# 28th Ion Channel Meeting / 6th workshop SFICT

### September 10th through 13th, Sète, France

### Sunday, September 10th 2017

**16:00** Welcome of the meeting attendees

20:00 Dinner

## Monday, September 11th 2017

#### 8:30 Opening session

#### 8:45 **Symposium 1:** Ion channels in Organelles

Co-organized by:

Sylvie Ducreux (Université Claude Bernard, Lyon- France)

Antonio Ferrer-Montiel (IBMC, Universidad Miguel Hernandez, Alicante-Spain)

Susan Treves (Basel, Switzerland): RyRs in extraocular muscles

**Javier García-Sancho** (Valladolid, Spain): Calcium in the Endoplasmic Reticulum: a look from the inside with GAP indicators

György Hajnoczky (Philadelphia, USA): ER-mitochondrial interface

**Marina Balycheva** (Philadelphia, USA): Non-canonical Role of mitofusin 2 in regulating Ca2+ homeostasis in the endoplasmic reticulum via interaction with Sarco/endoplasmic reticulum Ca2+/ATPase (SERCA)

#### 10:30 Coffee break

#### 11:00 Oral communication 1

Organized by Nathalie Guérineau (Institut de Génomique Fonctionnelle, Montpellier-France)

**Xavier Gasull** (Barcelona, Spain): Pyrethroid insecticides inhibit K2P channels and activate sensory neurons producing pain and paresthesias.

**Clément Verkest** (Nice, France): Inhibition of ASIC1 channels in a rat model of migraine induces potent analgesic effects.

**Francesco Formaggio** (Bologna, Italy): Evaluation of calcium homeostasis: insights in the cellular mechanisms of neuropathic pain in Fabry disease.

**Reza Sharif Naeini** (Montréal, Canada): Mechanosensitive ion channels in articular nociceptors drive mechanical allodynia in osteoarthritis.

#### 12:15 Sponsor Communication

**Conrad Weichbrodt** (Nanion Technology, Germany): Modulation of TRP channels by temperature in planar lipid bilayers

#### 12:30 1-minute oral presentation for odd number posters

#### 13:00 Lunch

#### 15:00 Poster session 1

#### 17:00 Symposium 2: Role of astrocytic ion channels in neurotransmission

Co-organized by:

*Nathalie Rouach (Collège de France, Paris-France)* 

Felix Viana (Universitad Miguel Hernandez, Alicante-Spain)

**Justin Changjoon Lee** (South Korea): Role of Best1 in GABA, glutamate, d-serine release from astrocytes and modulation of neuronal activity

Raúl Estévez (Barcelona, Spain): Regulation of astrocytic chloride channels in health and disease

**Jérome Clasadonte** (Lille, France): Communication between astrocytes through connexin 43-mediated gap junction channels controls the daily cycle of wakefulness

**Cheng-Chang Lien** (Taiwan): Background K<sup>+</sup> conductance mediates rapid EPSP attenuation in oligodendrocyte precursor cells

#### **18:45** Plenary lecture

**Katsuhiko Mikoshiba** (*RIKEN Brain Science Institute, Japan*): Mechanism of IP3 receptor channel gating and its role in cell function and disease

20:00	Dinner			

## Tuesday, September 12th 2017

#### 8:45 Symposium 3: Ion channels and cardiovascular diseases

Co-organized by:

Hamid Moha ou Maati (Institut de Génomique Fonctionnelle, Montpellier-France) Florian Lesage (IPMC, Sophia-Antipolis-France)

Peter Kohl (Freiburg, Germany): Fibroblast-Myocyte Electrical Interactions

**María Teresa Pérez García** (Valladolid, Spain): Kv channels in vascular remodelling: Novel targets against restenosis

**Angelo Torrente** (Montpellier, France): Role of L-type Cav1.3 Ca2+ channels in Ca2+ handling and SAN pacemaker activity altered by external conditions

**Julie Briot** (Montréal, Canada): Investigating the role of extracellular loops in the cardiac L-type CaV1.2 channel in mediating the physical interaction with CaVα2δ1

#### 10:30 Coffee break

#### 11:00 Oral communication 2

*Organised by Stephane Sebille (Université de Poitiers- France)* 

**Filip Van Petegem** (Vancouver, Canada): Structural and functional insights into ion channels of the muscle excitation-contraction machinery

**Nolwenn Tessier** (Lyon, France): Cardioprotective role of TRPV1 channels in H9C2 cell lines.

**Jonathan Rojo-Ruiz** (Valladolid, Spain): Endoplasmic reticulum calcium dynamic by physiological stimuli in pancreatic islets of Langerhans.

**Luiza Filipis** (Grenoble, France): A multisite confocal system for fast Ca 2+ imaging from submicron structures in brain slices

#### 12:15 IBRO fellowship session:

**Andrei D. Ivanov** (Neurophysiology of Learning Laboratory, IHNA, Moscow, Russia): NMDA and non-NMDA glutamate receptors involvement in synaptic plasticity impairment in a pilocarpine model of temporal lobe epilepsy

#### 12:30 1-minute oral presentation for even number posters

13:00 Lunch

#### 15:00 Poster session 2

#### 17:00 Symposium 4: Ion channels in endothelial and epithelial cells

Co-organized:

Thierry Chataigneau (CAMB Université de Strasbourg-France)

Graça Soveral (iMed.ULisboa, Universidade de Lisboa-Portugal)

**Michel Félétou** (Institut Servier, France): Endothelial ion channels in the regulation of vascular tone

Carlos Miguel Farinha (Lisboa, Portugal): Out of the ER to the membrane: regulation of CFTR trafficking

Ralf Köhler (Zaragoza, Spain): KCa3.1 channel in endothelial/epithelial cell signaling and as drug target

**Claire Legendre** (Angers, France): Are the expressions of voltage-gated sodium Nav Channels genes modified in mice arteries according to age, sex and hypertension?

- 18:45 Annual meeting of the association « Canaux ioniques »
- 19:30 Apéritif Sétois and special dinner
- 21:30 Poster and Oral Communication Prize session

22:00	<b>Evening Party</b>			

## Wednesday, September 13th 2017

#### 10:00 Symposium 5: Ion channel and Electrical remodeling

*Organized by:* 

Olivier Soriani (Institut de Biologie de Valrose, Nice-France) Marco Caprini (Universita di Bologna-Italy) **Kelly McLaughlin** (Boston, USA): Spatio-temporal distributions of endogenous resting potential, ion flows, and electric fields on patterning, regeneration and cell fate

**Andrea Bedini** (University of Bologna, Italy): Nociceptin/orphanin FQ antagonizes TLR4-mediated proliferation, migration and inflammatory signaling in human glioblastoma cells through calcium channel-dependent and independent signaling pathways

**Anant Parekh** (Oxford, UK): Spacial dynamic of calcium channel expression **David Crottès** (San Francisco, USA): EGF-induced cell motility requires TMEM16A-dependent calcium signaling

- 11:45 Meeting closure
- 12:00 Lunch
- 13:00 Airport shuttle departure