark

Targeting protein-protein interactions in the brain

11.50 Lunch and Poster Session

13.30 SESSION 2

Chair: Professor Joe Sweeney

13.35 Doctor Andrew Thomas, Medicinal Chemistry, Neuroscience at Pharma Research and Early Development, Roche Innovation Center, Basel, Switzerland

The discovery of Basmisanil

14.10 Professor Nigel Hooper, Institute of Brain, Behaviour and Mental Health, University of Manchester, UK

Activation of ADAM10 as a therapeutic strategy for Alzheimer's disease

14.45 Doctor Richard Mead, Department of Neuroscience, University of Sheffield, UK

The Nrf2-ARE pathway as a therapeutic target in amyotrophic lateral sclerosis

15.20 TEA

16.05 SESSION 3

Chair: Mister Neville Nicholson

16.10 Professor Simon Ward, Medicinal Chemistry, Translational Drug Discovery Group, University of Sussex, UK

New approaches to old targets - using structural biology to drive ligand design in glutamate ion channels

16.45 Doctor Suchira Bose, Neurodegenerative Diseases, Eli Lilly, UK

Tau therapeutic approaches to Alzheimer's disease.

17.20 Closing Remarks