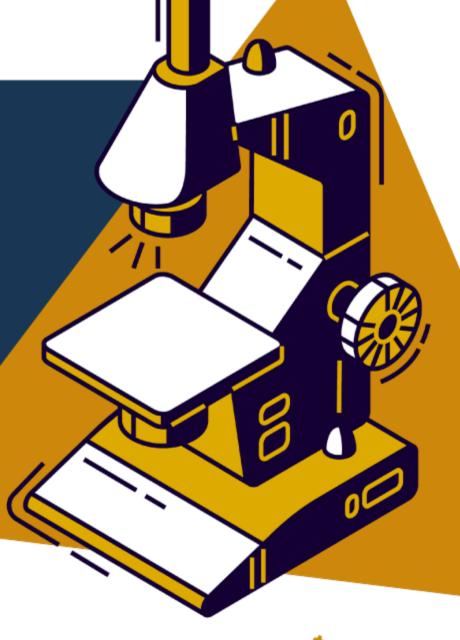
#### HANDS-ON LAB TRAINING

# IN VITRO LUNG MODELS

▼ 6<sup>th</sup> & 7<sup>th</sup> November, 2025

Geneva, Switzerland

## PRACTICAL SESSIONS





EPITHELIX ALTERTOX









**PARTNERS** 

### **HOT 1: Cell culture of** 3D ALI lung models



This session will cover the practical steps to follow when receiving Epithelix ALI cultures: from product unboxing to quality control.

A focus will also be made on the global design of an experiment with these models.



by Xiao-Yann Huang











### HOT 2: Applying high content image analysis to inhalation safety



This session will cover the theory of high content image analysis and the application to in vitro lung cell cultures.

A focus will be on the interpretation of images and data as well as contextualising the outputs alongside more standard approaches towards weight-of-evidence inhaled safety assessment.



by **Victoria Hutter** 











#### **HOT 3: Innovative Aerosol Exposure Systems for In Vitro** Toxicity Testing at the Air-Liquid Interface

This session will provide an in-depth look at advanced exposure systems designed for in vitro models cultivated at the air-liquid interface (ALI).

Learn how these systems deliver gases, liquid aerosols, and dry powders to lung cell cultures relevant for realistically simulating inhalation exposures for respiratory studies, and how they bridge the gap between lab models and realworld lung exposure.



by Paul Schumacher











### HOT 4: AXBarrier-on-chip installation and handling



This session presents AXBarrier-on-chip, a technology designed to mimic the microenvironment of different organs, with a special focus on the lung and the reproduction of the breathing motion.

It includes case studies demonstrating the model's ability to predict drug safety and efficacy and highlights its compatibility with exposure system.



by **Pauline Zamprogno** 











#### HOT 5: Mastering the 3D Tetraculture Model ALIsens®



This session will focus on the 3D tetraculture model ALIsens® - a cutting-edge *in vitro* system that closely mimics the human alveolar barrier.

Gain a deep understanding of the tetra culture model's design & its application in identifying respiratory sensitizers, learn essential methods for preparing the model for ALI exposure conditions and engage in guided exercises to handle & assess the model, enhancing practical skills in respiratory toxicology.



by **Arno Gutleb & Sabina Burla** 













### Register Now













