



16^{ème} Colloque Canaux Ioniques
Presqu'île de Giens
2-5 Octobre 2005

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Liste des Exposants :

DIPSI

HAMAMATSU FRANCE

HARVARD APPARATUS

LEICA MICROSYSTEMS

MICRO-MECANIQUE

NIKON FRANCE

OLYMPUS

SEGA ELECTRONIQUE

WPI

Carl ZEISS SAS

SUNDAY, OCTOBER 2

15h-19h30 Welcome of the meeting attendees
19h45 Cocktail
20h15 Dinner

MONDAY, OCTOBER 3

8h15 Meeting opening

SYMPOSIUM I :

ION CHANNEL DISORDERS AND THERAPY

(Organized by Saïd BENDAHOU)

8h30 B. FONTAINE (Paris, France) Resocanaux: a network dedicated to the care and research on muscle channelopathies and related disorders.
9h00 C. GAUDIOSO (Marseille, France) Fonctionnal analysis of Nav1.1 sodium channel mutants involved in severe myoclonic epilepsy in infancy (SMEI)
9h15 C. BERNARD (Marseille, France) Acquired channelopathies in epilepsy.
9h45 L. PTACEK (San Francisco, USA) Ion channel disorders of the nervous system.

10h15 A word from OLYMPUS

10h30 Coffee break

ORAL COMMUNICATIONS I:

CHANGES IN ION CHANNELS EXPRESSION

(Chaired by Isabelle BARÓ)

11h15 ROGER, S (Tours, France) Voltage-gated sodium channels: metastase markers and potential targets in cancer therapy
11h30 BIDAUX, G (Lille, France) Functioning of TRPM8 in plasma- and endoplasmic reticulum membranes of the human epithelial prostate cells: dependence on their oncogenic status
11h45 DEMOLOMBE, S (Nantes, France)

Mapping Transcription Regulators in the Adult Mouse Heart
12h00 ARNOULT, C. (Grenoble, France) Sperm low-voltage activated calcium channels: insights from studies of Ca_v3.1 or Ca_v3.2 deficient mice

12h30 Lunch

15h00-17h00 POSTERS Session I (odd numbers)

SYMPOSIUM II :

MOLECULAR AND PHYSIOLOGICAL ROLES OF ION CHANNELS IN THE IMMUNE SYSTEM

(Organized by Halima OUAJID-AHIDOUCH)

17h00 G. PANYI (Debrecen, Hungary) Potassium channels in T cells: modulators of T cell receptor signaling.
17h30 L. PELLETIER (Toulouse, France) Calcium signaling pathways in T lymphocytes.
18h00 A.-L. PERRAUD (Denver, USA) TRPM ion channels as potential modulators of the immune response.
18h30 A. PENNA (Montpellier, France) TRPV2 channel upregulation and partial relocalization in lipid rafts after inflammatory activation of immune cells.

18h45 Annual meeting of the « Association Canaux Ioniques »

20h30 Dinner

TUESDAY, OCTOBER 4

ORAL COMMUNICATIONS II:

STRUCTURE-FUNCTION RELATIONSHIP OF THE ION CHANNEL

(Chaired by Yves Maulet)

9h00 RENAULD, S (Sherbrooke, Canada) Régulation du canal sodique épithélial (ENaC) par deux ligands extracellulaires.
9h15 HOSY, E (Grenoble, France) A new molecular

probe of the interactions between the two subunits of the K_{ATP} channel

9h30 DREYER, I (Potsdam, Germany) How do plant K^+ channel sense K^+ ?

9h45 FRACHISSE, J.M (Gif sur Yvette, France) A "VDAC-like" activity at the plasma membrane of *Arabidopsis thaliana* root cells.

10h00 coffee break

SYMPOSIUM III :

EARLY SENSORY PROCESSING

(Organized by **Michel ROUX**)

10h30 M. KAMERMANS (Amsterdam, Netherlands) The role of connexin hemichannels in negative feedback from horizontal cells to cones in the vertebrate retina.

11h00 B. ROSKA (Basel, Switzerland) Discovering retinal and cortical circuits by combining genetics, virology and physiology

11h30 S. LAGIER (Paris, France) Synaptic interactions and network properties of the mammalian olfactory bulb.

12h00 J. BONSACQUET (Montpellier, France) Direct electrophysiological study of synaptic activity at identified vestibular calyx terminals: evidence for the involvement of both AMPA and NMDA glutamate receptors

12h30 Lunch

15h00-17h00 POSTERS Session II (even numbers)

SYMPOSIUM IV :

ION CHANNELS AND PROTEIN COMPLEXES

(Organized by **Arnaud MONTEIL**)

17h00 B. FAKLER (Freiburg, Germany) Polyprotein complexes associated with

voltage- and calcium-activated potassium channels.

17h30 C. VANDENBERG (Santa Barbara, USA) Trafficking and targeting of inward rectifier potassium channels by PDZ-based signalling complexes.

18h00 P. MARIN (Montpellier, France) Multiprotein complexes interacting with 5-HT receptors and their role in receptor trafficking and signalling.

19h30 Dinner

21h00 "Mort Subite" session (Chair person : Yves Maulet)

WEDNESDAY, OCTOBER 5

ORAL COMMUNICATIONS III:

REGULATION OF NEURONAL ION CHANNELS

(Chaired by **Stéphane SUPPLISSON**)

9h15 CHESNOY-MARCAIS, D (Le Kremlin-Bicêtre, France) The estrogen receptor modulator tamoxifen enhances spontaneous glycinergic synaptic inhibition of hypoglossal motoneurons

9h30 SAVIGNER, A (Lyon, France) Insulin acts on mitral cells in Rat olfactory bulb slices by reducing potassium conductances

9h45 REBRIK, TI (San Francisco, USA) In mammals, cones but not rods, demonstrate Ca^{2+} -dependent modulation of cGMP-gated channels

10h00 ROUX, MJ (Illkirch, France) The glutamate transporter EAAT5 works as a presynaptic receptor in mouse rod bipolar cells

10h15 Coffee break

SYMPOSIUM V :

ROLE OF TRAFFICKING IN ION CHANNEL REGULATION

(Organized by **Sabine ZIMMERMANN**)

10h45 M. BLATT (Glasgow, UK) Transport and volume control: an expanding problem.

11h15 G. DUBY (Louvain, Belgium) A conditionally targeted Shaker subunit is involved in plant adaptation to high humidity.

11h45 S. DAHIMENE (Nantes, France) A conserved N-terminal structural motif determines KCNQ channel surface expression. Implications in KCNQ1-associated Romano-Ward LQT1 syndrome

12h00 G. THIEL (Darmstadt, Germany) Miniature viral potassium channels: the relevance of the transmembrane domain length for channel sorting and channel function.

12h30 Meeting closure

12h45 Lunch

COMITE D'ORGANISATION
16^{ème} Colloque "Canaux Ioniques"

Saïd BENDAHHOU (Valbonne)

Christian CHABBERT (Montpellier)

Jean-Yves LE GUENNEC (Tours)

Yves MAULET (Marseille)

Arnaud MONTEIL (Montpellier)

Halima OUADID-AHIDOUCH (Amiens)

Michel RONJAT (Grenoble)

Michel ROUX (Illkirch)

Stéphane SUPPLISSON (Paris)

Sabine ZIMMERMANN (Montpellier)

Co-Présidents :

Isabelle BARÓ (Nantes)

Florian LESAGE (Valbonne)