

Nanion User Meeting USA

Boston, MA

May 11th - 12th

Thursday May 11th

7:30 - 8:30am Arrival, Breakfast, & Poster setup

8:30 - 8:45am Welcome and Introduction - **Wyatt Hall Director of Sales**

] Cardiac Session [

8:45 - 9:30am **Keynote:** Regulation of the cardiac sodium channel Nav1.5 by 14-3-3
Dr. Isabelle Deschenes, The Ohio State University

9:30 - 10:00am Patch clamping hiPSC-derived atrial cardiomyocytes to measure SK ion channel currents
Dr Glen Tibbits, British Columbia University

10:00 - 10:30am Ion channels in cardiac mitochondria **Dr. Colin Phoon**, NYU Langone Health

10:30 - 11:00am Myocardial workload, metabolism, and local regulation of perfusion
Dr. Matt Nystoriak, University of Louisville

11:00 - 11:40am **Morning Coffee Break/ Poster Presentations**

] Antibody Session [

11:40am - 12:10pm Ion Channel Targeted Small Molecule and Antibody Therapeutic Programs
Dr. Franck Potet Icagen

12:10 - 12:40pm Effect on a single domain antibody on the kinetics of Nav1.7 recorded with Syncropatch
Dr. Umberto Banderalli, National Research Council Canada

12:40 - 1:10pm Activin A directly impairs human cardiomyocyte contractile function indicating a potential role in heart failure development
Dr. Scott Mac-Donnell, Regeneron

1:10 - 2:10pm **Lunch/ Posters viewing**

] Tech Session [

- 2:10 - 2:40pm** All things new on Syncro **Soren Friis** Nanion
- 2:40 - 3:10pm** Simultaneous Single-Molecule Optical and Electrical Recordings using Microelectrode Cavity Arrays **Dr. Daniel Burden**, Wheaton College
- 3:10 - 3:40pm** MISSION POSSIBLE - **Dr. Jean Francois Rolland**, Axxam the iPRO
- 3:40 - 4:10pm** **Afternoon Coffee Break/ Poster Presentations**
- 4:10 - 4:40pm** New Product Launch: Introducing the AtlaZ, Quantitative Live-Cell Analytics Platform **Dr. Ron Knox**, Nanion
- 4:40 - 5:10pm** Automated Patch Clamp Recording of Human iPSC-derived Cardiomyocytes **Dr. Alfred George**, Northwestern
- 5:10 - 5:40pm** New FLEXcyte applications for the analysis of hiPSC-derived cell type contractile properties **Dr. Matthias Gossman**, Innovitro
- 5:40 - 6:00pm** Closing remarks **Dr. Ron Knox** - Champagne Reception & Poster viewing
- 7:00 - 9:00pm** **Dinner in Skylight Room**

Friday May 12th

7:30 -8:30am **Arrival & Breakfast**

] Cardiac Session II [

8:30 -9:15am **Keynote:** A high-throughput drug cardiotoxicity screening pipeline utilizing cell-specific action potential and voltage clamp
Dr. Trine Krogh-Madsen, Weill Cornell Medicine

9:15 - 9:45am Ryanodine Receptors: pharmacology and disease mechanisms through structural and functional methods **Dr. Filip Van Petegem**, University of British Columbia

9:45 - 10:15am Using planar patch clamp to probe anti-arrhythmic drug interaction with cardiac ion channels **Dr. Jonathan Silva**, Washington University St. Louis

10:15 - 10:45am Cardiac conduction slowing- the pharmacology and clinical translation of NaV1.5 block **Dr. Khuram Chaudhary**, Bristol Myers Squibb

10:45 -11:15am **Morning Coffee Break/Poster Presentations**

] IPS Neuronal Session [

11:15 - 11:40am High-throughput Functional Characterization of hiPSC-derived Nociceptors using Automated Patch Clamp **Dr. Vince Truong**, Anatomic

11:40am - 12:10pm SSM-based measurements of ion fluxes in reconstituted systems **Dr. Matthias Quick**, Columbia University

12:10 - 12:40pm Distinct applications of Syncropatch by ICE-T@Broad **Dr. Jen Pan**, Broad Institute

12:40 - 1:40pm **Lunch**

- 1:40 - 2:10pm** Automated planar electrophysiology: bringing innovation to drug discovery in the academic settings **Dr. Fernanda Laezza**, University of Texas Medical Branch
- 2:10 - 2:40pm** A multi-platform approach for lysosomal channel drug discovery **Dr. David Dalrymple**, SB Drug Discovery
- 2:40 - 3:00pm** **Afternoon Coffee Break/ Poster Presentations**
- 3:00 - 3:30pm** Characterization of Small Molecule Modulators of KNa Channels Using Automated Patch Clamp **Dr. Brittany Spitznagel**, Vanderbilt University
- 3:30 - 4:00pm** **Dr. Wendy Wu/Jun Zhao**, FDA
- 4:00- 4:30pm** Understanding dilated cardiomyopathy one patient at a time using an iPSC-derived Heart-in-a-Dish model **Dr. Kyla Bourque**, McGill University
- 4:30 - 5:00pm** End Wrap up **Wyatt Hall**