

## SUNDAY, SEPTEMBER 20<sup>TH</sup>

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

## MONDAY, SEPTEMBER 21<sup>ST</sup>

8:30 Meeting opening

### Symposium I: "NEURONS, ION CHANNELS AND HUMAN DISORDERS"

*Organized by Sophie Nicole, UPMC, UMR\_5975, Université Pierre et Marie Curie, Paris, France*

8:45 **Philippe MARAMBAUD** (Manhasset, USA) - CALHM1 in the Pathogenesis of Alzheimer's Disease  
9:15 **Jean-Christophe PONCER** (Paris, France) - Functional impact of GABAA R2 mutations associated with idiopathic generalized epilepsy syndromes.  
9:45 **Steven N TREISTMAN** (San Juan, Porto Rico) - The BK Channel: Mediator and Model for Alcohol Tolerance.  
10:15 **Jacques BARHANIN** (Nice, France)-TASK2 potassium channels set central respiratory CO<sub>2</sub> and O<sub>2</sub> sensitivity.

10:35 A word from Thermofisher

10:45 Coffee break

### Oral Communications I: "EXPLORING SODIUM AND CALCIUM CHANNELS"

*Chair: Christian Legros, RCIM UPRES EA 2647/ USC INRA 2023 Angers, Université d'Angers, France*

11:15 **Ly, R.** (Paris, France). - Activation of the T-type calcium channels at the Purkinje cell by simulated synaptic events.  
11:30 **Jones, C** (Canbridge, UK) - Development of a medium-throughput electrophysiology assay to investigate state-dependency of sodium channel blockers using qpatch.  
11:45 **Gillet, L.** (Tours, France) - Docosahexaenoic acid reduces breast cancer cells invasiveness by regulating voltage-gated sodium channels activity.

12:30 Lunch

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

### Symposium II: "INTRACELLULAR ION CHANNELS"

*Organized by Jean-Luc Morel, CNIC, UMR 5228 CNRS, Université de Bordeaux I, Talence, France*

17:00 **Andreas GUSE** (Hamburg, Germany) - Complexity of calcium signaling in T-lymphocyte engaging cADPr, NAADP and IP3 pathways  
17:30 **Antony GALIONE** (Oxford, UK) - NAADP receptor, function, regulation and pharmacology.  
18:00 **Paul ALLEN** (Boston, USA) - Regulation of RYR1 in physiology and pathophysiology.  
18:30 **Olivier PICHON** (Tours, France) - Interplay between hypothetic RyR and IP3R calcium channels regulates the auxin-dependent secondary metabolism in Plant cells.

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

20:30 Dinner

### 21:15 Special lecture

*Organized by Stephan Kellenberger, Dpt de Pharmacologie et de Toxicologie, UNIL, Lausanne, Suisse.*

**William CATTERALL** (Seattle, USA)

"ION CHANNELS, ELECTRICAL SIGNALING, AND NEUROPLASTICITY"

**Symposium III: "ROLE OF ION CHANNELS IN PLANTS"**

*Organized by Anne-Aliénor Véry, BPMP, UMR5004, Montpellier, France*

**9:00** Patrick FAVRE (Fribourg, Switzerland) - *Electric signaling in plants.*

**9:30** Giles OLDROYD (Norwich, UK) - *Differential calcium oscillations during symbiosis signalling of legumes.*

**10:00** Dominique ROBY (Toulouse, France) - *Cyclic nucleotide-gated cation channels and the control of the hypersensitive cell death in Arabidopsis thaliana.*

**10:30** Erwan MICHARD (Oeiras, Portugal) - *GLR's and D-serine modulate the Ca<sup>2+</sup> signature and growth of pollen tubes.*

**10:45** Coffee break

**Oral Communications II: "CARDIAC ION CHANNELS AND THEIR DIVERSITY"**

*Chair: Fabien Van Coppenolle, CNRS-UMR 5123, Université Lyon I, Villeurbanne, France*

**11:15** AMAROUCH, MY. (Nantes, France) - *Mutation of cardiac Nav1.5 in a novel autosomal dominant cardiac arrhythmia of hisian type and associated with dilated cardiomyopathy.*

**11:30** KRZYSTANEK, K. (Copenhagen, Denmark). *Regulation of the cardiac IKs channel complex by ubiquitylation and de-ubiquitylation.*

**11:45** KRUSE, M. (Hamburg, Germany)- *Impaired endocytosis of TRPM4 channel associated with isolated cardiac conduction disorders.*

**12:00** GUSEV, K. (Bern, Switzerland) - *AMPK -dependent regulation of voltage-gated sodium channels in cardiomyocytes.*

**12:30** Lunch

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

**Symposium IV : "BREAKING NEWS" IN ION CHANNELS"**

*Organized by Sébastien Roger, INSERM U921, Université de Tours, Tours, France*

**17:00** Thomas VOETS (Leuven, Belgium) - *New advances in Thermoregulated TRP channels.*

**17:30** Luis GALIETTA (Genova, Italy) - *TMEM16A, a membrane protein associated with calcium-dependent chloride channel activity.*

**18:00** Alan NORTH (Manchester, UK) - *Identification and physiological role of P2X receptors in single-celled eukaryote.*

**18:30** Jacques NOEL (Sophia-Antipolis, France) - *The background K<sup>+</sup> channels TRAAK and TREK-1 control both warm and cold perception.*

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

**19:30** Dinner

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

**Symposium V: "POST-TRANSCRIPTIONAL MODIFICATIONS OF ION CHANNELS AND PROTEIN INTERACTION"**

*Organized by H  l  ne Vacher, INSERM UMR 641, IFR Jean Roche, Marseille, France*

**9:00**        **James S TRIMMER** (Davis, USA) - *Phosphorylation of Kv channels.*

**9:30**        **Daniela ROTIN** (Toronto, Canada) - *Role of the Nedd4 family of ubiquitin ligases in regulating ENac and other proteins.*

**10:00**       **Stefan GR  NDER** (Aachen, Germany) - *Glycosylation of specific asparagine residues is necessary for the surface expression of acid-sensing ion channel (ASIC) 1b.*

**10:30**        **Coffee Break**

**Oral Communications III: "IONS CHANNELS: FROM STRUCTURE TO FUNCTION"**

*Chair: Christophe Duranton, CNRS-FRE3093, TIANP, Nice, France.*

**11:00**       **SINTRA GRILO, L.** (Lausanne, Suisse) - *Stereoselective block of hERG1 channel by bupivacaine scrutinized at molecular level.*

**11:15**       **CORRINGER, PJ** (Paris, France) - *X-ray structure of bacterial Cys-loop receptor-channels : structural basis of allosteric mechanism.*

**11:30**       **TAKEDA A.-N.** (Lausanne, Suisse) - *Structure and Function of the Cytosolic N-terminus of ASIC1a*

**11:45**        **Meeting closure**

**12:30**        **Lunch**

