

# V<sup>TH</sup> In-vitro ALternatives WORKSHOP

*Animal tests are not always predictive of human responses, but are currently mandatory for drug approval process. To increase their predictivity, in vitro data could be used. Unfortunately current in vitro models are still inadequate to reproduce human pathophysiology. This is mainly due to the technological limitations of the standard equipment used in cell culture laboratories, such as the lack of a 3D micro-architecture, the static environment and the absence of cross talk between different tissues.*



*The IVT<sup>ech</sup> mission is to provide technology and services to allow the implementation of relevant advanced in-vitro models, based on the know-how acquired in more than 10 years of research*

*Following our previous workshops, it's a pleasure to announce the V<sup>th</sup> In-vitro Alternatives Workshop, focused on the design of multi-organ and dynamic in-vitro models using IVT<sup>ech</sup> technology. These models mimic the human physiology more closely than conventional in-vitro systems and could represent promising alternatives to animal tests.*

## Overview OF THE WORKSHOP



### Theoretical training

- Introduction on the use of bioreactors in the laboratory practice
- Participants will learn the basics of tissue model design for drug and nano-toxicity studies in dynamic conditions.

### Hands-on experience

- Practical demonstration of the advantages of IVT<sup>ech</sup> products as platforms to implement advanced in-vitro models
- Participants will use IVT<sup>ech</sup> products to perform connected cell cultures in dynamic conditions.



# Aim OF THE WORKSHOP

## Workshop key points

- Introduce the practice and use of **innovative cell culture systems** to design meaningful in-vitro experiments
- Show how to implement **3D in-vitro models** under **dynamic conditions**, using IVTeCH LiveBox1
- Show how to implement **dynamic in-vitro models of physiological barriers**, using IVTeCH LiveBox2
- Show how to **apply dynamic conditions** to the cells environment using IVTeCH LiveFlow
- Provide the participants with a **practical experience** on multi-organ and connected in-vitro model design and implementation, to obtain **physiologically relevant results**
- Show how to perform in-situ **real-time monitoring** of the experiment by **imaging** and **media sampling**, and routine end-point analyses

The IVTeCH team will support the participants in all phases required to run a **3D dynamic multi-organ in-vitro model**, from theory to practice.



## V<sup>TH</sup> in-vitro ALTERNATIVES WORKSHOP

**Dates:** 10<sup>th</sup> - 11<sup>th</sup> January 2018

**Where:** Toscana Life Sciences (TLS) Foundation,  
via Fiorentina 1, 53100, Siena (SI), Italy

**Registration fee:** € 300+VAT (full), € 250+VAT (Students/Young Researchers\*) including consumables, coffee breaks & lunches

Contact us for group discount

\*under 30 years

**Participants:** A maximum of 20 participants with lab experience

**Registration deadline:**  
31 December 2017

**Register at:** [info@ivtech.it](mailto:info@ivtech.it)

**More Info:** [www.ivtech.it](http://www.ivtech.it)

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