



Presqu'île de Giens  
23<sup>rd</sup>-26<sup>th</sup> September 2007

<http://congres.igh.cnrs.fr/canaux-ioniques/>

## Program of the 18<sup>th</sup> « Ion Channel » meeting

### Sunday, September 23

- 15:00 - 19:30      Welcome of the meeting attendees.  
19:45                Cocktail  
20:15                Dinner

### Monday, September 24

- 8:15:                Meeting opening

### **Symposium I: “What can invertebrates tell us about ion channels diversity and function?”**

*Chair : Christian Legros. UPRES EA 2647, University of Angers, Angers (France).*

- 8:30                **Ke Dong** (Michigan State University, East Lansing, USA)  
“Modulation of insect sodium channel function by alternative splicing and RNA editing”
- 9:00                **Neil Millar** (University College London, London, UK)  
“Molecular pharmacological characterisation of neuronal nicotinic acetylcholine receptors: targets for drug discovery and commercially important insecticides”
- 9:30                **Daniel Cattaert** (Université Bordeaux 1, Bordeaux, France)  
“Role of muscarinic receptors in the state dependent regulation of sensory-motor transmission in the crayfish walking system”
- 10:00              **Ulrich Ebbinghaus-Kintscher** (Bayer CropScience AG, Monheim, Germany)  
“Flubendiamide - The first insecticide with a novel mode of action on insect ryanodine receptor”

- 10:30 A word from Hamamatsu  
10:40 Coffee Break

## Oral communications I: “Cation channels”

*Chair : Christophe Arnoult, INSERM U607, CEA, Grenoble (France).*

- 11:00 **Aurélie Chantome** (INSERM E0211, Tours, France)  
“SK3 channel promotes melanoma cell migration”
- 11:15 **Marc Gielen** (ENS, Paris, France)  
“Structural rearrangements of NMDA receptors during allosteric inhibition: common features with AMPA receptor desensitization”
- 11:30 **Truong-Han Tran** (INSERM U619, Tours, France)  
“Ultrasound activated sonography contrast agent induced BKCa opening in MDA-MB-231 mammary cancer cell line”
- 11:45 **Jacques Barhanin** (IPMC, Nice, France)  
“Invalidation of TASK1 K<sup>+</sup> channels disrupts adrenal gland zonation and mineralocorticoid homeostasis”
- 12:00 A word from Nanion Technologies GmbH
- 12:05 A word from Thermo-Fisher
- 12:15 A word from Latoxan
- 12:30 Lunch
- 15:00 – 17:00 Posters Session I (odd numbers)

## Symposium II : “Ion channels and mechanosensation”

*Chair: John N. Wood, UCL, Dept of Biology, London (UK).*

- 17:00 **Owen P. Hamill** (UTMB, Galveston, USA)  
“TRPCs as mechanosensitive channels”
- 17:30 **Gary R. Lewin** (Charité Universitäts Medizin, Berlin, Germany)  
“Stomatin-like proteins as essential subunits for mechanosensitive ion channels”
- 18:00 **Eric Honoré** (IPMC, Nice, France)  
“Sensing pressure with K<sub>2P</sub> channels”

- 18:30      **Ralf Khöler** (Philipps-University, Marburg, Germany)  
“Loss of shear stress-induced vasodilation in mice deficient for TRPV4”
- 18:45      Annual meeting of the “Association Canaux Ioniques”
- 20:30      Dinner

## Tuesday, September 25

### Symposium III : “Non-conducting functions of ion channels”

*Chair : Alexandre Mezghrani, IGF CNRS UMR 5203, Montpellier (France).*

- 9:00      **Ricardo Dolmetsch** (Stanford School of Medicine, Stanford, USA)  
“Calcium channels: new ways of looking at old molecules”
- 9:30      **Christopher M. Gomez** (University of Chicago, Chicago, USA)  
“The alpha1A calcium channel C terminus is a molecular Trojan Horse in SCA6”
- 10:00      **Ann-Marie Surprenant** (University of Manchester, Manchester, UK)  
“Pannexin: An ion channel - or not?”
- 10:30      **Daphne Atlas** (The Hebrew University of Jerusalem, Jerusalem, Israel)  
“The voltage gated Ca<sup>2+</sup> channel is the Ca<sup>2+</sup> sensor of secretion”
- 10:45      A word from Applied Biosystems
- 10:55      Coffee break

### Oral communications II: “Ions, lipids and proteins : channel modulators”

*Chair : Christine Berthier, CNRS UMR 5123, University Lyon1, Lyon (France).*

- 11:15      **Boris S. Zhorov** (McMaster University, Hamilton, Canada)  
“Metals ions in P-loop channels: invisible components of drugs receptors?”
- 11:30      **Dalia Gordon** (Tel-Aviv University, Tel-Aviv, Israel)  
“Molecular analysis of the sea anemone toxin AV3 demonstrates the heterogeneity of receptor site-3 on insect voltage-gated Na-Channels”

- 11:45      **Dimitra Gkika** (Radboud University, The Netherlands, present address: INSERM U800, Lille, France)  
“Extracellular regulation of TRP channels by Kallikrein serin proteases”
- 12:00      **Laurent Counillon** (CNRS UMR6548, Nice, France)  
“Regulation of the activity of the Na<sup>+</sup>/H<sup>+</sup> exchanger NHE-1 by membrane environment”
- 12:15      A word from Cambridge Electronic Design Limited
- 12:30      Lunch
- 15:00 – 17:00      Posters Session II (even numbers)

#### **Symposium IV: “Intracellular organelles channels and transporters”**

*Chair : Jean-Marie Frachisse, Vegetal Sciences Institute, Gif sur Yvette (France).*

- 17:00      **Frans Maathuis** (University of York, York, UK)  
“Vacuolar cation channels; roles and regulation”
- 17:30      **Enrico Martinoia** (University of Zürich, Zürich, Switzerland)  
“Vacuolar channels and transporters involved in maintaining cytosolic homeostasis”
- 18:00      **Giovanni Zifarelli** (Istituto di Biofisica, Genova, Italy)  
“CIC-5: a transporter in a channel family”
- 18:30      **Fabien Van Coppenolle** (INSERM U800, Lille, France)  
“Translocon: a calcium leak channel involved in Store Operated Channels activation through iPLA2-pathway”
- 19:30      Dinner
- 21:00      “Mort Subite” session

## Wednesday, September 26

### Symposium V : “Ion channels in chemical and visual senses”

**Chair :** *Eric Lingueglia, IPMC CNRS UMR 6097, Valbonne Sophia-Antipolis (France).*

- 9:00        **Sue Kinnamon** (Colorado State University, Fort Collins, USA)  
“Transduction and afferent signalling mechanisms in taste cells”
- 9:30        **Martin Biel** (Ludwig-Maximilians Universität, Munich, Germany)  
“Functional roles of the cyclic nucleotide-gated channel subunit CNGB1 in visual and olfactory system: insights from genetic studies in mice”
- 10:00       **Agnès Savigner** (Laboratoire de Neurosciences & Systèmes Sensoriels, Lyon, France)  
“Crosstalk between olfaction and food- intake: Insulin alters olfactory neuron excitability”
- 10:30       **Nathalie Azorin** (CNRS UMR6150, Marseille, France)  
“Cutaneous sensation: variation in intracellular calcium and ATP release caused by irritant chemicals in human keratinocytes”
- 10:45       Coffee Break

### Oral communications III: “New insights”

**Chair :** *Gildas Loussouarn, INSERM U533, Nantes (France).*

- 11:00       **Claude Collet** (UMR406 Ecologie des Invertébrés, Avignon, France)  
“Intracellular calcium transients measured under voltage-clamp in single muscle fibres isolated from the domestic honeybee”
- 11:15       **Eric Hosy** (Erasmus MC, Rotterdam, Netherlands)  
“Activity-dependent increases in the intrinsic excitability of cerebellar Purkinje cells”
- 11:30       **Julien Dupuis** (Institut de Biologie Structurale, Grenoble, France)  
“Three C-terminal residues from the Sulfonylurea Receptor contribute to the functional coupling between the KATP channel subunits SUR2A and Kir6.2”
- 11:45       Meeting closure
- 12:30       Lunch