

SUNDAY, SEPTEMBER 12ND

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

MONDAY, SEPTEMBER 13RD

8:25 Meeting opening

Symposium I: "ION CHANNELS AND TOXINS"

Organized by Anne BARON-FORSTER, IPMC, CNRS-UNSA, UMR6097, Nice, France

8:30 Frank BOSMANS (Bethesda, USA). Functional properties and toxin pharmacology of a dorsal root ganglion sodium channel viewed through its voltage sensors
9:00 Enzo WANKE (Milan, Italia). Promiscuity and selectivity of venomous peptides and vulnerability of sodium and potassium channels
9:30 Ines IBANEZ-TALLON (Berlin, Germany). Cell-Surface Tethered Toxins for Studies Of Neuronal Circuitry In Vivo
10:00 Rocio FINOL-URDANETA (Canada). Discrimination Among Heteromeric K⁺ Channels May Underlie Cardioprotection By An Inhibitory Conotoxin
10:30 A word from Nanion Technologies

10:45 Coffee break

Oral Communications I: "IONIC COCKTAIL"

Chair by Sophie NICOLE Inserm U975; UPMC, Paris, France

11:15 Matthieu VANDENBERGHE (France). Orai1 And Stim1 Are Involved In Keratinocytes Differentiation
11:30 Romain FELIX (France). ionic events during the maturation of human monocytederived dendritic cells
11:45 Diana DAHAN (France). Involvement Of Trpv2 And Trpv4 In Pulmonary Artery Hypertension
12:00 Manuel NIEVES-CORDONES (France). Regulation Of Inward K⁺ Channel Activity In Arabidopsis By The Shaker Subunit Atk1: Molecular Mechanisms And Role In Control Of Stomatal Opening And Plant Adaptation To Water Stress
12:15 A word from DIPSI

12:30 Lunch

15:00-17:00 POSTERS SESSION I (numéros impairs - odd numbers)

Symposium II: "PATHOLOGIES OF ION TRANSPORTERS"

Organized by Mallorie POET, TIANP, CNRS-UMR 6097, UNSA, Nice, France

17:00 Chirstian HUBNER (jena, Germany). Functions unraveled by dysfunction: Bicarbonate transporters of the SLC4A gene family
17:30 Harald H. SITTE (Vienna, Osterreich). Monoamine Transporters: why amphetamines take two to tango!
18:00 Raul ESTEVEZ (Barcelona, Spain). Molecular basis of megalencephalic leukoencephalopathy with subcortical cysts: ion siphoning by astrocytes
18:30 Ingrid CHAMMA (France). Activity-Dependent Regulation of the Membrane Dynamics Of The Neuronal Potassium/Chloride Cotransporter KCC2

18:45 Break

19:00

Special lecture
Ehud ISACOFF Variations on voltage sensing

20:00 Lunch

TUESDAY, SEPTEMBER 14TH

Symposium III: "THE AQUAPORINS FROM MICROORGANISMS TO MAMMALIANS"

Organized by Olivier PICHON, Université François-Rabelais de Tours, EA 2106 TOURS, France

- 8:45** **Stefan HOHMANN** (Göteborg, Sweden). Yeast aquaporins are controlled by and involved in developmental programmes
- 9:15** **François CHAUMONT** (Louvain-la-Neuve, Belgium). Plant plasma membrane aquaporins: a highly regulated plumbing system
- 9:45** **Jerome BADAUT** (Loma Linda, USA) Aquaporin a multi-functional channel: from aqueduct to pipeline
- 10:15** **Pascal JOURDAIN** (Switzerland). Optical recording of transmembrane water transport by Digital Holographic Microscopy.
- 10:30** A word from **GATC Biotech**

10:45 **Coffee break**

Oral Communications II: "ION CHANNELS IN PATHOLOGICAL CONDITIONS"

Chair: Sébastien Roger, Université François-Rabelais de Tours, Inserm U921, France

- 11:15** **Cynthia ORE-CERPA** (France). Biological pacemakers engineered by non-viral gene transfection of ventricular cardiomyocytes with HCN1-HCN2 channels in a mouse model of complete atrioventricular block
- 11:30** **Xavier GASULL** (Spain). TRESK channel contribution to drg sensory neuron hyperexcitability following nerve injury
- 11:45** **Hélène GAUTIER** (UK). Neurotransmitter signalling in two types of oligodendrocyte precursor cells during remyelination.
- 12:00** **Mehdi HAMMADI** (France). Human Ether À Go-Go (Heag1) K⁺ Channels Are Critical For Breast Cancer Migration
- 12:15** A word from **Ad instruments**

12:30 **Lunch**

15:00-17:00 **POSTERS SESSION II (numéros pairs - even numbers)**

Symposium IV: "NEURONAL EXCITABILITY and INTEGRATION"

Organized by Desdemona FRICKER, CRICM - CNRS UMR 7225, Paris, France

- 17:00** **Richard H. KRAMER**, (Berkley, USA) - Non-genetic photochemical tools for controlling neural activity with light
- 17:30** **Matthew NOLAN**, (Edinburgh, UK) - The topographic organization of spatial encoding by neurons in layer II of the medial entorhinal cortex
- 18:00** **Bruce P BEAN** (Harvard, USA) Drug delivery through TRP channels
- 18:30** **Camille LIAUTARD** (France). Impact of nav1.1 loss-of-function on hippocampal network excitability in a severe myoclonic epilepsy of infancy mouse model.

18:45 **ANNUAL MEETING of the "Association Canaux Ioniques"**

20:15 **Dinner**

21:00 **"MORT SUBITE" SESSION**

Symposium V: "MEMBRANE DYNAMICS OF ION CHANNELS"

Organized Jean-Christophe PONCER, INSERM - Institut du Fer a Moulin, Paris, France.

- 9:00** **Josef KITTLER** (University College, London). NMDA receptors regulate gabaa receptor lateral mobility and clustering at inhibitory synapses through calcineurin and serine 327 on the gamma 2 subunit
- 9:30** **Laurent GROC** (CNRS, Université Bordeaux 2, France). High-resolution imaging of membrane nmda receptor trafficking: more dynamic than previously thought
- 10:00** **Michael TAMKUN** (Colorado State University, USA) Kv2.1 localization and function are regulated by a diffusion trap mechanism
- 10:30** **Christophe LETERRIER** (France). "Ankyrin G and protein kinase CK2 restrict sodium channel diffusion at the axonal initial segment before the establishment of the diffusion barrier"

10:45 **Coffee Break**

Oral Communications III: "LIPIDS AND ION CHANNELS"

Chair: Jean-Luc Morel, CNRS UMR5228, Talence, France

- 11:00** **Gildas LOUSSOUARN** (France). Phosphatidylinositol-4,5-bisphosphate (PIP2) stabilizes the open pore conformation of the Kv11.1 (hERG) channel
- 11:15** **Fabrice HOMBLE** (Belgium). Modulation of plant mitochondrial vdac by phytosterols
- 11:30** **Alban GIRAULT** (France). Alkyl-glycolipids are new inhibitors of sk3 channel and therefore of cancer cell motility

11:45 **Meeting closure**

12:00 **Lunch**