

## **Symposium 24: Epilepsy and Precision Medicine**

**Sponsored by the Association of British Neurologists**

**Theme: Novel treatments and translational neuroscience**

**Wednesday 12<sup>th</sup> April, 9:00 – 10:40**

Epilepsy is the most common serious neurological disorder, yet still is surrounded by social stigma that impacts on the everyday lives of people it affects. Epilepsy is associated with increased risks of medical and psychosocial comorbidities, as well as a heightened risk of premature mortality. Epilepsy has increasingly been recognised as a heterogeneous group of conditions, representing a spectrum. State-of-the-art approaches are now unravelling the causal underpinnings of this spectrum and promise to meaningfully and quickly advance the prospects of mechanism-based personalised treatment approaches. In this Symposium, recent advances in a number of aspects of the epilepsies will be presented. Genetic approaches in the epilepsies are proving very powerful, revealing a wide range of causes, helping determine mechanisms, and directing novel approaches to treatment. Cancer biology has also experienced major advances in the last few years, and this has significantly impacted upon tumour biology in the epilepsies. Immune and inflammatory mechanisms are emerging as widespread in the epilepsies, with direct clinical relevance for diagnosis and treatment. Psychological treatment approaches have been revitalised by novel perspectives rooted in fundamental science, and are providing potential alternative treatment strategies. All of these exciting areas will be discussed in this Symposium, showing how personalised approaches are proving especially relevant in the epilepsies.

Chair: Professor Sanjay Sisodiya (University College London)

Speaker 1: Professor Sanjay Sisodiya

'Epilepsy Genetics: contributions to cause and management'

Speaker 2: Dr Mark Cunningham (Newcastle University)

'Epileptogenic Tumours: informed management'

Speaker 3: Dr Sarosh Irani (University of Oxford)

'Epilepsy: inflammatory insights'

Speaker 4: Dr Yoko Nagai (University of Sussex)

'Epilepsy: biofeedback'