

## Agenda - Thursday October 25

13:00 – 13:30 PM ▶ **Welcome Reception/ Poster Set Up 3<sup>rd</sup> floor**



### Thursday Session 1: Hot Topics

13:30 – 13:50 PM ▶ **Welcome and introduction**  
Niels Fertig, Nanion Technologies

13:50 – 14:10 PM ▶ **Profiling the pharmacology of G-protein coupled receptors using impedance analysis of cell-based assays**  
Prof. Dr. Joachim Wegener, University of Regensburg

14:10 – 14:30 PM ▶ **Light makes it funnier**  
Dr. Jean-Francois Rolland, Axxam

### SyncroPatch Users

14:30 – 15:30 PM ▶ **SyncroPatch User Workshop 3<sup>rd</sup> floor**

15:30 – 16:00 PM ▶ **Instrument Demonstration ground floor**

14:30 – 15:00 PM ▶ **Coffee Break & Poster presentation**

15:00 – 16:00 PM ▶ **Instrument Demonstration**



### Thursday Session 2: Transporters in Focus

16:00 – 16:20 PM ▶ **Functional evidence for NCX in iPSC-derived cardiomyocytes**  
Dr. Maria Barthmes, Nanion Technologies

16:20 – 16:40 PM ▶ **tba**  
Dr. Irina Borodina, TU Copenhagen

16:40 – 17:00 PM ▶ **The lipid environment determines the activity of the E.coli ammonium transporter, AmtB**  
Dr. Arnaud Javelle, Strathclyde Institute

17:00 – 17:30 PM ▶ **Coffee Break & Poster Presentation**



### Thursday Session 3: Potassium and Calcium Channels

17:30 – 17:50 PM ▶ **Ca<sup>2+</sup> channels and Ca<sup>2+</sup> regulated channels in red blood cells**  
Prof. Dr. Lars Kästner, Saarland University

17:50 – 18:10 PM ▶ **A biophysical map of the homomeric voltage-gated potassium channel (Kv) family**  
Dr. Rajnish Ranjan, EPFL

18:10 – 19:30 PM ▶ **Get together & walking to the Sheraton hotel**

19:30 PM ▶ **Dinner at Sheraton Westend Factory Restaurant**

## Agenda - Friday October 26

9:00 – 9:10 AM ▶ **Welcome**



### Friday Session 1: Impedance-based assays

- 9:10 – 9:30 AM ▶ **CiPA myocyte phase II validation study results: cross-site comparison using the CardioExcyte 96**  
Dr. Sonja Stölzle-Feix, Nanion
- 9:30 – 9:50 AM ▶ **Quality control of CiPA-validated Cor.4U® cardiomyocytes and implications for a new CiPA-like long-term cardiotoxicity validation consortium**  
Dr. Ralf Kettenhofen, Ncardia
- 9:50 – 10:10 AM ▶ **Exciting news: iPS cells for modelling pain disorders**  
Prof. Dr. Angelika Lampert, RWTH Aachen University

10:10 – 10:40 AM ▶ **Coffee Break & Poster Presentation**



### Friday Session 2: New Technologies

- 10:40 – 11:00 AM ▶ **Binding of photoreactive inhibitors to resting and inactivated conformations of the sodium channel by synchronized voltage and optical stimulation using the Port-a-Patch**  
Dr. Árpád Mike, Hungarian Academy of Sciences
- 11:00 – 11:20 AM ▶ **Beyond electrophysiology: additional optical readout for artificial bilayer experiments**  
Dr. Gerhard Baaken, Ionera
- 11:20 – 11:40 AM ▶ **CardioExcyte 96 Goes Flexible: Investigating Cardiac Contractility under Physiological Mechanical Conditions with the CellDrum Add-On**  
Dr. Matthias Gossmann, innoVitro

11:40 – 12:30 PM ▶ **Lunch**



### Friday Session 3: SyncroPatch PE: The full bandwidth

- 12:30 – 12:50 PM ▶ **Development of SyncroPatch assays for GABA<sub>A</sub> receptors**  
Dr. David Dalrymple, SB Drug Discovery
- 12:50 – 13:10 PM ▶ **A new in vitro paradigm: From hERG-centric to multiple ion channel current assessment (SyncroPatch 384PE) – To provide a more accurate mechanistic-based pro-arrhythmia prediction**  
Dr. Doi Masafumi, Daiichi Sankyo RD Novare
- 13:10 – 13:30 PM ▶ **SyncroSwitch – compatibility of synthetic photoswitches with the SyncroPatch 384PE**  
Dr. Martin Sumser, LMU Munich

13:30 – 14:00 PM ▶ Coffee Break & Poster Presentation

## Agenda - Friday October 26



### Friday Session 4: LGICs and ASICs

- 14:00 – 14:20 PM ▶ **Designing multiple assay protocols for ligand-gated ion channel targets using the stacked tip feature on the Patchliner**  
Sam Manyweathers, Metrion Biosciences
- 14:20 – 14:40 PM ▶ **High-throughput validation of non-canonical amino acid incorporation into acid-sensing ion channel 1a**  
Nina Braun, University of Copenhagen
- 14:40 – 15:00 PM ▶ **Closing remarks**  
Dr. Andrea Brüggemann, Nanion

## Program - Thursday October 25

14:00 – 15:30 PM ▶ Workshop for SyncroPatch 384/768 PE Users: 3<sup>rd</sup> floor

### SyncroPatch 384/768PE: HTS Planar Patch Clamp

Meet the SyncroPatch 384/768PE Team:

**Andrea Brüggemann**  
CSO



**Søren Friis**  
Director Global  
Customer Relations



In this workshop you will learn from Søren Friis tips and tricks on assay development for specific ion channels. Andrea will present new data on ion channel assays and will give an overview on new features.

15:00 – 16:00 PM ▶ Instrument Demonstrations: Ground floor

SyncroPatch 384/768PE  
Port-a-Patch  
Patchliner  
SURFER 96SE  
CardioExcyte 96