

Neurobiology Dissemination Task Force

Chairs: M Kokaia and A Pitkanen

Members: D. Janigro, A. Galanopoulou, V. Whittemore, J. Noebels, A. Nehlig, N. Garcia-Cairasco, G. Avanzini, H. Scharfman, A. Ikeda, U. Heinemann

Dissemination activities for 2015

ILAE Satellite Workshop - WONOEP XIII

August 31st - September 4th 2015: Halki Palace, Heybeliada Island, Turkey.

WONOEP topic: Biomarkers in epilepsy

More info: http://www.ilae.org/Visitors/Congress/congressinfo/WONOEP_announce15.pdf

Preliminary draft of the NBC events accepted for ILAE 2015 – Istanbul Congress

NEUROBIOLOGY SYMPOSIUM

Title: Optogenetics to cure epilepsy: Facts and feasibility

Chair: Merab Kokaia (*Sweden*)

- Studying brain networks with optogenetics - **M Kokaia** (*Sweden*)
- Neocortical seizure silencing – **R Wykes** (*UK*)
- Close-loop flashing to stop seizures - **E Krook-Magnuson** (*USA*)
- Functional dichotomy of fast-spiking interneurons in focal seizure - **G Carmignoto** (*Italy*)

PARALLEL SESSION

Title: Personalising mTOR inhibition for epilepsy treatment: From bench to bedside

Chair: Aristeia Galanopoulou (*USA*)

- mTORopathies and epilepsies -
- mTOR inhibitors in the treatment of epilepsies: Promises and pitfalls -
- Anti-epilepsy therapies in the treatment of mTORopathies -
- Personalizing treatment of epilepsy in Tuberous Sclerosis Complex –

PARALLEL SESSION:

Title: Exploring new therapies for human monogenic epilepsies using personalized models

Chair: Jeffrey Noebels (*USA*)

- Neonatal estradiol prevents infantile spasms and seizures in arx-linked infantile spasms syndrome
- Rescuing the effects of a potassium channel mutation associated with neonatal seizures –
- Preventing generalised seizures in GABAA2 receptor mutations in infancy with triheptanoin dietary therapy –
- Personalising treatment for Dravet Syndrome: Lessons from animal models and iPS cells

PARALLEL SESSION:

Title: Epilepsy across species and ages: Translating video and EEG terminology from animals to humans and back

Chairs: Solomon L. Moshé (*USA*) and **Alexis Arzimanoglou** (*France*)

- Translating EEG terminology from animals to humans -
- Translating seizures from animals to humans -
- Interactive video presentation -
- Interactive video presentation -

Other accepted sessions /titles with neurobiology content

- The complexities of epilepsy genetics
- Epilepsies related to the immune system
- SUDEP: from understanding mechanisms to clinical prevention
- Pitfalls of preclinical AED studies
- Status epilepticus: Translation from animal models to humans
- Brain development: common mechanisms between autism and epilepsy spectrum
- Different flavors of interictal discharges
- Genetic causes of epileptic encephalopathies
- Where is the next big breakthrough coming from?
- Mechanisms of developmental toxicity of AEDs
- Modelling epilepsy comorbidities in animals

Teach clinical epilepsy to neuroscientist

The best of two worlds: Translational Epileptology Serie

- 1) **Temporal lobe epilepsy: Of Mice and Men.** Chair: Jerome Engel Jnr. (USA); Speaker 1: Çigdem Özkara (Turkey) , Speaker 2: Antoine Depaulis (France)
- 2) **Now it happens, now it doesn't: Ictal vs. interictal in the lab and in real life.** Chair: Aristeia Galanopoulou (USA). Speaker 1: Marco de Curtis (Italy), Speaker 2: Phillipe Kahane (France)
- 3) **What do and can Clinicians expect from Neuroscientists?** Chair: Solomon L. Moshé (USA) Speaker 1: Jerome Engel Jnr. (USA) Speaker 2: Giuliano Avanzini (Italy)
- 4) **Epilepsy beyond the neuron: Where to look and what to do?** Chair: Marco de Curtis (Italy) : Speaker 1: Emilio Perucca (Italy) Speaker 2: Damir Janigro (USA)

Young Scientist Awards. To the best platform presentation (500€ + diploma). The decision on award by NBC reviewers, based on the evaluation of science and presentation skills.

Symposium at 9th IBRO meeting, Rio de Janeiro, Brasil, July 7-11, 2015

Mechanisms of network synchronization and hyperexcitability

(Chair: Merab Kokaia, Lund University, Sweden)

- Karl Deisseroth, Stanford University.
- Dimitri Kullmann, University College London, UK.
- John Huguenard, Stanford University.
- Merab Kokaia, Lund University, UK.