



## 3D cell models for 3R research

The *3D in 3R* Training school is an excellent opportunity for researchers to learn about three-dimensional cell culture models, such as spheroids, tissue constructs, organoids, and organs-on-a-chip application. These models could contribute to the implementation of 3R concepts. This school will teach researchers theoretical and practical skills needed to establish 3D models in their labs for different purposes. The cooperative and enthusiastic academic environment and synergism between experienced teachers and talented early-career investigators will contribute to a better understanding of 3D model peculiarities and their application as the bridging tool from the discoveries in 2D models to the *in vivo* studies.



**Dates:** May 9-10, 2024 (2-day hybrid meeting)

**Venue:** Lithuanian University of Health Sciences, Sukilėlių pr. 13, LT-50162 Kaunas, Lithuania

**Contact person:** Vilma Petrikaitė (vilmapetrikaite@gmail.com)

**Number of participants:** up to 15 (in person), up to 100 (online)

PRELIMINARY PROGRAMME		
DAY 1		
10:00	<b>Reception / registration</b>	
	<b>LECTURES / discussion</b>	
11.00	<b>Welcome and introduction to IMP<sub>3</sub>ROVE</b> Opening of training school/workshop	<i>Winfried Neuhaus (COST action chair)</i> <i>Vilma Petrikaite</i>
11.20	<b>Available 3D models / Wonderful life of organoids</b> (overview of 3D models, their features, etc.)	<i>Helena Kandarova</i>
12.00	<b>2D models vs 3D models</b> (Pitfalls in drug development, as an example – BBB model)	<i>Winfried Neuhaus</i>
13.00	<b>LUNCH</b>	
14.00	<b>Advances in Tissue models development</b>	<i>Silvia Letasiova, Mattek</i>
14:30	<b>AFTERNOON “WET LAB”</b>	
	<b>Testing toxicity in <i>in vitro</i> skin model</b>	<i>Silvia Letasiova, Mattek</i>
	<b>Testing substances in EpiIntestinal model</b>	<i>Silvia Letasiova, Mattek</i>
17:00	<b>Sightseeing / Dinner</b>	
DAY 2		
08.30	<b>Morning coffee/tea</b>	
	<b>LECTURES / discussion</b>	
09.00	<b>Reproducibility of 3D models</b> (standardization/validation issues)	<i>Helena Kandarova</i>
09.40	<b>5D <i>in vitro</i> model: a step closer to humans</b>	<i>Tommaso Sbrana, IVTech</i> <i>Silvia Quaglio, IVTech</i>
10.00	<b>3D fibrous scaffolds</b>	<i>Edvinas Krugly, Bious Technology &amp; Life</i>
10.30	<b>Coffee/tea</b>	
11:00	<b>MORNING “WET LAB”</b>	
	<b>Session 1a: Let’s make 3D tumor spheroids</b>	<i>Vilma Petrikaitė</i>
	<b>Session 1b: Let’s grow tissues on 3D fibrous scaffolds</b>	<i>Edvinas Krugly, Bious Technology &amp; Life</i>
	<b>Session 2: Let’s image spheroids</b>	<i>Chiara Magliaro &amp; Piera Mancini</i>
13.15	<b>LUNCH</b>	
14.15	<b>Discussion, including issues from “WET LAB”</b>	
14:30	<b>Closing remarks / QUIZ</b>	