

SUNDAY, SEPTEMBER 11th 2016

16:00-20:00 **Welcome of the meeting attendees**

20:00 **Dinner**

MONDAY, SEPTEMBER 12th 2016

8:30 Opening session

9:00 Symposium 1: Gap junctions and hemi-channels from physiology to pathology

(organised by Nathalie Guérineau, Institut de Génomique Fonctionnelle, CNRS UMR5203, INSERM U1191, Univ. Montpellier, Montpellier, France)

- **Nathalie ROUACH** (Center for Interdisciplinary Research in Biology, CNRS UMR7241, INSERM U1050, Collège de France, Paris, France). Astroglial connexin hemichannels: novel players in basal synaptic transmission.
- **Mathieu VINKEN** (Dept of In Vitro Toxicology and Dermato-Cosmetology, Brussels, Belgium). Connexin and pannexin (hemi)channels as novel drug targets in liver disease.
- **Marc MESNIL** (Signalisation et Transports Membranaires, CNRS ERL7368, Univ. Poitiers, Poitiers, France). Connexin43 implication in glioma invasion.

10:30 Coffee break

11:00-12:15 Oral communication session 1, organised by Emmanuel Deval (IPMC, CNRS, Université Nice Côte d'Azur, Sophia Antipolis, France)

- **Jennifer Hua** (IGF, Montpellier, France) involvement of purinergic receptors in the development of Alzheimer disease.
- **Sabrina Vullo** (Department of Pharmacology and toxicology, Lausanne, Switzerland) Conformational changes occurring in the acidic pocket during ASIC activity.
- **Perrine Royal** (iBV, CNRS, Université Nice Côte d'Azur, Nice, France) Heterodimerization within the TREK channel subfamily produces a diverse family of highly regulated potassium channels
- **Hélène CABANAS** (Université de Poitiers, Poitiers, France): Alteration of Store-Operated Calcium Entry in Bcr-Abl-expressing leukemic cells

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

12:30 Lunch

15:00- 2 minutes oral presentation of poster with odd numbers (organised by Wojciech Sponarski)

15:20-17:00 Poster session 1

17 :00 Symposium 2 : Intracellular ion channel and their regulation

(organised by Stéphane Sebillé, Laboratoire STIM, Poitiers, France)

- **Enrique Jaimovich** (Center for Molecular Studies of the Cell, Universidad de Chile, Santiago de Chile, Chile). ION CHANNELS AND THE REGULATION OF METABOLISM AND GENE EXPRESSION IN SKELETAL MUSCLE
- **Paolo Bernardi** (Department of Biomedical Sciences, University of Padova, Italy). CHANNEL PROPERTIES OF F-ATP SYNTHASE ACROSS SPECIES
- **Vincent Jacquemond** (Institut NeuroMyoGène CNRS UMR 5310 - INSERM U1217 -

Université Claude Bernard Lyon 1-Lyon, France). RYANODINE RECEPTOR-MEDIATED Ca²⁺ RELEASE IN SKELETAL MUSCLE: MODULATION BY PHOSPHOINOSITIDES

- *Selected speaker:* **Lucille PAITA** (Université Lyon 1, Bron, France): Are Transient Receptor Potential Vanilloid type 1 (TRPV1) channels targets of isoflurane in mouse cardiomyocytes?

19:00 Plenary lecture: **Jean Gaël Barbara** (Laboratoire Neurosciences, CNRS, Université Pierre et Marie Curie, Paris, France) The concept of ion channels: history from before to after the discovery of the patch clamp technique

12:30 Dinner

TUESDAY, SEPTEMBER 13th 2016

8:45 symposium 3: Role of ion channel in vascular function

(organised by Jean-François Quignard, CRCTB, INSERM U1045, Université de Bordeaux, Bordeaux, France)

- **Lan Zhao** (Centre for Pharmacology and Therapeutics, Division of Experimental Medicine, Imperial College London, Hammersmith Hospital, London W12 0NN, UK). Role of the zinc transporter Slc39a12 in pulmonary hypertension.
- **Fabrice Dabertrand** (Department of Pharmacology, University of Vermont, Given Building, 89 Beaumont Avenue, Burlington VT 05405-0068, USA). Local control of cerebral blood flow by capillary KIR channels.
- **Eric Honoré** (Institut de pharmacologie moléculaire et cellulaire, Sophia Antipolis, France). Piezo1 in smooth muscle cells is involved in hypertension-dependent arterial remodeling
- *Selected speaker:* **Raphael Rapetti-Mauss** (iBV, CNRS, Université Nice Côte d'Azur, Nice, France)

10:30 Coffee break

11:00-12:15 Oral communication session 2, organised by Céline Marionneau (Nantes, France)

- **Benjamin Compans** (IINS, CNRS, Université de Bordeaux, Bordeaux, France) Various long-term depressions trigger different nanoscale reorganization of AMPA receptors at synapses.
- **Oksana Iamshanova** (Laboratoire Physiologie cellulaire, Inserm, Université Lille 1, Villeneuve d'Ascq, France) Sodium Leak channel, NaLCN and its role in prostate cancer.
- **Christian Legros** (Laboratory of integrated neurovascular and mitochondrial biology, CNRS, Inserm, Université d'Angers, Angers, France) Adaptative remodeling of stimulus-secretion coupling in the adrenal medulla of spontaneously hypertensive rats.
- **Mahboubi Harkat** (Laboratoire de conception et application de molécules bioactives, CNRS, Université de Strasbourg, Illkirch, France) Study of the molecular mechanism of P2X pore dilation.

12:30 Lunch

15:00- 2 minutes oral presentation of poster with even numbers (organised by Eric Hosy)

15:20-17:00 Poster session 2

17:00 Symposium 4: Ionic selectivity in the channel function

(organised by Franck Chatelain, IPMC, CNRS, Université Nice Côte d'Azur, Sophia Antipolis, France)

- **Crina Nimigean** (INSERM/U1006 Aix-Marseille Université, France). Molecular gate locations in potassium channels.

- **Mark Alkema** (University of Massachusetts Medical School, Dpt of Neurobiology, USA). Synaptic engineering: A Change in the Ion Selectivity of Ligand-Gated Ion Channels Provides a Mechanism to Switch Behavior.
- **Stephen J. Tucker** (University of Oxford, Dpt of Physics, UK). Structural and functional studies of selectivity filters in K2P and Kir channels.
- *Selected speaker:* **Sebastien Roux** (Institut Neurosciences Cellulaires et Intégratives, Strasbourg, France) Autism and cerebellum: Purkinje cell death and chloride gradient hypothesis.

18:45 Annual meeting of the ion channel association

19:30 Apéritif Sétois and special dinner

21:30 Poster prize and "Mort Subite" session

22:00 evening party

WEDNESDAY, SEPTEMBER 14th 2016

10:00-11:45 Symposium 5: Structure, function et physiology of ion channels: input form invertebrate model

(organised by Marc Gielen, Institut Pasteur, Paris, France)

- **Jeremiah OSTEEN** (University of California, San Francisco, USA): Nav1.1 in A δ fibers mediates mechanical pain signaling
- **Jean-Louis Bessereau** (Institut NeuroMyoGène, CNRS UMR 5310 - INSERM U1217 - Université Claude Bernard Lyon 1, Villeurbanne, France). How to build a nicotinic receptor: insights from *C. elegans*
- **Steeve Thany** (Entomologie et Biologie Intégrée, Université d'Orléans, France). Insect nicotinic acetylcholine receptors subtypes, physiological function and pharmacological properties
- *Selected speaker:* **Philippe Tardy** (Institut NeuroMyoGene, Villeurbanne, France) β -spectrin and ankyrin regulated K2P channel function and localisation un *C. Elegans*.

12:00 Lunch and end of the 27th Ion channel meeting!