

“Towards Automated Patch-Clamp Electrophysiology of Immune Cells”

October 23, 2026 | NYU Langone Health

12:00-1:30 PM | Scientific Session

Short Research Presentations

10-minute presentation + 2-minute Q&A

Dr. Murali Prakriya — CRAC Channels

Dr. Zhaozhu Qiu — “From VRAC to PAC: Discovery of Novel Chloride Channels”

Dr. Bimal Desai — TRPM7 and Mitochondrial Calcium Signaling

Dr. Shivashankar Othy — Role of Calcium Signaling in T Cell Motility

Dr. Axel Concepcion — “Current Limitations in the Biology and Pharmacology of Anion Channels and Transporters”

IonLab and Sophion QPatch II Overview

30 minutes

Dr. Daniel Sauter, Dr. Soomin C. Song, & Dr. Pietro Scaduto

Overview of IonLab and its research program

Introduction to the Sophion QPatch II automated patch-clamp platform

Applications of automated patch-clamp electrophysiology in immune-cell research

1:30-2:00 PM | Lunch (& Informal Discussions)

30 minutes

2:00-4:00 PM | Hands-On Session

Practical Experience with the Sophion QPatch II Automated Patch-Clamp System

Demonstration of the QPatch II platform in the IonLab

Experimental workflow and applications

Discussion of potential applications to immune-cell electrophysiology

4:00-5:30 PM | Discussion Session

Informal Discussion on Experimental Approaches, Collaborations, and Future Directions

Workshop Participants

Selected Workshop Attendees

Ingo Koomoa-Lange

Ana Laura Lopez Serrano

Amedee des Georges

Henrique Borges da Silva

Dirk Trauner

Kalai Mangai Muthukumarasamy

Ahmed Emam Abdelnaby

Invited Speakers

Murali Prakriya — CRAC Channels

Zhaozhu Qiu — VRAC Currents

Bimal Desai — TRPM7 and Mitochondrial Calcium Signaling

Shivashankar Othy — Piezo1 and CRAC Signaling in Immune Cells

Axel Concepcion — LRRC8 and AE2 Channels/Transporters

Sophion Team

Pietro Scaduto

Daniel Sauter

NYULH & IonLab Team

Stefan Feske

Sooming Song

Xianming Lin

Marta Maltese