

IMCB Invited Speaker



Speaker : Dr. Jonathan Wood
*Lecturer in Neuroscience, Sheffield Institute of Translational Neuroscience,
University of Sheffield, UK*

Date : 4 Sep 2013 (Wednesday)

Time : 11:00AM - 12:00PM

Venue : IMCB Seminar Room 3-46, Level 3, Proteos, Biopolis

Host : Assoc. Prof. Sudipto Roy

Seminar :

Neurodevelopmental and behavioural functions of DISC1 in zebrafish

Mental health issues affect approximately 1 in 4 people during their lifetime, with around 3% of the population suffering from psychoses. The current treatments for these conditions vary in their efficacy, have adverse side effects and are largely based on compounds discovered more than 50 years ago. Many mental disorders show a strong genetic component and largely uncharacterised subtle neurodevelopmental disorders are thought to be a major factor in the aetiology of disease. The *Disrupted-in-schizophrenia 1 (DISC1)* gene was identified as the gene most likely responsible for the unusually high prevalence of depression, schizophrenia and bipolar disorder in a Scottish pedigree harbouring a t(1;11) balanced chromosomal translocation. DISC1 has been shown to interact with a plethora of cytoskeletal and signalling molecules, while knock-down studies in mice implicate it in multiple aspects of neuronal development. I will outline our studies aimed at characterising the neurodevelopmental and behavioural functions of DISC1 in the zebrafish that are being undertaken in collaboration with Dr Sudipto Roy at the IMCB.

About the Speaker :

I joined the Neuroscience department in 2001 after postdoctoral work on Huntington disease and other polyglutamine disorders at the University of Wales College of Medicine in Cardiff (1994-96) and the Laboratory of Molecular Neurobiology at the Johns Hopkins Medical Institutions in Baltimore (1996-2001).

My research is focussed on molecular mechanisms underlying neurodegenerative disorders and neurodevelopmental pathways that confer susceptibility to neuropsychiatric diseases such as schizophrenia. Much of this work is carried out in collaboration with colleagues in the MRC Centre for Developmental and Biomedical Genetics.



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