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FUJIFILM



Partner Talk:

Diverse *in vitro* Assays
Applying Human Models for
Assessing Drug-Induced
Toxicity

Monday, September 23
12:30 PM-1:30 PM CET
Palm Rooms 3-4

Diverse *in vitro* Assays Applying Human Models for Assessing Drug-induced Toxicity

This joint partner session will focus on the characterization and impact of pharmacological compounds on various types of human induced pluripotent stem cell-derived (hiPSC-derived) cardiomyocytes, cardiac fibroblasts, and hepatocytes. The use of these cellular models is on the rise for evaluating the cardiac safety and potential toxic effects of newly synthesized compounds. This surge in usage is due to their ability to produce consistent results and their minimal ethical implications.

Join us for an insightful presentation on our cutting-edge *in vitro* human models and assays, developed collaboratively to assess the impact of drugs on cardiac fibroblast-induced fibrosis and hepatotoxicity using models such as iCell® Cardiomyocytes², iCell Cardiac Fibroblasts and iCell Hepatocytes 2.0.

We will showcase advanced methodologies such as automated patch clamp (SyncroPatch 384 and Patchliner) to characterize electrical phenotypes of these cells, among others. Additionally, we will highlight data generated using newest technologies that simulate human cardiac and hepatic environments, facilitating precise assessment of drug safety and efficacy (FLEXcyte 96 and AtlaZ). Our combined efforts culminate in the establishment of a robust platform for elucidating the mechanisms underlying drug-induced cardiac fibrosis and hepatotoxicity, thereby accelerating advancements toward safer therapeutic interventions.

Speakers



Dr. Elena Dragicevic

Global Marketing Manager
Nanon Technologies, Germany



Dr. Ravi Vaidyanathan

Senior Product Manager
Fujifilm Cellular Dynamics, Inc., US



Dr. Bettina Lickiss

BD & Scientific Communications Manager
InnoVitto, Germany

Notes

Visit our posters at SPS 2024!

Nanon Technologies

Poster #057-A: Implementation of an Electric Cell-Substrate Impedance Sensing (ECIS) Protocol to Parametrize 2D induced Pluripotent Stem Cell-Derived Cardiomyocyte (iPSC-CM) Cultures

Poster #059-A: Automated Patch-Clamp for High Throughput Characterization of Subtype-Specific Induced Pluripotent Stem Cell Derived Cardiomyocytes

Poster #060-A: High Throughput Automated Patch-Clamp of Cardiac Ion Channels using Physiological Fluoride-Free Internal Solution

Poster #086-D: OCT2 in the Heart and GAT1 in the Brain: Functional Characterization and Drug Development using SSM-based Electrophysiology

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Poster #067-B: Analyzing Atrial Human iPSC-Cardiomyocyte Responses to GPCR and Ion Channel Modulators: Introducing a Chamber-Specific Cell Model for Preclinical Testing

Poster #103-D: Artificial Intelligence-based Phenotypic Characterization of Gender-Specific, Patient – iPSC Derived Cardiomyocyte Cell Models

Fujifilm Cellular Dynamics

Poster #104-D: Incorporating iPSC-derived Macrophages into Co-Culture Systems to Assess Immune-mediated Toxicity across Organ Systems

Poster #109-D: Comprehensive Suite of Assays for Assessment of Cardiotoxicity Using Human iPSC-derived Cardiomyocytes