

PAST OXION SEMINARS

2004

5th October

Prof Denis Escande, INSERM, Nantes, France

‘Genomics of ion channels in the heart’

9th October

Prof Walter Stüehmer, Max-Planck Institute for Experimental Medicine, Germany

‘EAG: A potassium channel involved in proliferation and cancer’

8th December

Prof Catherine Vérien-Bryan, Department of Molecular Biophysics, Oxford

‘Structural studies using cryo-electron microscopy; domain motions of a potassium channel KirBac3.1’

2005

9th May

Prof Peter Seeburg, Max-Planck Institute for Medical Research, Heidelberg, Germany

‘Manipulating excitatory neurotransmission in the mouse’ (Physiology Department Seminar Sponsored by OXION)

23rd May

Prof Don Hilgemann, University of Texas

‘The molecular workings of cardiac Na transporters: between perfection and failure’ (Physiology Departmental Seminar Sponsored jointly by Physiological Society and OXION)

25th July

Prof David Gadsby, Rockefeller University

‘Control of CFTR channel gating’

29th November

Dr Frances A Edwards, UCL

‘Homeostasis of spine synapses in the hippocampus; does LTP wipe the memory slate clean?’

2006

30th January

Dr Paola Pedarzani

‘Matching molecules to function: calcium-activated potassium channels in the brain’

31st March

Prof Sam Wang, Princeton University

‘Optical approaches to understanding synaptic learning rules’

28th April

Prof Roberto Bruzzone, Pasteur Institut, Paris

‘Cell-cell communication: connections with connexins and more’ (Department of Physiology, Anatomy and Genetics Seminar sponsored by OXION)

2007

19th February

Prof Dirk Isbrands, Centre for Molecular Neurobiology, Hamburg, Germany

‘Physiology and pathophysiology of KCNQ/M-channels in mouse brain’ (Department of Physiology, Anatomy and Genetics Seminar sponsored by OXION)

11th May

Dr Paul Slesinger, Clayton Foundation Laboratories for Peptide Biology, Salk Institute

‘Sorting nexin regulation of G protein-gated potassium channels: A complex problem’

23rd May

Dr Mark Mayer, Porter Neuroscience Research Center, NIH

‘Analysis of glutamate receptor ion channel gating and modulation using X-rays and patch clamp’

28th May

Dr Hugh Robinson, Dept for Development and Neuroscience, Cambridge

‘Regular and irregular firing in cortical neurons studied with conductance injection’

16th July

Professor Bruce Tempel, University of Washington, Seattle, USA

‘Ions in your ear: Kv channels, Ca⁺⁺ pumps and hearing loss’

2008

6th March

Dr Marco Capogna, MRC-ANU, Oxford

‘Contributions of GABAergic neurotransmission to the circuits of amygdala and hippocampus’

18th April

Dr Raimund Dutzler, University of Zurich

‘The structural basis for CIC channel and transporter function’

22nd April

Professor Cecilia Bouzat, Bahia Blanca, Argentina

‘Structural and mechanistic basis of activation of Cys-loop ligand-gated ion channels’

8th May

Mr Serdar Uysal, University of Chicago

‘The crystal structures of the closed and the open conformation of full-length KcsA with a synthetic antibody’

2009

15th January

Professor Birgit Liss, University of Ulm, Germany

‘Dopamine midbrain neurons: functional and molecular diversity in health and disease’

29th January

Professor Bernard Attali, Tel Aviv University, Israel

‘Gated motions and assembly modalities of voltage-gated Kv7 potassium channels: the case of the cardiac IKS potassium channel’

12th March

Dr Mathias Dreger, Caprotec, Berlin

‘From ion channels to cellular signalling: Capture Compound mass spectrometry for small molecule interaction-based functional proteomics’

27th April

Professor Ehud Isacoff, Dept of Molecular & Cell Biology, UC Berkeley

‘Variations on voltage sensing’

28th May

Professor Hannah Monyer, Interdisciplinary Center of Neuroscience Heidelberg

‘Genetic manipulations to study GABAergic interneurons in vitro and in vivo’

11th June

Dr Nelson Barrera, Dept of Chemistry, Cambridge

‘Subunit stoichiometry and interactions of intact membrane’ protein complexes using mass spectrometry’

19th June

Professor Tamas Horvath, Section of Comparative Medicine, Yale University
'The role of mitochondria in synaptic plasticity'

13th July

Dr Declan Ali, University of Alberta
'Development of glutamatergic synapses in zebrafish: PKC to the rescue'

17th July

Professor Beverley Orser, University of Toronto
'Tonic GABAergic regulation of synaptic plasticity and memory'

2010

4th March

Professor Chris Miller, Brandeis University, USA
'A virtual proton pump: from physiology to structure'

9th April

Professor Bertil Hille, University of Washington, USA
'G-protein-coupled receptors regulate ion channels and many other membrane proteins through phosphoinositide breakdown'

29th April

Professor Poul Nissen, Aarhus University, Denmark
'The structure and function of Na⁺, K⁺-ATPase in cells and disease'

17th June

Dr Ingo Greger, MRC-LMB, Cambridge
'Mechanisms and dynamics of AMPA receptor biogenesis'

28th June

Dr Andrew Plested, Neurocure-Charité/FMP-Berlin
'Trapping the activation mechanism of glutamate receptors'

5th August

Professor Colin Nichols, Washington University in St Louis, USA
'Inward rectifier K channels: from dielectric to disease'

22nd November

Professor Ian Forsythe, MRC Toxicology Unit, University of Leicester
'Barely controlled excitement: voltage-gated potassium channels in auditory processing'

2011

9th June

Professor Thomas Jentsch, Leibniz-Institute für Molekulare Pharmakologie, Berlin, Germany

‘The need for H⁺-driven Cl⁻ accumulation in endosomes and lysosomes: insights from sick mice and humans’

20th June

Professor Pierre-Jean Corringer, Pasteur Institute, Paris

‘Allosteric regulatory sites of pentameric channel-receptors explored at the atomic resolution: the case of general anesthetics’

24th June

Professor Seth Grant, Wellcome Trust Sanger Institute, Cambridge

‘Unravelling the complexity of synapses’

15th September

Dr. Liz Carpenter, Structural Genomics Consortium, NDM, Oxford

‘The first structure of a human membrane protein in Oxford: the mitochondrial ABC transporter ABCB10’

17th October

Professor Michisuke Yuzaki, Keio University, Tokyo

‘Not an orphan anymore – a glutamate receptor GluD2 finds two partners, Cbln and D-Ser’

16th November

Professor Bill Catterall, University of Washington, USA

‘Sodium channels at atomic resolution: structure, function and disease’

2nd December

Dr. Denis Burdakov, Department of Pharmacology, University of Cambridge

‘Brain circuits orchestrating sleep and energy balance’

2012

23rd March

Dr. Andreas Schaefer, Max Planck Institute, University of Heidelberg

‘Inhibition and odour discrimination in mice’

25th April

Professor Michael Häusser, University College London

‘Dendritic computation’

26th October

Professor Bonnie Wallace, Birkbeck College, London

‘The open conformation of a sodium channel reveals the transmembrane pathway and gating mechanism’

17th December

Professor Pierre Paoletti, Ecole Normale Supérieure Paris

‘NMDA receptors: diversity, molecular mechanisms and regulation by synaptic zinc’

2013

6th March

Dr. Paolo Tammaro, Dept. of Pharmacology, Oxford

‘Getting to know vascular TMEM16A channels’

14th June

Professor Steve Goldstein, Brandeis University, USA

‘SUMO emerges from the nucleus to regulate ion channel activity at the cell surface’

20th June

Dr. David Keays, Institute of Molecular Pathology, Vienna

‘The search for the Magnetoreceptors’