

PROGRAM Sète 2015

Sunday, September 13th 2015

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

20:30 **Dinner**

Monday, September 14th 2015

8:30 **Meeting opening**

8:45 **Symposium 1-Voltage-gated ion channels: Inactivation mechanisms**

Organized by **Céline Marionneau** (Nantes, France)

8:45 **Gordon Tomaselli** (Baltimore, USA): Calcium and CaM Regulation of Na Channels – Role in Channelopathies

9:15 **Martin Heine** (Magdeburg, Germany): Surface dynamic of calcium channels tune neuronal communication.

9:45 **Stephan Pless** (Copenhagen, Denmark): Hydrogen bonds as molecular timers for potassium channel inactivation.

10:15 **Selected speaker: Marc Gielen** (Paris, France): The desensitization gate of inhibitory Cys-loop receptors.

10:30 **Coffee break**

11:00-12:00 **Oral Communication 1. Ion Channels from Pain to Heart**

Talks selected by **Aurélien Chatelier** (Poitiers, France)

11:00 **Stéphane Lolignier** (Clermont-Ferrand, France): The Nav1.9 Channel Is a Key Determinant of Cold Pain Sensation and Cold Allodynia.

11:15 **Tiphaine Voisin** (Montpellier, France): A novel mouse model to study the zinc modulation of Cav3.2 T-type calcium channels in the pain pathway.

11:30 **Sophie Burel** (Nantes, France): Phosphorylation of Cardiac NaV1.5 Channels at S1933 and S1984 Disrupts FGF13-Dependent Regulation of Channel Inactivation Properties.

11:45 **Fiona Bartoli** (Chatenay-Malabry, France): Cardiac specific expression of dominant-negative Orai1 channel in mice.

- 12:15** **Lunch**
- 15:00-17:00** **Poster session 1**
- 17:00** **Symposium 2-Signal perception and transmission in plants: old questions-new answers**

Organized by **Wojciech Szponarski** (Montpellier, France)

- 17:00** **Richard Hilleary** (Madison, USA) : Catching the wave: Ca²⁺ channels support long-range signaling in Arabidopsis.
- 17:30** **Rob Roelfsema** (Würzburg, Germany) : Role of anion channels in regulating transpiration of plants.
- 18:00** **Edward Farmer** (Lausanne, Switzerland) : Long-distance signalling in wounded plants
- 18:30** **Selected speaker: Manuel Nieves-Cordones** (Montpellier, France) Epidermal cell turgor depends on a K⁺ channel to regulate stomatal aperture.
- 18:45** **Wine testing: A selection of wines from the Domaine du Peyronnet's cellar**
- 20:00** **Dinner**

Tuesday, September 15th 2015

- 8:45** **Symposium 3-Synapse functioning, from de molecular organization to current properties**

Organized by **Eric Hosy** (Bordeaux, France)

- 8:45** **Ryuichi Shigemoto** (Vienna, Austria): High resolution localization of voltage-dependent calcium channels and related proteins in CNS synapses.
- 9:15** **Ingo Greger** (Cambridge, UK): Synapse functioning, from de molecular organization to current properties.
- 9:45** **Mathieu Letellier** (Bordeaux, France): How to bring the right receptor to the right synapse: role of neuroligins in the specification of synapses.
- 10:15** **Selected speaker: Mélanie Cavalier** (Montpellier, France): Involvement of the PKA and ERK pathways in ghrelin-induced long-lasting potentiation of excitatory synaptic transmission in the CA1 area of the rat hippocampus.
- 10:30** **Coffee break**
- 11:00-12:00** **Oral communication 2. Channels Corrections and Regulations**

Talks selected by **Claude Collet** (Avignon, France)

11:00 **Michel Vivaudou** (Grenoble, France) Novel regulation of GIRK potassium channels by δ -opioid receptors

11:15 **Guillaume Sandoz** (Nice, France) Phospholipase D2 specifically regulates TREK channels via direct interaction and local production of phosphatidic acid

11:30 **Frédéric Becq** (Poitiers, France) A structure-based approach for the design of CFTR-binders for correction in cystic fibrosis

11:45 **Jean-François Quignard** (Bordeaux, France) Endothelium-dependent relaxation and T-type voltage gated calcium channels in mice pulmonary artery

11:15

12:15 **Lunch**

15:00-17:00 **Poster session 2**

17:00 **Symposium 4 –TRP-athies**

Organized by **Jessica Sabourin** (Paris, France)

17:00 **Stephen R Houser** (Philadelphia, USA): Canonical Transient Receptor Potential (TRPC) Channels Induce Pathological Hypertrophy and Depressed Contractility in the Diseased Heart.

17:30 **Karel Talavera Pérez** (Leuven, Belgium): TRP channels as sensors of bacterial endotoxins.

18:00 **Thomas Gudermann** (Munich, Germany): TRP channels in the kidney.

18:30 **Selected speaker: Thibaut Parpaite** (Bordeaux, France) Mechanical stress and TRPV4 channels: influence of cellular environment during pulmonary hypertension establishment.

18:45 **Annual meeting of the Association Canaux Ioniques**

19:45 **Special Dinner ‘Sétois’**

21:30 **Poster Prize**

21:40 **‘Mort Subite’ session**

22:15 **Evening Party**

Wednesday, September 16th 2015

9:45 Symposium 5 -Ion channels and transporters in spinal networks

Organized by **Emmanuel Deval** (Nice, France)

9:45 Anthony Dickenson (London, UK): Ion channels controlling spinal excitability.

10:15 Sandrine Bertrand (Bordeaux, France): Activity-dependent plasticity in spinal motor synapses: from the myth to the reality.

10:45 Marie-Pascale Côté (Philadelphia, USA) : Exercise improves spinal reflex recovery through an increase in KCC2 expression after SCI.

11:15 Selected speaker: Frédérique Scamps (Montpellier, France) Motoneuron electrical activity, Na⁺/K⁺ pump and neuromuscular junction defects in KCC3^{-/-} mice.

11:30 Meeting closure

11:45 Lunch

13:00 Airport shuttle departure