



Sunday, February 20
12:30 PM – 2:00 PM
Esplanade, Room 158
Fluxion Biosciences

From Immunology to Ion Channels: Microfluidic Approaches to Automated Patch Clamp and Cellular Analysis. A Look at IonFlux Mercury and BioFlux Systems from Fluxion Biosciences.

Leveraging proprietary microfluidic approaches, Fluxion Biosciences provides unique solutions that simplify and automate complex cell-based assays. This presentation will cover two Fluxion systems used extensively in biophysical characterization of cells: IonFlux and BioFlux.

IonFlux Mercury automated patch clamp (APC) systems are capable of recording from 16 to 256 separate cells simultaneously in whole cell patch clamp mode. With unique features such as industry-leading fast in-plate compound exchange and continuous solution flow, IonFlux systems are used globally in pharma and academic laboratories for both ligand and voltage-gated ion channel screening. Recent developments include automated IC/EC50 calculation workflows, and the introduction of a new range of GABA cells for complete sample-to-result analysis.

The BioFlux system is the world's leading platform for analyzing cell-cell interactions in a flow-controlled environment. Applications include characterization of cell migration, adhesion strength, transmigration, and chemotaxis. BioFlux assays for research and drug development in immunology, vascular biology, and cancer will be reviewed. Recent research in covid-induced thrombocytopenia and functional analysis of CAR-T cells will be highlighted.

Speakers

Jeff Jensen, Chief Executive Officer, Fluxion Biosciences
Ali Yehia, Chief Scientific Officer, Fluxion Biosciences