



# 7<sup>th</sup> RSC/SCI Symposium on Ion Channels as Therapeutic Targets

Monday - Tuesday, 27<sup>th</sup> - 28<sup>th</sup> March 2023

Wellcome Genome Campus,  
Cambridge, UK

## Synopsis

Ion channels are important targets for therapeutic intervention due to their extensive roles in human physiology and the pathophysiology of disease. Many successful drugs targeting this gene family have been discovered for diseases such as hypertension, epilepsy and neuropathic pain.

This symposium, the 7<sup>th</sup> in an ongoing series, will showcase the most recent advances to aid the design of new ion channel therapeutics and promote interaction between scientists with a shared interest in the field of ion channel drug discovery.

## Features

- Medicinal chemistry case studies of ion channels as therapeutic targets;
- Advances in structure determination techniques and successful structure determinations of key ion channels;
- Novel pharmacology and target validation;
- Emerging technologies for targeting, assaying and modulating ion channel targets;
- Plenary speakers, poster session, trade exhibition, on-site accommodation and dinner.

## Confirmed Speakers Include

**Anna Carbone**, *Evotec*

EVOchannel: tune in to safe molecules

**Giuseppe Cecere**, *F. Hoffmann-La Roche*

Discovery of Potent, Subtype-Selective GABA<sub>A</sub>  $\alpha 5$  PAMs for the Treatment of Neurological Disorders from a NAM-to-PAM Switch

**Jose Maria Cid**, *Janssen R&D*

GluN2B PAMs as enhancers of synaptic plasticity for the treatment of Alzheimer's disease

**Steve Griffin**, *University of Leeds*

Plugging the holes in antiviral therapy – Drug discovery potential of viroporins to treat SARS-CoV2

**Michael Hahn**, *Bayer*

Discovery of the TASK-1 and TASK-3 Channel Blocker BAY 2586116 for the Treatment of Obstructive Sleep Apnea (OSA)

**Mark Healy**, *Novartis*

The discovery of the NMDA receptor NR2B NAM, MIJ821, a novel, rapidly acting antidepressant

**Simon Holton**, *Nuvisan*

Cryo-EM Structural Studies of The Human TRPV4 Ion-Channel

**Anna Junker**, *University of Muenster*

P2X ion channels as promising therapeutic and diagnostic targets: From the discovery of the first orthosteric P2X7R selective agonist to the development of optical probes for the imaging of P2X7R expression

**Myriem El Qacemi**, *Syngenta*

The discovery of Isocycloseram: A novel Isoxazoline Insecticide

**Fabrice Pierre**, *Vertex*

Discovery of CFTR Modulators for the Treatment of Cystic Fibrosis

**Luca Raveglia**, *Aptuit, an Evotec Company*

From High-Throughput Screening to Target Validation: Benzo[d]isothiazoles as Potent and Selective Agonists of Human TRPM5 Possessing In Vivo Gastrointestinal Prokinetic Activity in Rodents

**Shawn Stachel**, *Merck Sharp & Dohme*

Chemistry accelerated invention of a highly potent oral Nav1.8 channel blocker for the treatment of pain

**Stephen Tucker**, *University of Oxford*

Defective gating underlies a novel K2P channelopathy associated with sleep apnea

## Programme

Please see the event website for the conference programme.

## Who should attend

Scientists from industry and academia interested in the therapeutic potential of ion channels. The organising committee particularly welcomes attendance and participation of students or early career researchers working in the field of ion channels.

## Call for Poster Abstracts

The poster submission deadline is 31<sup>st</sup> December. Posters will be displayed throughout the meeting and presenters have the option of a 2 minute "flash" oral presentation.

## Exhibitor and Sponsor Opportunities

There will be a relevant trade exhibition, and sponsors are encouraged to support this well-respected event. Any support is greatly appreciated.

## Registration

Registration is now open, please see the event page on the BMCS website for more details.

## Organising Committee

Rose Bardell-Cox, *Evotec*

Mike Clegg, *MSD*

Karl Collins, *Bayer Foundation*

Brian Cox, *University of Sussex*

Sarah Major, *Evotec (Chair)*

Nigel Swain, *Heptares*

## Sponsors

Sponsors are encouraged to support this popular event.



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To find out more, visit the BMCS website by using the URL or by scanning the QR code here:

<https://www.rscbmcs.org/events/ionchannels23/>



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