



# Membrane Physiology Symposium

Napa California, April 22<sup>nd</sup> & 23<sup>rd</sup> 2024

## Monday, April 22<sup>nd</sup>

**7:30 - 8:30 am**

### Arrival, Breakfast, & Poster Set Up

**8:30 - 8:45 am**

#### Wyatt Hall - Nanion Director of Sales

Welcome Introduction

**8:45 - 9:15 am**

#### A Tribute to Dr. William Catterall by Dr. Tamer Gamal El-Din

**9:15 - 9:45 am**

#### Dr. Al George Jr. - Northwestern

Functional Consequences of Human Ion Channel Variants

**9:45 - 10:15 am**

#### Dr. Brady Maher - Lieber Institute

Assaying Native Sodium Channels in Human iPSC-Derived Neurons

**10:15 - 10:45 am**

#### Dr. Isabelle Deschenes - The Ohio State University

Impact of Heart Failure Activated T cells on Cardiac Electrophysiology

**10:45 am - 1:15 pm**

### Networking Session & Lunch Break

**1:15 pm - 1:30 pm**

#### Dr. Markus Rapedius - Nanion Technologies

Patch 384: All the Small the Things

**1:30 - 2:00 pm**

#### Dr. Doug Krafte - OmniAb Inc.

Advances in Targeting Ion Channels Across Therapeutic Modalities

**2:00 - 2:30 pm**

#### Dr. Jen Pan - The Broad Institute

A Tale of Two Channels

**2:30 - 3:00 pm**

#### Dr. Jose Mercado - DSM-Firmenich

Scrambling Mosquito Olfaction to Deter the Buzzing Menace

**3:00 - 3:30 pm**

#### Dr. Gail Robertson - University Wisconsin Madison

Coordinate Biogenesis of Ion Channels in Excitable Membranes

**3:30 - 5:30 pm**

### Networking Session

**6:30 - 9:00 pm**

### Dinner Hosted by Nanion Technologies

# Tuesday, April 23<sup>rd</sup>

7:30 - 8:30 am

## Arrival, Breakfast, & Networking Session

8:30 - 8:45 am

**Dr. Hector Valdivia - University Wisconsin**

That Which Does Not Kill You, Makes You Stronger: The Salutary Effect of Scorpion Peptides on Ca<sup>2+</sup>-Dependent Arrhythmias

8:45 - 9:15 am

**Dr. Dan Minor - UCSF**

Covalent Chemogenetic K2P Channel Activators

9:15 - 9:45 am

**Dr. Jean-Ju Chung - Yale**

CatSper Channel: Assay Development for Male Fertility Treatment and Contraceptives

9:45 - 10:15 am

**Dr. Alyssa Petko - Bluerock**

Physiological Characterization of iPSC-Derived Cardiomyocytes for the Treatment of Heart Failure

10:15 - 10:45 am

**Dr. Ivy Dick - University of Maryland**

Diverse Mechanisms Underlying the Pathogenesis of Calcium Channelopathies.

10:45 am - 11:15 am

**Dr. Baron Chanda - Washington University in St. Louis**

Mechanisms of Modulation of HCN Channel Activity

11:15 am - 1:45 pm

## Networkings Session & Lunch

1:45 - 2:15 pm

**Dr. Luis Cuello - Texas Tech University HSC**

The Unforeseen Consequences of a Novel Mechanosensitive Gating Process & Crystallization Conditions in KcsA Ion Binding Affinity & Occupancy

2:15 - 2:25 pm

**Dr. Jim Brady - Maxcyte**

Rapid Development of Membrane Physiology Assays Using Scalable Electroporation

2:25 - 2:55 pm

**Dr. Alex Dopico - University Tennessee HSC**

BK Channel Subunits and Steroids: A Tale of Two Subunits

2:55 - 3:25 pm

**Dr. Justin Du Bois - Stanford**

Toxin-based Tools for Studies of Voltage-Gated Sodium Channels

3:25 - 3:55 pm

**Dr. David Dalrymple - SB Drug Discovery**

Utilizing SURFE<sup>2</sup>R SSME Technology for SLC Transporter Drug Discovery

3:55 - 5:30 pm

## Networking Session

7:30 - 10:00 pm

## Wine Tasting Hosted By SB Drug Discovery

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